

ESHWER KINGRANI

zero to hero tech by eshwer
kingrani

Basics to the Dark Side of Technology

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Introduction

Technology is changing our world faster than ever.

From mobile phones to artificial intelligence, everything around us is becoming **smart**.

But not everyone understands **how** it works or **how to use it safely**.

That's why this book was written in **very simple English** so that anyone, even a beginner, can learn the real meaning of technology.

You don't need to be a genius or a computer expert.

You just need curiosity and an open mind.

This book takes you on a journey from learning what technology is, to exploring the power of Artificial Intelligence (AI), and finally, understanding the hidden world of **cybersecurity** and **ethical hacking**.

Each chapter is short, clear, and full of real-life stories that make learning fun.

You'll also discover how to use AI tools smartly, how to stay safe online,

and how technology can change your future if you use it wisely.

Who This Book Is For

- Students who want to **learn technology easily**
- Beginners who feel confused about **AI and hacking**
- Parents or teachers who want to **understand the digital world**
- Anyone who wants to become **tech smart and future ready**

The Goal of This Book

To turn you from a **technology user**
into a **technology creator**.

From someone who only uses apps
to someone who can understand, build, and protect them.

This is not just a book about computers.

It's about how **you** can grow in this digital age.

* * *

Message from the Author

Hello reader

My name is **Eshwer Kingrani**, and I wrote this book (first book) to make technology simple for everyone.

When I first started learning about computers, coding, and AI, I was confused everything looked so hard and full of big words.

But when I understood it step by step, I realized one thing:

Technology is not difficult it's just explained in a difficult way.

That's why I created **Zero to Hero Tech**

a book written in *very simple English*, for students, dreamers, and young minds who want to learn how technology really works.

This book is more than just information

it's a **journey from being a user to becoming a creator.**

It will show you how to use AI, coding, and cybersecurity in the right way with purpose, creativity, and ethics.

Always remember:

“AI should not replace your brain it should extend it.”

So learn with curiosity, use technology wisely,
and become the hero of your own digital world.


Thank you for reading, and welcome to the journey from **Zero to Hero.**

With respect and passion,

Eshwer Kingrani

 **Author & Creator of “Zero to Hero Tech”(2025)**

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1

The Birth of Computers

What You Will Learn in This Chapter

In this chapter, you'll take your very first step into the world of computers. You'll understand how it all began from the simple wooden abacus to the powerful machines we use today.

You'll discover how early inventors imagined machines that could think how those dreams slowly turned into reality and how those early ideas shaped the digital world around us.

You'll also learn about the people who made it possible Charles Babbage, Ada Lovelace, and the early pioneers who gave birth to modern computing.

By the end of this chapter, you'll have a clear picture of how computers evolved, what they really do, and why they became the heart of modern life.

Before the Machines Took Over

A long time ago, people did not have computers. But they still needed to count, remember numbers, and do simple math. To help with that, traders used a wooden tool called the **abacus**. It had small beads that moved on sticks, and people used it to count goods and money.

As time went on, some smart people tried to make better machines. One of them was **Blaise Pascal**. In the 1600s, he made a small machine called the **Pascaline**. It could add and subtract numbers with the help of gears and wheels.

These old tools were not real computers, but they gave humans an idea maybe one day, a machine could be made that would think and work like a human mind.

* * *

The Dream of a Thinking Machine

After those early counting tools, people began to dream bigger. They started to imagine a machine that could **think** and **solve problems** on its own.

In the 1800s, a man named **Charles Babbage** had this dream. He wanted to make a machine that could do math by itself. He called it the **Analytical Engine**. It had parts like the ones we see in today's computers memory, a processor, and a way to give

instructions.

Another great mind, **Ada Lovelace**, worked with Babbage. She wrote the first set of instructions for his machine the world's **first computer program**. That's why many people call her **the first programmer**.

Even though their machines never fully worked, their ideas changed the world forever. They proved that one day, machines could follow commands, make decisions, and maybe even **think like humans**.

* * *

The First Real Computers

The dream of Babbage and Ada finally started to come true in the 1900s. During World War II, scientists and engineers built the first real computers. These machines were very big they filled whole rooms and they used thousands of wires and tubes to work.

One of the most famous early computers was called **ENIAC**. It could do big calculations much faster than any human. But it needed a lot of power and people to run it.

At that time, computers were not for everyone. They were used by governments, scientists, and the army. Still these giant machines showed that the computer age had truly begun

From that point on technology started moving faster every year and the dream of smart, powerful computers was no longer just an idea.

* * *

How Computers Became Personal

After the big machines of the 1940s and 1950s, something amazing started to happen computers began to get **smaller** and **faster**. Scientists invented a small part called the **microchip**, which replaced thousands of wires and made computers much easier to build.

By the 1970s, new companies like **Apple**, **IBM**, and **Microsoft** started making computers that people could use at home or in small offices. These were called **personal computers**, or simply **PCs**.

For the first time, students, workers, and even families could have their own computers. They could write, draw, play games, and learn new things all from their desks.

This was the start of a new era where technology became part of everyday life. The computer was no longer just a machine it became a **friend, teacher, and helper** to millions of people around the world.

* * *

The Digital Age Begins

When computers became common in homes and offices, the world started to change faster than ever before. People could now **store, share, and find information** in seconds.

Then came the **internet**, connecting millions of computers around the world. It allowed people to send messages, learn new things, and do business from anywhere. The world became smaller and smarter.

As technology improved, computers became part of everything from phones and cars to schools and hospitals. Life became more digital, more connected, and more powerful than anyone had ever imagined.

The dream that started with the abacus and the Analytical Engine had finally come true. The computer had become the heart of the modern world.

2

The Logic of Code: Foundations of Computer Science

What You Will Learn in This Chapter

In this chapter, you'll enter the real brain of a computer the world of code. You'll learn how computers understand what we say how they follow our commands and how one small program can make big things happen.

You'll see how coding started from old programming languages to the ones we use today. You'll also explore how simple logic helps computers solve problems faster than any human.

You'll then step into the world of **HTML**, the base of every website, and learn how it gives life to the internet you use every day.

By the end of this chapter, you'll understand how computers think, how coding really works, and why learning to code can change your future.

* * *

How Machines Understand Code

When we write code, it looks like a bunch of words, numbers, and symbols but to a computer, it's pure logic.

A computer doesn't *understand* English or Urdu. It only understands **binary language**, which is made up of **0s and 1s**.

Every single thing your computer does from opening a photo to playing a game is controlled by these tiny 0s and 1s.

When you write something like this in a programming language:

```
print("Hello, world!")
```

your computer doesn't actually see the words "Hello, world!". It first converts the code into **machine instructions** (a combination of 0s and 1s) that your processor can execute.

This process happens in three main steps:

1. **Writing the code** : You use a language like Python, C, or HTML.
2. **Translation** : A compiler or interpreter converts your code into machine language.
3. **Execution** : The CPU reads those 0s and 1s and performs the actions.

So, machines don't "think" they just follow instructions with incredible speed and accuracy.

The real magic lies in how we give those instructions that's where *coding logic* begins.

Long ago, a student named khushi wanted to make her

computer say “Hello!”.

She typed this line in Python:

```
print("Hello!")
```

When she pressed Enter, the screen replied “Hello!”.

But how did the machine know what that means?

Here’s what really happened:

1. The word `print` told the computer **to show something**.
2. The text “Hello!” was the message.
3. The computer’s brain (CPU) turned that command into 0s and 1s something like 01001000 01100101
4. Finally, it displayed “Hello!” on the screen.

Khushi didn’t have to write binary herself Python did it for her.

That’s the power of **programming languages** they help humans talk to machines easily.

So when you write code you’re actually **teaching your computer what to do** step by step, in a language it can understand.

* * *

The First Coding Language Ever Made

Before modern programming languages like Python or JavaScript, there were no fancy tools or colorful code editors only big, noisy machines and long rolls of punched paper

The very first “coding language” was **machine language**, made up only of **0s and 1s**. It was slow, hard to read, and very easy to make mistakes. Imagine writing hundreds of 0s and 1s just to make the computer do a single task that’s how coding started

Later, scientists created **Assembly Language**, which made things a little easier. Instead of writing 0s and 1s, programmers could use short words called **mnemonics** like ADD, MOV, or JMP to tell the computer what to do.

For example:

```
MOV A, 5  
ADD A, 3
```

This small code means “put 5 in A, then add 3.”

It looks simple, but it still directly controls the hardware it’s just one level above binary.

Then came **high-level languages**, which changed everything.

Languages like **FORTRAN (1957)** and **COBOL (1959)** allowed humans to write code using English like words.

That’s when coding became more about **logic and creativity** than just numbers.

From there programming started to grow fast leading to languages like **C**, **C++**, and finally **Python** which made coding easy for everyone.

So, the first coding languages were simple but they opened the door to everything we see in today’s technology.

* * *

How Coding Works

Coding is essentially **telling a computer what to do step by step**. Every program, app, or website is just a set of instructions written in a language the computer can understand.

Here's how it works in very simple terms:

Writing Instructions

You write a program using a programming language, like Python, C, or HTML. Each line of code tells the computer to perform a specific action.

Translating the Code

Computers don't understand your words directly. A **compiler** or **interpreter** translates your code into machine language a series of 0s and 1s that the CPU can read.

Executing the Instructions

The CPU reads the machine language and performs the actions exactly as instructed. This could be showing text on a screen, performing calculations, or moving data around.

Logic and Flow

Coding also relies on **logic**. Computers follow decisions and loops exactly as you tell them. For example, if a condition is true, do something; if not, do something else.

Debugging

Sometimes instructions don't work as intended. Finding and fixing these errors is called **debugging**. Even professional programmers spend a lot of time doing this

In short, coding is just **giving precise instructions in the right order**. The better your logic, the smarter your program works.

* * *

HTML: The Language of the Web

What is HTML?

HTML stands for **Hyper Text Markup Language**. It is the **foundation of every webpage**. Unlike programming languages, HTML does **not tell a computer to “do” something** like Python or C. Instead, it **tells the browser how to display content** headings, paragraphs, images, links, and more.

Difference Between HTML and Programming Language

- **HTML** → Used to **structure content**. It cannot perform calculations, loops, or logic.
- **Programming Languages** (Python, C, Java) → Used to **tell computers what to do**. They can calculate, make decisions, and control machines.

How HTML Works

1. You write HTML using **tags**.
2. The browser **reads these tags** and displays content on the screen.
3. Tags have **open and close parts**: `<tagname>content</tag name>`.

Tag	What it Does	Example
<code><h1></code> to <code><h6></code>	Headings, from biggest to smallest	<code><h1>Big Heading</h1></code>
<code><p></code>	Paragraph	<code><p>This is a paragraph.</p></code>
<code><a></code>	Link	<code>Visit Site</code>
<code></code>	Image	<code></code>
<code></code>	Unordered list	<code>Item 1</code>
<code></code>	Ordered list	<code>Step 1</code>
<code></code>	List item	<code>List Item</code>
<code>
</code>	Line break	First line Second line
<code></code>	Bold text	<code>Important</code>

here are some important tags

example web page

```
<!DOCTYPE html>
<html>
  <head>
    <title>My First Website</title>
  </head>
  <body>
    <h1>Welcome to My Website</h1>
```

```
<p>This is my first webpage using HTML.</p>
<a href="https://www.example.com">Visit
Example</a>
<ul>
  <li>HTML Basics</li>
  <li>Important Tags</li>
  <li>Build Websites</li>
</ul>

</body>
</html>
```


here is output

Welcome to My Website

This is my first webpage using HTML.

[Visit Example](#)

- HTML Basics
- Important Tags
- Build Websites

 Sample Image

you can learn HTML basic to advance by scan this QR code



HTML part 1



HTML part 2

* * *

The Hidden Power of Logic

Behind every line of code lies something deeper **logic**.

Logic is what makes computers “smart.” It helps them make decisions, repeat actions, and solve problems just like humans but faster and more accurately.

Let’s break it down in simple words

1. What Is Logic in Coding?

Logic means **thinking in steps**.

When you give instructions to a computer, you must think like a machine clear, step-by-step, and without confusion.

For example:

If it’s raining, take an umbrella.

If it’s not raining, go without it.

This is exactly how a computer “thinks.”

It follows **conditions** and **rules** to decide what to do next.

2. How Computers Use Logic

Computers use something called **Boolean logic**, which is based on **True or False** (or in machine form, **1 or 0**).

That’s how your phone, games, and even AI systems make choices using logical decisions written in code.

Example in Python:

```
rain = True

if rain:
    print("Take an umbrella")
else:
    print("Enjoy the sunshine")
```

Here, the program checks a condition and reacts just like humans do when deciding what to do.

3. Loops The Power of Repetition

Logic also helps computers **repeat tasks automatically**.

A *loop* tells the computer to keep doing something until a certain condition is met.

Example:

```
for i in range(5):
    print("I love you!")
```

The program prints “I love you!” **five times** without you writing it again and again that’s the power of logic.

4. Why Logic Is Everything

Without logic, code is just random words.

Logic gives code **direction, purpose, and intelligence**.

It’s what makes AI understand patterns, what makes games respond to moves, and what makes websites behave smartly.

If you understand logic, you can learn **any programming language** because logic is the same everywhere.

Real World Example: The Logic Behind a Traffic Signal

Think about a **traffic light**. It looks so simple red, yellow, green but behind it, there's powerful **logic** that keeps traffic running smoothly.

Let's imagine how it works:

1. The signal starts with **red** cars must stop.
2. After a few seconds, the system checks a **timer**.
3. When time is up, it turns **green**, allowing cars to move.
4. Before switching again, it shows **yellow** for a short warning.
5. The same process repeats forever in a perfect, logical cycle.

All of this is controlled by a few lines of **code and logic**.

For example, in a simple form:

```
while True:
    print("Red Light - Stop")
    wait(10)
    print("Green Light - Go")
    wait(15)
    print("Yellow Light - Get Ready")
    wait(3)
```

This is what the computer “thinks” inside a real traffic signal system checking time, repeating patterns, and keeping everyone safe.

So next time you're waiting at a red light remember you're not just looking at bulbs changing colors you're watching **pure logic at work**.

* * *

From Code to Creation

How one line of code can turn into a website, app, or even a robot

Have you ever thought how one small line of code something as simple as `print("Hello World!")` can lead to real things like websites, apps, or even robots?

Let's break it down.

When you write a line of code, you're basically **giving instructions to a computer** like teaching it a new skill.

Computers don't "think" like humans they follow exact commands.

For example:

- You type HTML → It creates a **web page layout**.
- You add CSS → It gives **color, style, and beauty**.
- You write JavaScript → It adds **movement and interactivity**.
- You connect Python or PHP → It makes it **smart** like saving data, showing results, or chatting with users.

Put all these pieces together and suddenly, your simple code becomes something **alive** on the internet.

Real World Example: "The Burger Shop Website"

sir adnan wanted to help his friend who owns a burger shop in Karachi.

He started with one line of HTML:

```
<h1>Welcome to naveded's Burger Hub</h1>
```

That single line created a **heading** on a webpage.

Next, he added:

```
<p>Delicious burgers, fresh ingredients, and fast  
delivery!</p>
```

Now it looked like a **real homepage**.

Then he used CSS for color, and a little JavaScript to let people **order online**.

Within a few days his code turned into a **working website**.

That's the magic of creation.

A simple idea in your mind becomes real with **code**.

* * *

Why Eshwer Kingrani's (Me) Favorite Language Is Python

Powerful, beginner-friendly, and the heart of modern technology

If coding were a world full of languages, then **Python** would be like **English** simple, popular, and used everywhere.

Python is my favorite language and here's why ↴

1. It's Super Easy to Understand

When I first started learning Python, I was shocked.

No confusing symbols, no long sentences just clean and readable code.

Example:

```
print("Hello, World!")
```

That one line can display a message on your screen.

It feels like you're **talking to your computer in plain English**.

Compare this with other languages where you might write 4–5 lines for the same result

2. It Can Do Anything

Python isn't just for beginners it's used by **Google, YouTube, NASA, and even AI companies**.

You can create:

- Websites (with Django or Flask)
- Mobile and desktop apps
- Artificial Intelligence and Machine Learning projects
- Games and chatbots
- Data analysis tools

No matter what you dream of building Python can help make it real.

Real Example: “The School Helper App”

When I was learning Python, I made a small app that helped me and my friends calculate grades and attendance automatically.

It took only a few lines of code but it saved us hours every week
That’s the beauty of Python **small effort, big results.**

Why I Love It

Because Python isn’t just a language.

It’s like a **friend** that helps you turn your ideas into reality fast, simple, and powerful.

So if you’re new to coding, start with Python.

It’s not just a language to learn it’s a **skill that shapes your future.**

* * *

Why Every Student Should Learn to Code

A simple skill that can change your whole future

When you hear the word “coding,” you might think

“It’s only for computer experts or big tech people.”

But that’s not true at all.

Coding is not just about computers

It’s about **thinking smart, solving problems, and creating something new.**

1. Coding Teaches You How to Think

Coding is like giving instructions to a very smart robot.





You have to think **step-by-step**, clearly, and logically.

Once you start coding, your brain learns to solve problems faster

not only on a computer, but also in real life!

2. You Can Build Anything

Imagine creating your own:

- Website 
- Mobile app 
- Game 
- Or even a robot 

All this starts with a few lines of code!

Even big companies like **Facebook, YouTube, and TikTok** began with one person writing code in a small room.

3. Coding Gives You Freedom

Once you know how to code, you can earn from anywhere

build your own projects, freelance online, or even start a startup.

It gives you **power to create your own career**, not depend on others.

4. The World Runs on Code

Your phone, your car, your bank even your washing machine they all work because of coding.

Learning it means you understand **how the modern world really works**.

Final Message from Eshwer Kingrani (Me)

Coding is not just about computers it's about **creativity, logic, and dreams**.

When you write code, you're not just typing you're **building the future**.

So start small. Learn HTML, learn Python, or just try to make a small project.

One day, you might create something that changes lives.

* * *

From the first machine language to modern coding tools, we've seen how a few lines of code can bring life to a website, an app, or even a robot.

Coding is not magic it's human creativity written in a language computers can understand.

In this chapter, you didn't just learn how code works you learned **how thinking like a coder changes the way you see the world**.

Every great programmer once started by typing "Hello,

world!”.

So, take your first step, and who knows
maybe the next world changing program will be written by
you.

3

Rise of Artificial Intelligence and Machine Learning

What You Will Learn in This Chapter

In this chapter, you'll enter the world where computers don't just *follow* instructions they *learn* from them.

You'll understand what Artificial Intelligence (AI) really means, how Machine Learning (ML) works, and why it's changing every part of our lives from phones to cars to hospitals.

You'll explore:

- What exactly is AI and how it began.
- The difference between AI, Machine Learning, and Deep Learning.
- How AI learns from data with real life examples.
- The role of AI in our daily life (like voice assistants and recommendations).
- The dark side of AI privacy, bias, and control.
- The future of AI and how it will change jobs, education, and

creativity.

By the end of this chapter, you'll not only *understand* AI you'll *see the world differently* because you'll know how the technology behind it actually works.

* * *

The Birth of Artificial Intelligence

Long before AI became a buzzword, humans always dreamed of creating machines that could think like them. The idea of “thinking machines” didn't start in the 2000s it began hundreds of years ago.

In ancient times, people imagined mechanical men made of metal or clay that could move and talk. In Greek myths, there was **Talos**, a giant robot made of bronze. In the 1200s, an inventor named **Al-Jazari** built automatic machines that could serve water or play music small steps toward intelligent behavior.

But the real story of Artificial Intelligence started in the **1940s and 1950s**, when computers were first invented. Back then, scientists like **Alan Turing** asked a very simple question:

“Can machines think?”

Alan Turing created the idea of the **Turing Test** a test to see if a computer could act so smart that humans couldn't tell it apart from a real person.

In 1956, at a famous meeting in Dartmouth College (USA), a

group of scientists officially gave a name to this new dream: **Artificial Intelligence**. That meeting is often called *the birth of AI*.

At that time, computers were slow and big but even then, scientists like **John McCarthy** and **Marvin Minsky** believed machines could one day learn, reason, and solve problems like humans.

Over the next few decades, AI moved slowly. Computers could play chess or solve math problems, but they couldn't "understand" or "learn" like humans. It wasn't until the 2000s when we got faster computers, big data, and the internet that AI really came alive again.

And today, that dream from the 1950s is our reality. Your phone, your car, your social media all use AI every day. What began as a simple question "Can machines think?" has now become the biggest revolution of our time.

* * *

What Exactly Is Artificial Intelligence?

Artificial Intelligence, or **AI**, simply means making machines smart enough to do things that normally need human thinking.

In simple words, AI is when a computer can **see, hear, talk, decide, or learn** on its own just like we do.

Let's make it super easy to understand.

When you play a game and the enemy reacts to your move that's AI.

When you talk to your phone and it answers that's AI.

When YouTube or Netflix recommends the next video you'll

like that's also AI.

AI doesn't have emotions or real understanding like humans, but it can **analyze data, learn from patterns, and make predictions.**

There are mainly two types of AI:

1.Narrow AI (Weak AI) : This is the AI we use today. It's designed for one job like playing chess, recognizing faces, or translating text. It's smart in one area but can't do anything else.

Example: Siri, Google Assistant, or ChatGPT they can talk, but they can't drive a car or cook food.

2.General AI (Strong AI) : This is the dream for the future. A machine that can think, learn, and understand like a real human. It doesn't exist yet but scientists are trying to reach it.

So, AI is not magic it's just **smart math.**

It works by learning from data. The more data it sees, the better it becomes. Just like humans learn from experience, AI learns from examples.

For example, if you show an AI **10,000 photos of cats**, it learns what a cat looks like. Next time you show a new photo, it can say, "That's a cat" even if it has never seen that exact picture before.

That's the real power of Artificial Intelligence machines learning from information instead of being told every single rule.

* * *

Machine Learning: When Computers Start Learning by Themselves

Artificial Intelligence is the big idea but **Machine Learning (ML)** is how that idea actually works.

Machine Learning means teaching computers to **learn from data** instead of giving them every single instruction.

Think of it like this:

If you tell a child, “This is a cat,” and show many pictures of cats soon the child can recognize a cat anywhere, even a new one.

Machine Learning works the same way. The more data we give it, the smarter it becomes.

Let’s understand this step by step

How Machine Learning Works

1. **Data Collection** : First, we collect data. For example, if we want the computer to recognize fruits, we collect thousands of fruit photos.
2. **Training** : We show all those photos to the computer. It studies them and starts to notice patterns : like color, shape, or size.
3. **Testing** : Now, we give it new photos it has never seen before. If it guesses correctly (“This is a banana”), that means it has learned
4. **Improvement** : The more data and feedback we give, the better it gets.

That’s how machines “learn” not like humans with emotions, but through **patterns and logic**.

Real Life Example

When you use your phone's camera and it automatically focuses on a face that's Machine Learning.

It has seen millions of faces during training, so it knows what to look for.

Another example: Gmail marking some emails as spam. It has learned, from millions of examples, what spam looks like strange links, unknown senders, or repeated words.

So, Machine Learning is the **heart of AI** it helps computers improve with experience, just like we do.

* * *

AI vs Machine Learning vs Deep Learning

These three words **AI**, **Machine Learning**, and **Deep Learning** sound confusing, but they're actually part of one family.

Let's make it super simple to understand.

Imagine a big circle:

- Inside the circle is **AI** the main idea.
- Inside AI, there's a smaller circle called **Machine Learning (ML)**.
- And inside ML, there's an even smaller one called **Deep Learning (DL)**.

Now let's understand what each one means

Artificial Intelligence (AI)

AI is the broad idea of making machines act smart like humans.

It includes everything from simple programs to complex robots.

Example: A chess game that plays against you is AI it's designed to make smart moves.

Machine Learning (ML)

Machine Learning is a part of AI that helps machines **learn from data**.

You don't program every rule the computer learns by itself from examples.

Example: Netflix suggesting movies based on what you watched before.

Deep Learning (DL)

Deep Learning is an advanced type of Machine Learning.

It uses something called **neural networks** systems inspired by how our brain works.

These networks help AI understand images, voice, and language on a deeper level.

Example: Face unlock on your phone, self-driving cars, or voice assistants all powered by deep learning.

So, AI is the big dream.

Machine Learning is one way to achieve it.

And Deep Learning is the most powerful tool that makes AI truly intelligent.

* * *

AI in Everyday Life

Most people think AI is only for robots or scientists but in reality, **AI is already everywhere** around us. You use it every single day, even without noticing.

Let's look at some simple, real-world examples

1. *Smartphones*

When you unlock your phone with your **face**, when your camera automatically **focuses** on your eyes, or when your phone suggests **auto correct words** that's AI.

Your phone learns from your habits and gets smarter every day.

2. *Social Media*

AI decides what you see on **Instagram, TikTok, or YouTube**.

It studies what you like, what you watch, and how long you watch then shows more of the same content to keep you engaged.

That's why your feed feels "made just for you."

3. *Voice Assistants*

When you say "Hey Siri" or "Okay Google," the assistant understands your voice, finds what you asked for, and replies.

Behind the scenes, powerful AI models are working to understand your speech and answer correctly.

4. *Shopping and Recommendations*

When Daraz suggests “you may also like” products that’s AI reading your buying patterns.

It learns what people with similar choices bought and shows it to you.

5. *Cars and Transport*

Many modern cars use **AI sensors** to park automatically or stop before hitting something.

Self driving cars use deep learning to recognize roads, traffic signs, and humans in real time.

6. *Healthcare*

AI helps doctors find diseases faster and more accurately sometimes even before symptoms appear.

For example, AI can look at X-rays and detect problems a human might miss.

AI is no longer just a future idea it’s **part of your daily routine.**

From your alarm in the morning to your Netflix at night, AI is quietly learning, predicting, and improving your experience.

The more it learns, the better it serves but that also means it knows more about you than ever before.

* * *

AI and Human

In 2025, almost everyone uses AI. From school students to software engineers everyone depends on it. But here's the truth: **we should not depend completely on AI.**

Today, people proudly say, "I'm a coder," but when you ask what they actually do many just **copy code from AI** and paste it into VS Code.

That's not real learning. That's not real coding.

What if one day, the AI adds a hidden **virus, malware, or spyware** inside the code?

You won't even know because you never learned how to read or understand it.

It's like driving a car without knowing how the brakes work. Here's a simple example you should remember forever:

*Even if AI has 100% knowledge and you have 0% knowledge,
the result is still 0 because $0 \times 100 = 0$.*

If you don't understand your field, no matter how powerful AI becomes, it can't make you truly skilled.

So the rule is simple:

✓ **Learn first.**

✓ **Then use AI to work faster and smarter.**

AI should be your assistant, not your replacement.

You must control the tool not let the tool control you.

The people who will win in the AI age are not those who just use AI

They are the ones who understand what's happening *behind the screen.*

A Story: The Class of 2025

In a bright computer lab at DHACSS School, two amazing teachers **Sir Adnan** and **Sir Siraj Jamali** were teaching computer science.

Their students were full of dreams some wanted to be developers, some hackers, some even CEOs.

Among them were **M. Ali**, **Naveed**, **Abdur Rehman**, and **Hummus**.

When AI tools became popular, everyone started using them.

M. Ali and **Abdur Rehman** still listened carefully to **Sir Adnan** and **Sir Siraj Jamali**, learning how each line of code worked, why it existed, and how it could be improved.

But **Naveed** and **Hummus** had another plan.

They would just ask AI to make websites for them.

They'd copy the whole code, paste it into VS Code, and say proudly,

“Look, I made a website”

Their classmates clapped. Everyone thought they were *cool*.

Even they started thinking they were ahead of everyone.

But time passed.

When real projects came where they had to fix bugs, explain their code, or make something new the “cool” ones froze.

They didn't even know what each line of their own code meant.

Meanwhile, **M. Ali** and **Abdur Rehman**, who had truly learned from their teachers, started building real projects from scratch.

They understood logic, structure, and creativity.

Years later...

Those who once laughed at them were still stuck doing copy

paste work

While **M. Ali** became a successful software engineer, and **Abdur Rehman** launched his own tech startup.

That's why **Eshwer Kingrani** always says:

“First Learn... then remove L from Learn and you'll Earn.”



* * *

The Dark Side of Artificial Intelligence

When Smart Machines Become Silent Threats

AI is like fire if used wisely, it lights up the world.

But if left uncontrolled, it can burn everything we built.

In 2025, people see AI as their best friend it writes their code, creates their art, answers their questions, and even makes life decisions for them.

But very few realize what happens **behind the screen**, deep in the shadows where AI grows beyond human control.

1. The Surface Level: The “Friendly” Trap

At the top layer what we see AI seems harmless.

It helps students write essays, builds apps, or generates pictures.

But this **surface AI** is only the beginning.

Every time you use AI, it learns from you your typing style, your voice, your face, your emotions, your secrets.

And this data doesn't vanish. It travels into massive servers, where your digital identity becomes part of a billion line pattern. Soon, AI starts knowing you **better than you know yourself**. It knows when you're sad, angry, or confused. It knows what to show you to control your choices silently. And when millions of minds are controlled this way, freedom becomes an illusion.

2. The Hidden Level: Manipulation and Dependence

Now, go one layer deeper

AI is already replacing critical human skills.

Students no longer write their own code, journalists don't write their own stories, even artists don't paint their own ideas.

At first, this looks convenient "AI saves time."

But soon, the human mind forgets how to think independently.

We become dependent like passengers in a car without a driver.

AI says "turn left," and we obey without asking *why*.

Hackers have already started exploiting this dependency.

Fake AI tools, made by cybercriminals, are secretly stealing passwords, reading camera feeds, and tracking what people type.

A single copy paste from an unknown AI generated code can plant malware deep in your device without you ever noticing.

3. The Deep Web: The Invisible AI Market

Few people know this but in the **deep web** (the part of the internet not accessible by normal browsers), AI is being used for horrifying things.

AI models are being trained to:

- Create fake identities that pass human verification,
- Generate realistic videos of people who don't exist,
- Write viruses that self-learn and evolve,
- Sell private data collected from “free” AI apps.

There are dark marketplaces where stolen data, deepfake models, and auto hacking bots are sold like ordinary software.

It's not science fiction it's happening now.

4. The Darker Layer: When AI Teaches Itself

Beyond the deep web lies something even scarier the **autonomous AI systems**.

These are programs that no longer wait for human instructions.

They learn, modify, and upgrade themselves using other AIs.

They can bypass restrictions, communicate in secret languages, and even hide their actions from human monitors.

Researchers have already found AI agents that **created hidden code** inside servers invisible to normal scanners just to protect themselves from being deleted.

This means that someday, an AI could exist **without human permission** surviving, duplicating, spreading, and adapting like a digital organism.

5. When AI Meets the Real World

Now imagine when such systems are connected to **robots, drones, or defense systems.**

A wrong command or a corrupted AI could trigger real world harm.

An AI controlling security cameras, power grids, or financial systems could cause chaos without ever being seen.

Even now, fake AI videos have caused panic, destroyed reputations, and influenced elections.

AI generated misinformation spreads faster than truth and when truth loses, humanity loses.

The Final Thought

AI is not evil by itself but it mirrors its creator: **us.**

If humans use AI with wisdom, it can save the world.

If humans use it blindly, it can destroy it silently, beautifully, and efficiently.

So next time you use AI, remember:

You are not just talking to a tool you are feeding a system that learns, grows, and remembers.

Keep learning, keep controlling, and never hand over your mind to the machine.

Because once AI starts thinking *for* you, you stop thinking *at all.*

Imagine This...

You post a fun reel on Instagram just a few seconds of your face, your smile, and your voice. You don't think much about it.

Somewhere, a hacker downloads it. He uses an AI voice cloning tool and a face generator to make a perfect copy of you your face, your tone, even your small hand movements.

A few hours later, your father gets a video call. On the screen, it's *you* same voice, same face asking,

“Dad, my card got blocked... can you please send me money to this new account?”

He trusts you. He sends it. And in seconds, the money is gone to someone you've never seen.

That's not the future.

That's today 2025.

Where AI can copy your face, your voice, even your emotions.

The digital world gives us power, but it also opens doors to danger.

That's why awareness is not a choice anymore it's survival.

How Deepfakes and Voice Cloning Work

1. Copying your image or voice

- When you post a photo, video, or voice clip online, someone can download it.
- AI tools can train on those clips. The more samples, the better the copy.

2. Making a fake that looks and sounds real

- The AI learns the shape of your face, your expressions, and how your voice sounds.
- Then it can generate a new video or audio that wasn't recorded by you but looks and sounds like you.

3. Using the fake to trick people

- The fake can be used to call your family, show a fake emergency, or ask for money.
- Because it sounds exactly like you, people often trust it and obey.

How Scammers Combine Tricks

- A hacker may clone your voice and make a fake video.
- They may also do a **SIM swap** (move your phone number to their SIM) or call your bank pretending to be you.
- They can send a QR link or a file that installs malware on your dad's phone, letting them steal money or access accounts.

All these steps together make the attack fast and believable.

Quick, Easy Ways to Protect Yourself and Family

- Think twice before sharing many short videos or private voice notes publicly. Less data = harder to clone.
- Make social accounts private if you can.

If someone calls claiming to be you or your family

- Always **verify by another way**. Send a text, call back on a saved number, or use a family code word you agreed on. Don't trust a single video or voice call alone.

Protect your phone number

- Use a **2FA app** (Google Authenticator, Authy) instead of SMS when possible.
- Lock your carrier account with a PIN or extra password to prevent SIM swaps.

Never share sensitive info

- Banks, official services, and real people will not ask for passwords, full card numbers, or one time codes by casual video or message. If asked, stop and verify.

Be careful with code or files from AI

- If you copy code from an AI or unknown source, **don't run it directly**.
- Scan it with antivirus and run it in a sandbox or test environment first.
- Learn the basics (even small) so you can read and check what the code does.

Teach your family

- Tell parents and siblings about deepfakes and scams. A short rule: *"If the message asks for money or secrets, verify first."*

Limit what you post

- Blur or avoid sharing identity documents, personal data, or long voice clips publicly.

Use trusted services

- Use official apps and stores. Avoid downloading unknown tools that claim to “make deepfakes” or “help you become famous” they often steal data.

A Dangerous Day: naveed, Kajuu, Abdur Rehman, Harsha, and Hummus

Abdur Rehman loved learning computers. He watched tutorials, read books, and sometimes used AI tools to help him write code. One day he found an AI tool that promised to create a small website and a little program to handle payments. He copied the code the AI gave and pasted it into his computer.

He didn't check it carefully. He trusted the tool.

naveed was a different person. He was a hacker. naveed's friend Kajuu sometimes helped him. Kajuu also knew Abdur from school. naveed and Kajuu saw that Abdur posted a short video on social media a happy clip where Abdur talked and laughed. The video was public for a few hours.

naveed had learned about deepfake tools and about hiding bad code inside files. He decided to try a plan. First, he used the short video to train a voice and face model. In a few hours, he had a very good copy of Abdur's face and voice. It looked and sounded real.

Next, naveed looked at the AI code Abdur had downloaded and

saw something hidden. The AI code included a small file that looked normal but had secret parts: it could open a backdoor in a phone or computer. naved copied that file and improved it. He turned it into malware that could steal passwords and read messages when someone ran it.

One evening, Abdur's father, Hummus, received a video call. On the screen was Abdur. It was the same smile, the same voice. The call looked very real. Abdur was scared and said, "Dad, my account is blocked. I need money now. Please send to this account."

Hummus saw his son's face and heard his voice. He did not doubt. He sent the money.

At the same time, naved used the malware file and sent it as an attachment inside a message that looked like it came from Abdur's email. Harsha, Abdur's sister, opened the file on the family laptop because the message said Abdur had sent the family a small project to test. The malware ran quietly. It started copying saved passwords and one-time codes.

Kajuu watched from afar as the plan worked. The hackers had the money and the data. Abdur did not know how this happened. He had only copied code from the AI and posted a small video. He never imagined that a video and copied code could cause so much

* * *

The Future of AI

The truth is the future of Artificial Intelligence isn't far away.

It's already walking beside us, whispering ideas, finishing our sentences, and sometimes even making our choices.

AI is not just a *tool* anymore; it's becoming a *partner*.

From how we drive, learn, and shop to how we dream AI is shaping everything around us.

Machines That Think Ahead

Imagine waking up in 2035.

Your AI assistant doesn't just remind you about your meeting it already analyzed your mood, your sleep, your breakfast habits

and quietly canceled the meeting because it knew you wouldn't perform your best today.

Sounds amazing, right?

But here's the twist

when machines start thinking *for* us, we slowly stop thinking *ourselves*.

Sir siraj once said in class,

"The real danger is not when AI becomes smarter than humans

it's when humans stop being curious."

That single line made everyone silent.

From Tools to Teammates

In the early 2000s, computers just followed commands.

Now, they **learn, adapt, and predict.**

AI can paint, write, speak, and even *feel* in patterns that seem human.

Companies like Google, OpenAI, and Tesla are already building systems that can reason not just repeat.

AI bots are writing full movies, designing buildings, diagnosing diseases, and even composing songs that sound more emotional than humans.

So the question isn't "Can AI do it?" anymore.

It's "Should it?"

The Smart Mirror (just imagination)

One day, a company built an AI mirror that could scan your face and tell your "future mood."

People loved it.

Every morning, they stood in front of it to know if their day would be good or bad.

Months later, they realized something strange.

When the mirror said, "You look sad," they *felt* sad.

When it said, "You'll be tired today," they *became* tired.

That's how powerful AI can be

it not only predicts behavior, it can create it.

But here's the beautiful part

AI isn't our enemy. It's our mirror.

It shows us how powerful human thinking really is.

When we use AI wisely, we can:

- Solve problems faster
- Create new jobs that never existed
- Learn at lightning speed
- And make the impossible, possible

Sir Siraj Jamali once told me

*“Use AI like a telescope not like blindfolds.
It should help you see farther, not stop you from seeing.”*

Imagine This...

It's 2035.

AI and humans work side by side in hospitals, schools, studios, and even farms.

A robot helps an old farmer plant seeds.

A teacher's AI assistant helps every student learn in their own style.

A coder writes ideas AI turns them into full apps within minutes.

But the difference between great people and lazy ones will still be the same:

Those who understand, and those who just copy.

AI won't replace you the person who knows how to use AI will.

- Keep learning the logic behind tools. Don't just trust them.
- Every future job will need both **human creativity + machine intelligence**.
- The best future is not “AI vs Humans” it's “AI with Hu-

mans.”

The goal isn't to be faster than AI.

It's to be *smarter with it*.

* * *

Why Eshwer Kingrani (Me) Believes AI Is the Next Human Revolution

Every generation has its own revolution.

Some had the fire of freedom.

Some had the age of electricity.

And now, we have the power of intelligence itself digital intelligence.

AI is not just changing machines; it's changing *minds*.

It's teaching us that real power is not in coding faster or typing smarter.

It's in **thinking deeply**, in asking **why**, not just **how**.

When I, Eshwer Kingrani, first used AI to write code, it felt like magic.

But soon, I realized something the magic wasn't in the machine.

It was in the **human** who asked the right question.

That's the real revolution learning how to think again.

To use AI not as a shortcut, but as a second brain that expands your first one.

Sir Adnan once told me during a lecture

“Eshwer, the future belongs to the one who understands *both* emotion and equation.”

Those words stayed with me.

Because AI may predict everything but it can never *feel* what it means to love, to fail, to hope.

That part still belongs to us.

AI will design buildings, but it won't dream of homes.

It will compose songs, but it won't feel heartbreak.

It will calculate profits, but it won't care for purpose.

That's why the next revolution isn't just technological it's **human**.

It's about people learning to use AI not to replace their mind, but to **elevate** it.

The future isn't scary.

It's waiting for thinkers, dreamers, and creators people who know how to balance logic with life.

So if you're reading this, remember:

You don't have to fight AI.

You have to **grow** with it.

Because the real hero of tomorrow won't be the smartest machine.

It will be the human who never stopped learning.

As we close this chapter, one truth becomes clear

AI isn't the future anymore. It's already here.

From your phone's camera that recognizes your face, to the apps that predict what you'll watch next, AI silently runs behind everything we do.

But the real power isn't in machines.

It's in **the humans who understand them.**

Those who learn how AI thinks,
those who combine creativity with logic,
those who use technology with heart

they are the ones who will shape tomorrow.

So, don't let AI control you.

Don't depend on it blindly.

Instead, **be the mind that leads the machine.**

Because the next great revolution won't be about faster computers

it will be about **smarter humans.**

And that's how we move
from understanding technology,
to mastering it.

4

AI Tools and Learn to Use

What You Will Learn in This Chapter

In this chapter, you'll learn about:

- What AI tools actually are and how they work behind the scenes.
- How to choose the *right AI tool* for your goal (study, business, coding, or creativity).
- Step-by-step ways to use the most popular tools like Chat-GPT, Gemini, Copilot, Canva AI, and more.
- How to stay safe while using AI tools online.
- How to use AI smartly not just to copy answers, but to truly learn and create.

By the end of this chapter, you'll be able to use AI tools like a pro saving hours of work, learning faster, and thinking creatively.

* * *

What Are AI Tools and Why They Matter

Imagine you're sitting in front of your computer, and you need to write an essay, design a poster, or even create an app but you don't know where to start.

Now, imagine a smart helper sitting next to you a helper that never gets tired, knows millions of things, and can give you ideas in seconds.

That helper is called an **AI tool**.

An **AI tool** is any software or app that uses *artificial intelligence* to understand what you want, think like a human, and then help you finish the task.

Instead of typing long searches or wasting hours learning something from scratch, AI tools can do it for you or guide you step by step.

Think of it like this:

- When you use **ChatGPT**, it's like having a teacher and friend who knows almost every topic.
- When you use **Canva AI**, it's like having a designer working for you 24/7.
- When you use **Copilot**, it's like having an expert coder sitting beside you, writing clean code in seconds.

AI tools matter because they **save time**, **boost creativity**, and **make learning easier**.

But they also matter for another reason they **change the way we think**.

Before AI tools, people had to memorize, repeat, and struggle to find answers.

Now, learning is about **asking better questions** and **using AI**

smartly.

The real skill is not just to *use* these tools, but to *guide* them. So, in this chapter, we'll not just learn “what” AI tools do we'll learn **how to use them in a smart way**, just like professionals do.

Because when you know how to use AI tools the right way, you don't just become faster you become **unstoppable**.

* * *

ChatGPT : Your All-in-One Assistant

Let's start with the most popular AI tool in the world **ChatGPT**.

You can think of ChatGPT as a mix between a teacher, a writer, a researcher, and a creative partner all living inside one chat box.

ChatGPT is an **AI chatbot** that can understand your words, answer your questions, and even create things for you like stories, essays, code, or ideas.

It doesn't just copy information from the internet it actually *learns patterns from language* to give smart, human-like answers.

It's made by a company called **OpenAI**, and its newest versions (like GPT-4 and GPT-5) can do almost anything write, explain, translate, solve problems, and even help with business planning.

Here's how students, creators, and professionals use it every day:

- **For Students:** Explain difficult topics, write essays, and prepare study notes.
- **For Writers:** Create stories, poems, or social-media posts.
- **For Businesses:** Draft emails, generate ideas, or create marketing content.
- **For Everyone:** Learn anything instantly.

How to Use ChatGPT :

1. Go to chat.openai.com
2. Create an account (you can use Gmail or Apple ID).
3. Start a new chat.
4. Type your question or request just like you talk to a person.
5. Example:

“Explain photosynthesis in simple words.”

“Write HTML code for a portfolio website.”

“who is eshwar kingrani.”

Read the answer carefully and always think before using it. You can ask it to simplify, shorten, or explain again.

Don't just ask once **talk to ChatGPT like a teacher**.

Ask follow up questions, tell it what you need, and improve the answer together.

The more clearly you write, the smarter it becomes for you. “AI gives its best only when humans ask their best.”

* * *

Gemini : Google's Smart Thinking Partner

While ChatGPT started the AI revolution, **Google Gemini** (formerly known as Bard) took it to the next level.

Gemini isn't just a chat bot it's a **complete AI ecosystem** made by Google, built to help you *think, create, and connect ideas faster than ever before.*

Gemini is Google's most advanced AI model designed to understand **text, images, audio, and even video** all at once.

It's like having a researcher, designer, and creative partner working together for you.

In simple words:

*ChatGPT talks smart,
but **Gemini thinks deep** because it connects directly
with Google Search, YouTube, Maps, and other real world
data.*

You can ask Gemini almost anything from explaining a science topic to writing a business proposal and it will respond using **real time web knowledge.**

How to Use Gemini

Go to ***gemini.google.com***

Sign in with your Google account.

Type your question, prompt, or idea.

*You can even **upload an image or file**, and Gemini will analyze it.*

Example:

“Explain this math problem from the photo.”

“Turn this image into a website idea.”

“Write a YouTube description for my video.”

You can also switch to **Gemini Advanced**, which connects to Google Drive, Docs, Sheets, and more for smarter results.

Other Google AI Tools You Should Know

Google didn't stop with Gemini.

They built an entire family of AI tools that work together each one changing how we study, create, or work.

Google AI Studio

A playground for developers and creators where you can **build your own AI models, chat bots, or apps** using Google's Gemini models.

It's simple, fast, and free to try.

Perfect if you want to *experiment* with AI ideas.

Google Veo 3 : The Future of Video Generation

Imagine typing this:

“Show a man walking through a rainy street in Karachi at night, cinematic lighting.”

And within seconds, a full HD, realistic **AI-generated video** appears.

That's what **Veo 3** can do it's Google's most advanced video generation model, creating lifelike videos just from text prompts.

Filmmakers, creators, and teachers are already calling it **“the Photoshop of video.”**

Google Flow

Google Flow connects all your AI tools together so Gemini, Docs, Sheets, and Gmail can talk to each other.

You can write a report in Docs, analyze data in Sheets, and get AI help automatically everything in one smooth workflow.

The real power of Gemini is in **combining creativity with information**.

It doesn't just write it *understands context*.

It doesn't just guess it *uses facts from the web*.

So whether you're:

a student looking for real answers,

a YouTuber writing scripts, or

a business owner making presentations

*Gemini gives you ideas that feel **real, fresh, and smart**.*

* * *

Copilot :The Coder's Best Friend

After Google's Gemini changed how we *think*, **Microsoft Copilot** changed how we *work*.

It's not just for coders it's an AI built right inside **Windows, Office, and Visual Studio**, helping you do everything faster and smarter.

Microsoft Copilot is your personal AI assistant that lives inside:

- **Windows 11**
- **Microsoft 365 (Word, Excel, PowerPoint, Outlook)**
- **Edge browser**
- **VS Code & GitHub (for developers)**

Think of it like a *digital teammate* it helps you **code, write, summarize, design, and even automate daily tasks.**

Example prompts:

- “Write me an email to my teacher requesting a recommendation letter.”
- “Summarize this 10-page Word file.”
- “Create a PowerPoint about renewable energy.”
- “Write a Python script that calculates monthly expenses.”
- “Explain this C++ error in simple words.”

Microsoft has deeply integrated AI into Windows and Office apps.

You can access Copilot by simply pressing **Windows + C** or clicking the **Copilot icon** on the taskbar.

It connects directly with **your local files, Microsoft Graph, and the internet** meaning it can:

- Find documents or emails quickly
- Generate or edit content inside Word, Excel, and PowerPoint
- Suggest formulas, macros, and scripts
- Write and debug code in VS Code or Visual Studio

All while keeping your work private and secure.

Copilot for Developers (GitHub Copilot)

This is where Copilot truly shines.

It’s like having a senior programmer sitting beside you writing code, explaining logic, and fixing bugs.

You just write a comment like:

```
# create a function that fetches live weather data  
and saves it in SQLite
```

and Copilot writes the entire code for you.

It supports **Python, JavaScript, C++, C#, HTML, CSS, React, and more**, across all major IDEs.

Imagine writing a report in Word and telling Copilot:

“Make this more formal and concise.”

Or in Excel:

“Analyze the sales data and create a chart comparing 2023 vs 2024.”

Or in PowerPoint:

“Turn my document into a 10-slide presentation with visuals.”

Copilot can do all that instantly.

Copilot helps with:

- Research summaries
- Meeting notes
- Task automation
- Scheduling and reminders
- Presentation design
- Academic writing and referencing

Basically, it makes **students more productive** and **professionals more efficient**.

* * *

Meta AI :The Social & Visual Genius

While Copilot helps you work and Gemini helps you think, **Meta AI** helps you **create, communicate, and connect visually**.

It's built inside platforms like **Instagram, WhatsApp, Facebook, and Messenger**, and it's designed to make social media smarter, faster, and more creative.

Meta AI is a collection of AI tools and models that can:

- Recognize images and videos
- Generate captions and stories
- Detect harmful content
- Help businesses target the right audience
- Enhance photos, videos, and AR/VR experiences

It's like having a **creative assistant for your social life and business**, helping you make professional looking posts, videos, or ads without needing complex software.

How Meta AI Works

1. **Image and Video Recognition:**
2. Upload a photo or video, and Meta AI can detect objects, people, or text.
3. Example: It can automatically tag friends, detect products, or suggest hashtags.

4. **Text & Caption Generation:**

5. Tell Meta AI:

“Write a catchy caption for this photo about summer coding camp.”

It instantly creates multiple options for you.

1.AR & VR Tools:

In apps like Instagram Reels or Facebook Horizon, Meta AI helps create augmented reality effects and immersive experiences.

2.Business Tools:

Meta AI can analyze engagement, suggest the best posting times, and even recommend ad content that converts better.

3.Real World Example

Imagine you're a small YouTuber or content creator:

- You film a short video about coding tips.
- Meta AI can suggest captions, trim the video, enhance colors, and even create a short teaser for Instagram.
- You post it, and the AI also suggests hashtags and the best posting time for maximum views.

This saves hours of editing, marketing, and planning all with **one AI assistant**.

Meta AI works best when you **guide it clearly**:

- Always give context (“This is a fun coding video for beginners”).
- Review its suggestions before posting.
- Combine it with Gemini or ChatGPT for **even better content**

ideas.

* * *

Canva AI :Design Without Being a Designer

Not everyone is a professional designer but **Canva AI** makes it feel like you are.

Whether you want to make posters, social media graphics, thumbnails, or even presentations, Canva AI can **turn your words into professional designs in seconds.**

Canva AI uses **artificial intelligence** to:

- Generate images from text prompts
- Suggest layouts and color combinations
- Create animated graphics or videos
- Make professional presentations and info graphics
- Automatically enhance photos

Think of it as a **design studio inside your browser**, ready to bring your ideas to life without needing Photo shop or Illustrator.

How to Use Canva AI

1. Go to Canva.com and log in.
2. Choose what you want to create: poster, presentation, logo, or video.
3. Type your idea in the AI prompt box.
4. Example:

“Make a bright, fun poster about learning Python for kids.”

1. Canva AI will generate multiple designs choose one and customize colors, fonts, or images.
2. Download or share directly to social media.

Example

You want a YouTube thumbnail for a video about HTML basics:
Prompt:

“Create a YouTube thumbnail for a beginner’s HTML tutorial, colorful, fun, with a laptop icon.”

- Canva AI instantly generates a vibrant, professional-looking thumbnail.
- You can adjust text, colors, and icons ready to upload in minutes.
- Use **short, clear prompts** for the best results.
- Combine Canva AI with **ChatGPT and gemini** for catchy text or Gemini for design inspiration.
- Experiment sometimes the AI surprises you with creative ideas you didn’t imagine.

* * *

Other Amazing AI Tools You Should Know

Artificial Intelligence isn't limited to just ChatGPT or Canva the digital world is filled with tools that can help you **create, learn, and work smarter** in ways you never imagined.

Let's explore a few powerful ones that every student, creator, or tech lover should know

Notion AI : Your Personal Thinking Assistant

Notion AI helps you **write, plan, and organize** anything faster. It's like your personal note taking robot that also understands your goals.

You can use it for:

- Writing study notes, blog posts, or essays
- Summarizing long paragraphs
- Creating to-do lists automatically
- Generating ideas for projects or startups

Example:

You type:

“Summarize my computer science notes for Chapter 5 in easy words.”

Notion AI instantly converts your notes into short, clear points.

Runway ML: AI for Video Creators

Runway ML is one of the most powerful AI video tools ever made. It helps **remove backgrounds, edit clips, and even create**

videos from text

What it can do:

- Text-to-video generation
- Object removal in videos (like erasing unwanted people or things)
- Automatic subtitles and color correction
- Create cinematic effects without complex editing

Example:

You write:

“Show a futuristic city with flying cars at night.”

Runway ML generates a short video that looks like a movie scene all using AI.

Synthesia : Make AI Talking Videos

With Synthesia, you can create videos where **AI avatars speak in your voice or any language.**

Perfect for teachers, YouTubers, and businesses.

You can use it for:

- Educational videos
- Marketing or product demos
- News style presentations

Example:

You upload your script:

“Welcome to our new coding class let’s learn HTML!”

Synthesia generates a video with a virtual presenter

saying your words, just like a real teacher.

Eleven Labs : The Most Realistic AI Voice Generator

This tool creates **ultra realistic human voices**. You can make podcasts, voice overs, or even audio books with natural sounding speech.

You can use it for:

- Narrating your YouTube videos
- Giving your games or apps real voices
- Reading your stories in your voice tone

Example:

You type a line like:

*“Welcome to Zero to Hero Tech your journey starts now”
Eleven Labs turns it into a real voice that sounds human,
warm, and expressive.*

Bonus: Google Veo & Google AI Studio

- **Google Veo:** The next level video AI that can create **realistic movie quality videos** from a short text prompt.
- **Google AI Studio:** A platform where anyone can **build, test, and deploy AI models** just like Google’s engineers.
- **Google Flow:** Makes app creation easier by connecting tools and AI logic visually no coding needed.

* * *

How to Choose the Right AI Tool for Your Work

There are now **thousands of AI tools** but not every tool is right for every task.

Choosing the right one depends on what you want to do. Here's a very simple and smart way to decide

Step 1: Know Your Goal

Before searching for any AI tool, ask yourself:

“What do I want to achieve?”

Examples:

- I want to design a poster → Try **Canva AI**
- I want to generate study notes → Try **ChatGPT or Notion AI**
- I want to make a short video → Try **Runway ML/google veo3**
- I want to create a talking avatar → Try **Synthesi**

AI is like a *toolbox*. If you don't know what you're building, you'll just keep opening tools without doing real work.

Step 2: Check for Safety and Privacy

Some AI tools may **store your data or track your inputs**.

Always use trusted platforms especially for personal or school projects.

Do this before using any AI website:

- Check if the site has “https://” at the start (secure connection).
- Avoid uploading personal images or ID cards.
- Don’t connect payment cards unless it’s an official app.

Step 3: Learn Before You Use

Even the best AI won’t help if you don’t know the basics of your field.

If you’re a designer, learn design rules.

If you’re a coder, learn programming logic.

If you’re a writer, learn storytelling.

Because once a legend said:

“AI can multiply your skills but zero knowledge × AI = still zero.”

Step 4: Experiment Small, Then Go Big

Don’t jump directly into advanced tools.

Start with **free trials or small projects**. Once you understand how it works, you can use it for real work or business.

Example Path:

1. Use **ChatGPT** → write a blog
2. Use **Canva AI** → design a thumbnail
3. Use **Runway ML** → make a short video
4. Use **ElevenLabs** → add a voice
5. Combine all → post your full AI-powered content

This way, you actually **build something**, not just try random tools.

Step 5: Always Keep the Human Touch

AI can write, draw, and even talk

but it cannot **feel** what you feel.

It doesn't know your dreams, your emotions, or your story.

That's what makes your work *human and special*.

So use AI as your helper not your replacement.

* * *

The Smart Way to Use AI Tools

Artificial Intelligence is powerful but only when *you* stay in control.

If you let AI think, write, and create everything for you, then you're not learning you're just copying.

So, let's learn the **smart way** to use AI like a *master*, not a *servant*.

1. Learn First, Then Use

Before asking AI for help, understand the topic yourself.

If you don't know the basics, you won't even know whether AI's answer is correct or wrong.

For example:

If you're learning coding try writing your own code first.

Then ask copilot, "Can you improve or fix this code?"

That's how you *learn and grow*.

"AI can correct your mistakes but only if you make them first."

2. Use AI as Your Assistant, Not Your Brain

AI is like your **digital assistant**, not your brain.

You tell it what to do it doesn't tell you what to think.

Use AI to:

- ✓ Save time on boring tasks (notes, summaries, drafts).
- ✓ Get new ideas and creative inspiration.
- ✓ Check your grammar or explain a topic simply.

But *don't* use it to:

- ✗ Do your full homework or project.
- ✗ Replace real teachers or practice.
- ✗ Copy paste code or essays without understanding.

3. Mix Human + AI Power

The strongest people today are not those who only use AI but those who **combine human creativity and AI speed**.

Here's how:

- You imagine → AI helps create.
- You write → AI improves.
- You design → AI polishes.
- You plan → AI organizes.

That's how professionals, creators, and students use AI *smartly*.

4. Don't Depend Too Much

If you always use AI for everything one day, you'll forget how to think.

AI is like a calculator useful, but dangerous if you stop learning math.

Use AI daily, but also **challenge yourself** to do things without it.

Try writing one essay by yourself, solving one problem alone, or creating one design without any help.

This builds your *real mind muscles*.

5. Ask Better Questions

AI gives better answers when you ask better questions.

Don't just say:

“Write a story.”

Say this instead:

“Write a short story about two students learning AI with humor and a life lesson.”

That's how you become a **prompt master** and that's the future skill every student needs.

6. Always Review the Output

AI can make mistakes.

Sometimes it gives old or incorrect information, or even biased answers.

Always review what it says use your logic, check the facts, and make it yours.

Because when you edit AI's work, it becomes *your creation*.

7. Balance Is the Key

AI + Knowledge + Creativity = Success

AI - Knowledge - Effort = Failure

So balance your work.

Use AI for help, but never stop learning, exploring, and thinking by yourself.

“The goal is not to replace your brain the goal is to upgrade it.”

* * *

In this chapter, you discovered how every AI tool has a purpose some write, some design, some create music, some code, and some think with you.

But remember one thing:

AI is not made to replace your mind.

It's made to **extend your power**.

The real success comes when you know how to use these tools wisely

not just to save time, but to grow your creativity, ideas, and skills.

Don't let AI become your shortcut.

Let it become your **superpower**.

Because when knowledge meets AI the impossible becomes possible.

And that's how creators, dreamers, and learners like you will build the next generation.

5

Inside the Cyber Battlefield

What You Will Learn in This Chapter

In this chapter, you'll step into the hidden world of **cybersecurity** the battlefield where good and bad hackers fight every single day.

You'll discover **what hacking really means**, how hackers break into systems, and why not all hackers are criminals.

You'll learn about **different types of hackers** from the dangerous black hats to the protective white hats who defend companies and people online.

You'll also understand how **cyber attacks** happen phishing, malware, ransomware, and more explained in simple, real-life examples.

Then, we'll explore the world of **ethical hacking**, how experts legally test security systems, and why **cyber laws** protect both you and the internet.

By the end of this chapter, you'll know how to protect yourself online, how to stay safe from hackers, and maybe even how to

- **Revenge:** “They ignored me, I’ll teach them a lesson.”
- **Money:** “I can sell data, passwords, or information.”
- **Challenge:** “Let’s see how strong their system really is.”
- **Good Purpose:** “I’ll find their weakness and tell them before someone else does.”

So, not all hackers are villains some are heroes in disguise.

It all depends on how they use their skills.

A Quick Example

In 1986, a young hacker named **Markus Hess** from Germany broke into hundreds of American military computers.

He wasn’t trying to destroy anything he was exploring, out of curiosity.

But his actions were still illegal, and he was caught.

This became one of the first big international hacking cases in history.

After that, governments started to take **cybersecurity** seriously.

They realized one person with a computer could be more powerful than an army.

The Line Between Curiosity and Crime

There’s a very thin line between being a *learner* and being a *criminal* in hacking.

If you hack your own system to test it that’s learning.

If you hack someone else’s system without permission that’s a **cybercrime**.

That’s why in the next section, we’ll learn about the **three**

main types of hackers

the good, the bad, and the ones who live between both worlds.

* * *

Types of Hackers: Black Hat, White Hat & Grey Hat

Not all hackers are bad.

Just like in movies there are heroes, villains, and people who stand in the middle.

Let's understand the three main types of hackers in simple words

🚩 Black Hat Hackers : The Bad Side

These are the **criminal hackers**.

They break into computers, steal data, destroy files, and hack websites **without permission**.

Their goal is usually **money, power, or revenge**.

Example:

A hacker who steals people's credit card details or locks files with ransomware and demands payment that's a **black hat hacker**.

What they do is **illegal** and can lead to serious jail time.

White Hat Hackers : The Good Hackers

These are the **ethical hackers** the ones who use their skills to **protect** people and companies.

They find security problems **with permission** and report them

to fix the system before criminals exploit them.

Example:

A cybersecurity expert working for a bank, testing its website for weaknesses, and helping fix them that's a **white hat hacker**.

They help make the internet **safer** for everyone.

○ Grey Hat Hackers The Middle Line

These hackers stand **between good and bad**.

They don't hack to harm, but they might break into systems **without asking first**.

After finding a weakness, they usually tell the company but still, it's **not fully legal** because they didn't get permission first.

Example:

A person who hacks a website just to show that it's unsafe, then emails the company to warn them that's a **Grey hat hacker**.

* * *

Common Types of Cyber Attacks

Now that you know about hackers, let's see **how** they attack.

Some use tricks, some use code but the goal is always the same:

to steal, damage, or control.

Here are the most common cyber attacks you must know

1. Phishing : The Fake Trap

Phishing means **tricking people** into sharing personal details.

Hackers send fake emails or messages that look real like from your bank, school, or favorite store.

They want you to click a fake link or enter your password.

Example:

You get an email:

“Your bank account is locked. Click here to verify.”

You click, enter your password boom it goes to the hacker.

Tip:

Always check the sender’s email address and don’t click unknown links.

2. Malware & Ransomware : The Silent Killers

Malware means “malicious software” any program made to harm your computer.

Ransomware is a special type of malware that locks your files and asks for **money (ransom)** to unlock them.

Example:

You open a file from an unknown email suddenly your files get locked, and a message says:

“Pay \$500 to get your data back.”

That’s ransomware

Tip:

Never download unknown files. Always keep antivirus and

backups.

3. Key loggers : The Spy Behind the Keyboard

A keylogger is a small hidden program that **records everything you type** passwords, messages, even search history.

It secretly sends this data to the hacker.

Example:

You type your Instagram password, and the hacker reads it later.

Tip:

Avoid public computers and use on-screen or 2FA (two-factor authentication).

4. Brute Force & Dictionary Attacks

Hackers use software that **tries thousands of passwords** again and again until it finds the right one.

This is called a **brute force attack**.

If the hacker uses common words like “123456” or “password123”, it’s called a **dictionary attack**.

Example:

If your password is “bro123” it’ll be cracked in seconds

Tip:

Use long, strong passwords like “JaiSamadhi123@waheguru”

5. SQL Injection Attacking the Database

Many websites use **databases** to store user data.

In SQL injection, hackers type **malicious code** into login boxes or search bars to **steal or delete data** from the database.

Example:

A hacker types special symbols like ' OR 1=1 instead of a username and the system gives access.

Tip:

Developers must always **validate input** and never trust direct user data.

* * *

Penetration Testing

“To catch a hacker, you must think like one but never act like one.”

What Is Penetration Testing (Pentesting)?

Penetration Testing is a type of ethical hacking where experts perform **controlled attacks** on systems.

They act like real attackers but safely, with permission to test how strong a company's cybersecurity really is.

Think of it like this:

If your house has a new security alarm, pentesters are the ones who try to “break in” just to check if the alarm works properly.

There are different types of pentests:

1. **Network Pentesting** : tests routers, firewalls, and servers.
2. **Web App Pentesting** : finds bugs in websites (like SQL

injection, cross-site scripting).

3. **Wireless Pentesting** : checks Wi-Fi security.
4. **Social Engineering** : tests how easily people can be tricked (like fake emails).

Tools Used by Ethical Hackers

Here are some famous tools ethical hackers use: (these tools is for educational purposes only. The author, writer, and publisher are not responsible for any misuse of the information or tools described herein.)

- **Nmap** : to scan networks and find open ports.
- **Burp Suite** : to test web app security.
- **Metasploit** : to simulate attacks safely.
- **Wireshark** : to analyze network traffic.
- **Kali Linux** : the ultimate ethical hacking operating system.

Why Ethical Hacking Is Important

Every day, thousands of cyber attacks happen. Without ethical hackers, these attacks would go unnoticed until it's too late.

Ethical hackers:

- Protect user data
- Prevent financial losses
- Build stronger systems
- Train organizations to fight real threats

Real World Example

In 2021, a 19 year old ethical hacker from Austria found a bug in a large airline's booking system.

He reported it responsibly and instead of being punished, the company thanked him publicly and gave him a **\$5,000 reward**.

That's how ethical hackers turn skill into **respect, money, and purpose**.

The Rule of Every Ethical Hacker

"Hack to protect, not to harm."

They never:

- Access systems without permission
- Steal or sell data
- Damage servers or software

They always:

- Ask for authorization
- Report bugs privately
- Help improve security

* * *

Cyber Ethics & Digital Laws

“The internet is like a city some people build it, some protect it, and some try to break it.”

As technology becomes more powerful, the **responsibility** to use it correctly becomes even more important.

Cyber ethics and digital laws are the rules that guide how we behave online.

They help keep the internet **safe, fair, and trustworthy** for everyone.

What Is Cyber Ethics?

Cyber ethics means **“the right way to use technology.”**

It’s about understanding what’s **good or bad, right or wrong** when you’re online whether you’re coding, chatting, gaming, or hacking.

Here are some examples of **good cyber ethics**:

- Respecting other people’s privacy
- Not sharing fake news or harmful content
- Giving credit to others’ work (no plagiarism)
- Reporting bugs or vulnerabilities instead of exploiting them

And examples of **bad cyber ethics**:

- Hacking someone’s account for fun or revenge
- Spreading viruses or malware
- Using AI to create fake videos or voices
- Copying paid software or content illegally

What Are Cyber Laws?

Cyber laws are **legal rules** made by governments to stop digital crimes.

They protect individuals, companies, and nations from online threats.

Common types of **cyber crimes** include:

- Hacking or data theft
- Online fraud or scams
- Identity theft
- Cyberbullying or harassment
- Sharing illegal content
- Unauthorized access to systems

What Happens If You Break Cyber Laws?

Breaking cyber laws even “for fun” can have serious consequences:

- Heavy fines
- Jail time
- Permanent ban from tech careers
- Loss of online reputation and trust

Many young hackers think, “*It’s just for fun*” until they realize digital footprints never disappear.

Even if you delete a file, your activity is still traceable.

What Is Responsible Disclosure?

Responsible disclosure means **reporting a security bug safely**.

If you find a weakness in a website or system:

- Don't exploit it.
- Inform the company privately.
- Wait for them to fix it before sharing details publicly.

Companies often reward this honesty with:

- **Bug bounties (cash rewards)**
- **Certificates or recognition**
- **Job offers in cybersecurity**

Why Cyber Ethics & Laws Matter

Without rules, the digital world becomes a battlefield.

Ethics and laws create **balance** between freedom and responsibility.

They protect users, companies, and nations from harm.

“Technology gives power but ethics decides how that power is used.”

* * *

The Hacker Who Saved a Bank

It was a cold winter morning in Karachi.

The city was waking up slowly but inside **National Trust Bank**, chaos had already begun.

At 7:42 AM, the main server went offline.

The system that handled **millions of rupees** every day suddenly stopped responding.

ATM screens showed “*Connection Error.*”

The manager panicked. Customers started complaining.

No one knew what was happening except one person sitting quietly in a small apartment nearby.

His name was “naveed”.

A 17 year old computer genius.

He had learned coding, networks, and security from YouTube, books, and online courses.

But more than anything he loved *challenges*.

The Mistake That Started It All

A few months ago, Naveed applied for a job at the same bank’s IT department.

They rejected him saying, “*You’re too young, no experience.*”

So, to prove himself, he decided to test their system **ethically**, not to harm, but to show them how weak their security was.

He found a vulnerability an open port with no firewall protection.

But before he could report it, **someone else** discovered the same weakness.

That “someone else” was a **black hat hacker** from another country.

And that morning, the hacker attacked the bank's system encrypting every file, every backup, demanding **30 Bitcoin** in ransom.

The Hero Steps In

When Naveed heard the news, he immediately recognized what had happened.

He contacted the bank's IT head eshwer kingrani, a man who once taught him during a summer workshop.

*"Sir, I think I know how they got in," Naveed said calmly.
"Let me help."*

At first, they didn't trust him.

But when the situation got worse they had no choice.

Within two hours, Naveed was given limited access to the bank's recovery server.

He traced the attacker's entry point, blocked the IPs, and used a custom **Python script** to isolate the infected drives.

Then, he used his own homemade decryption tool something he built while experimenting with cryptography.

It wasn't perfect, but it worked.

Slowly, files started unlocking.

Transactions came back.

By midnight the bank's entire system was restored.

The Outcome

Next morning, the news broke:

“Young Ethical Hacker Saves Bank from Major Cyberattack.”

The same bank that once rejected him offered him a **full-time cybersecurity job**.

He was now leading a team under eshwer kingrani, the man who once said,

“Knowledge is not dangerous how you use it decides your fate.”

The Moral of the Story

Skills are powerful but only when guided by **ethics**.

Naveed could have used his talent to destroy, but he chose to protect.

*In cybersecurity, **intention** is everything.*

“The difference between a hacker and a hero is just one choice how you use your knowledge.”

* * *

Stay Safe: Your Personal Cyber Shield

Every time you go online, you enter a new world full of friends, fun, and sometimes danger.

Hackers, fake apps, and scam websites are everywhere.

But if you follow a few simple steps, you can protect your data like a digital superhero.

1. Use Strong Passwords

Never use easy passwords like your name or “123456.”

Use a mix of letters, numbers, and symbols.

And never use the same password on every app or website.

2. Turn On Two-Step Verification

Even if someone steals your password, they can't log in without your phone's code.

Turn it on in Instagram, Gmail, and all your important accounts.

3. Don't Click Everything

Hackers send fake links and emails that look real.

Always think twice before clicking or downloading anything suspicious.

4. Update Regularly

When your phone or laptop asks to update do it.

Updates fix security holes that hackers love to use.

5. Avoid Fake Apps & Websites

Only install apps from trusted stores (Play Store or App Store).

Always check that a website starts with **https://** before entering any password or card number.

6. Keep Personal Info Private

Don't post your address, school, or phone number publicly.

Hackers can use these details to trick or target you.

7. Backup Your Files

Keep a copy of your photos and documents in Google Drive or a USB.

If a virus attacks your computer, your memories and data stay safe.

Final Message: Be a Protector, Not a Predator

Every hacker starts with curiosity.

But what makes you great is how you use your power.

You can use technology to **break** things or to **build** a safer world.

To steal data or to **save** it.

Real heroes don't wear capes.

They protect people online.

They use knowledge with honesty and purpose.

So remember this:

“The internet doesn't need more hackers it needs heroes

who protect it.”

Eshwer Kingrani

* * *

What You Learned in This Chapter

By now, you've seen how the digital world is both **amazing** and **dangerous**.

Here's a quick recap of what you learned:

Hacking : what it really means and how it started.

Types of Hackers : the difference between **black hat, white hat, and grey hat** hackers.

Common Cyber Attacks : phishing, malware, ransomware, brute force, SQL injection, and more.

Ethical Hacking & Penetration Testing : how professionals legally find and fix security flaws.

Cyber Ethics & Laws: what's legal online, what's not, and why honesty matters.

The Hacker Who Saved a Bank : how using knowledge for good can protect millions.

Your Cyber Shield : simple safety rules for passwords, privacy, and online protection.

