What is a computer?

A **computer** is an electronic device that manipulates information, or data. It has the ability to **store**, **retrieve**, and **process** data. You may already know that you can use a computer to **type documents**, **send email**, **play games**, and **browse the Web**. You can also use it to edit or create **spreadsheets**, **presentations**, and even **videos**.
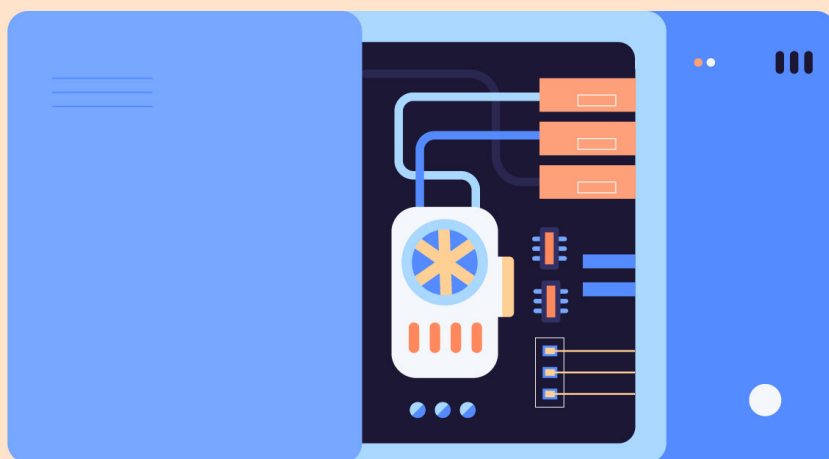
▶ Watch the video below to learn about different types of computers.

✳ Looking for the old version of this video? You can still view it **here**.
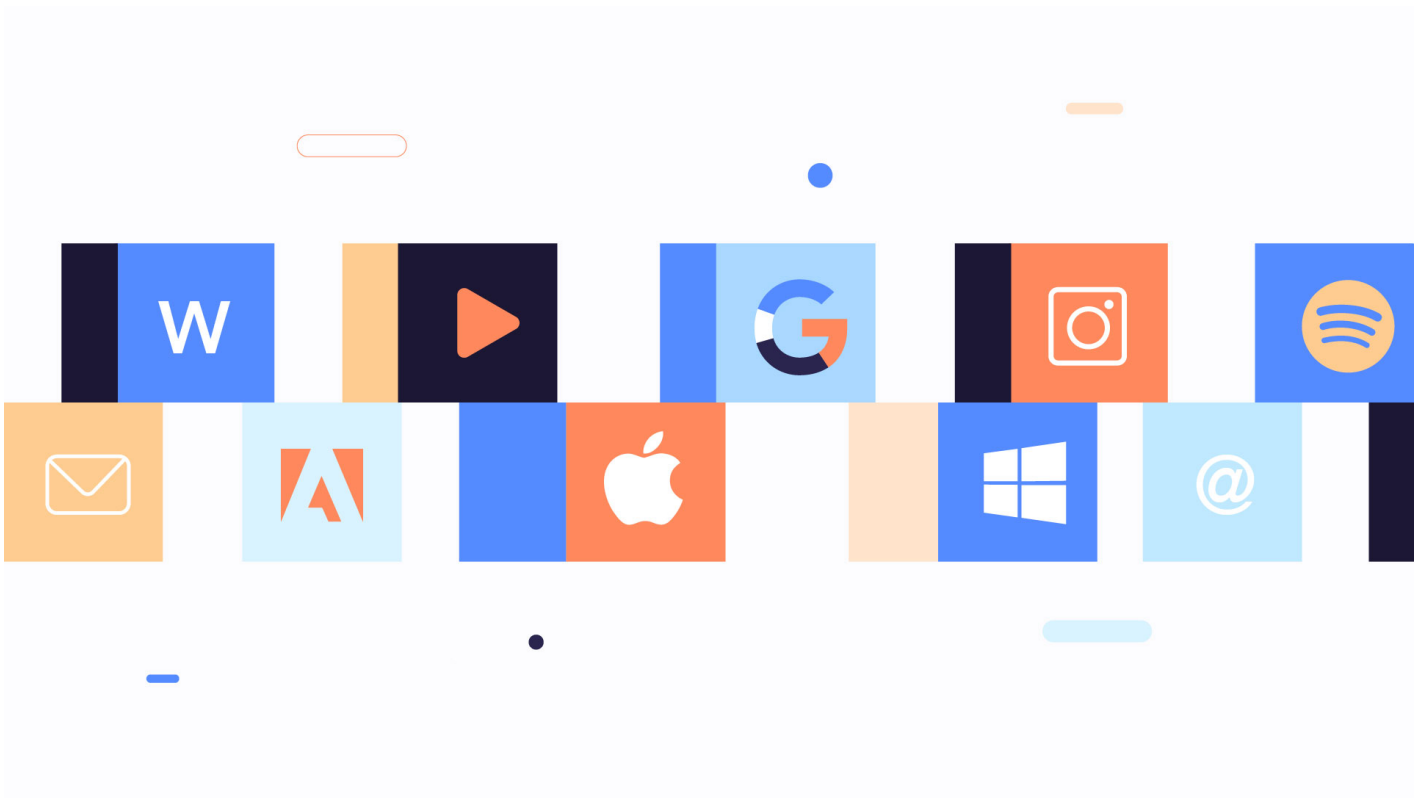
Hardware vs. software

Before we talk about different types of computers, let's talk about two things all computers have in common: **hardware** and **software**.

▶ **Hardware** is any part of your computer that has a **physical structure**, such as the keyboard or mouse. It also includes all of the computer's internal parts, which you can see in the image below.

▶ **Software** is any **set of instructions** that tells the hardware **what to do** and **how to do it**. Examples of software include web browsers, games, and word processors.
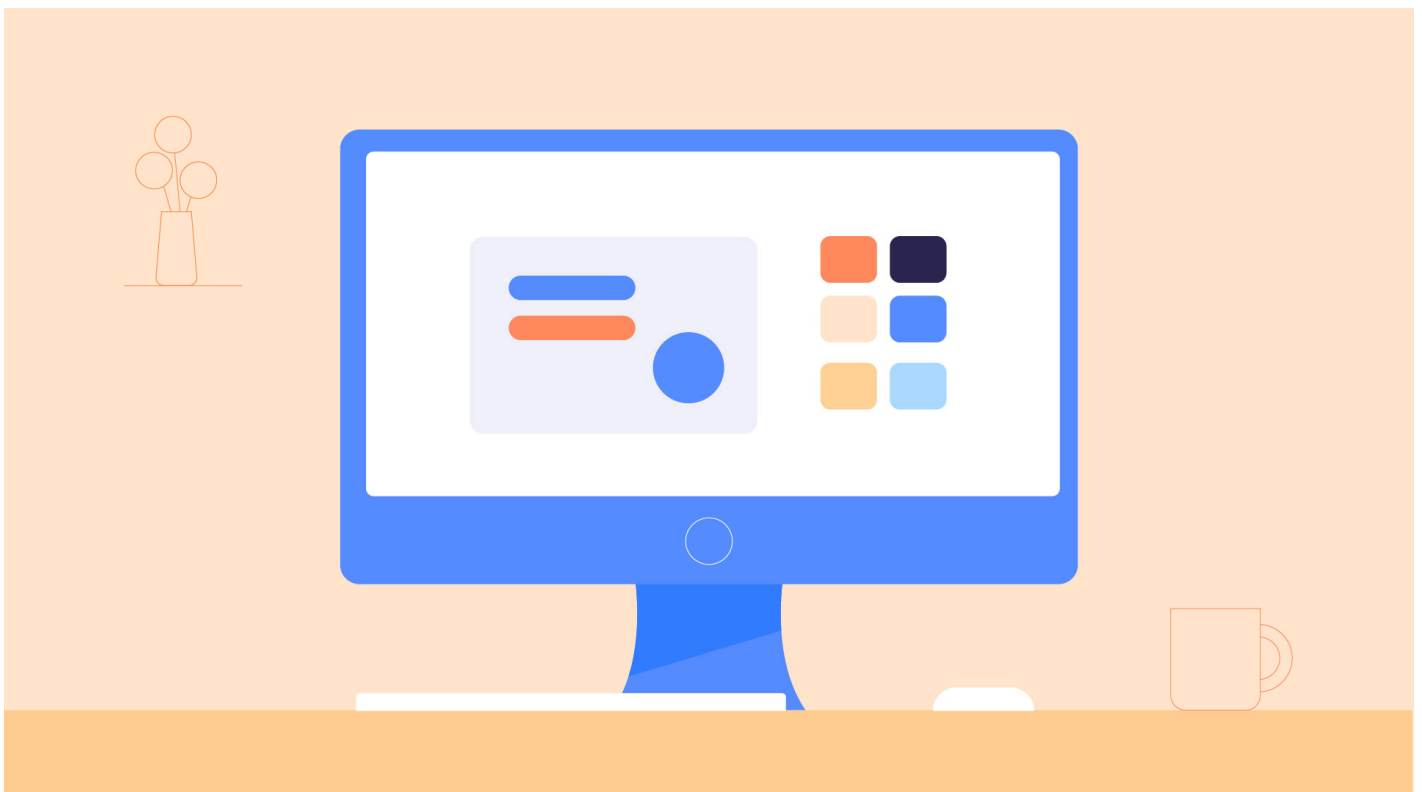

Everything you do on your computer will rely on both hardware and software. For example, right now you may be viewing this lesson in a **web browser** (software) and using your **mouse** (hardware) to click from page to page. As you learn about different types of computers, ask yourself about the differences in their hardware. As you progress through this tutorial, you'll see that different types of computers also often use different types of software.

What are the different types of computers?

When most people hear the word **computer**, they think of a **personal computer** such as a **desktop** or **laptop**. However, computers come in many shapes and sizes, and they perform many different functions in our daily lives. When you withdraw cash from an ATM, scan groceries at the store, or use a calculator, you're using a type of computer.
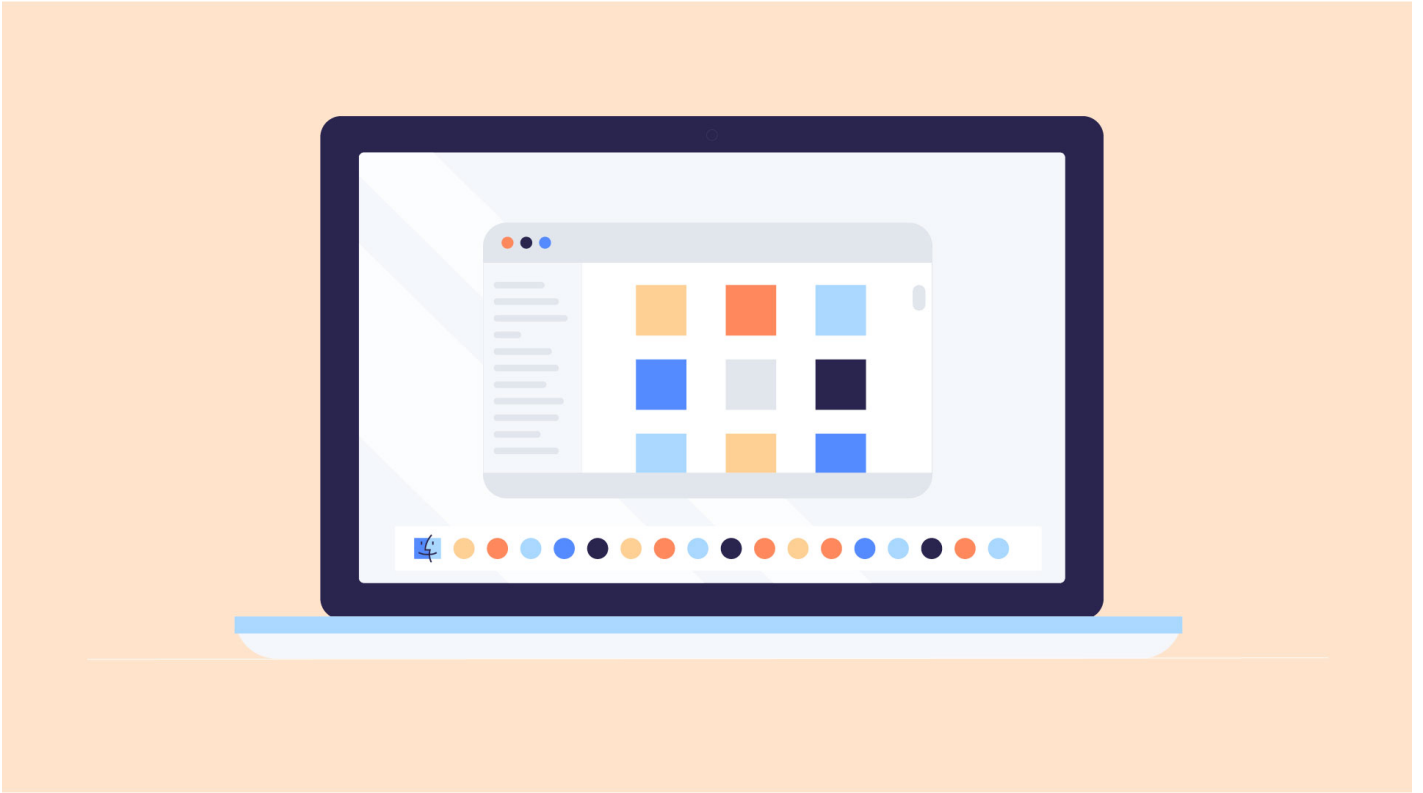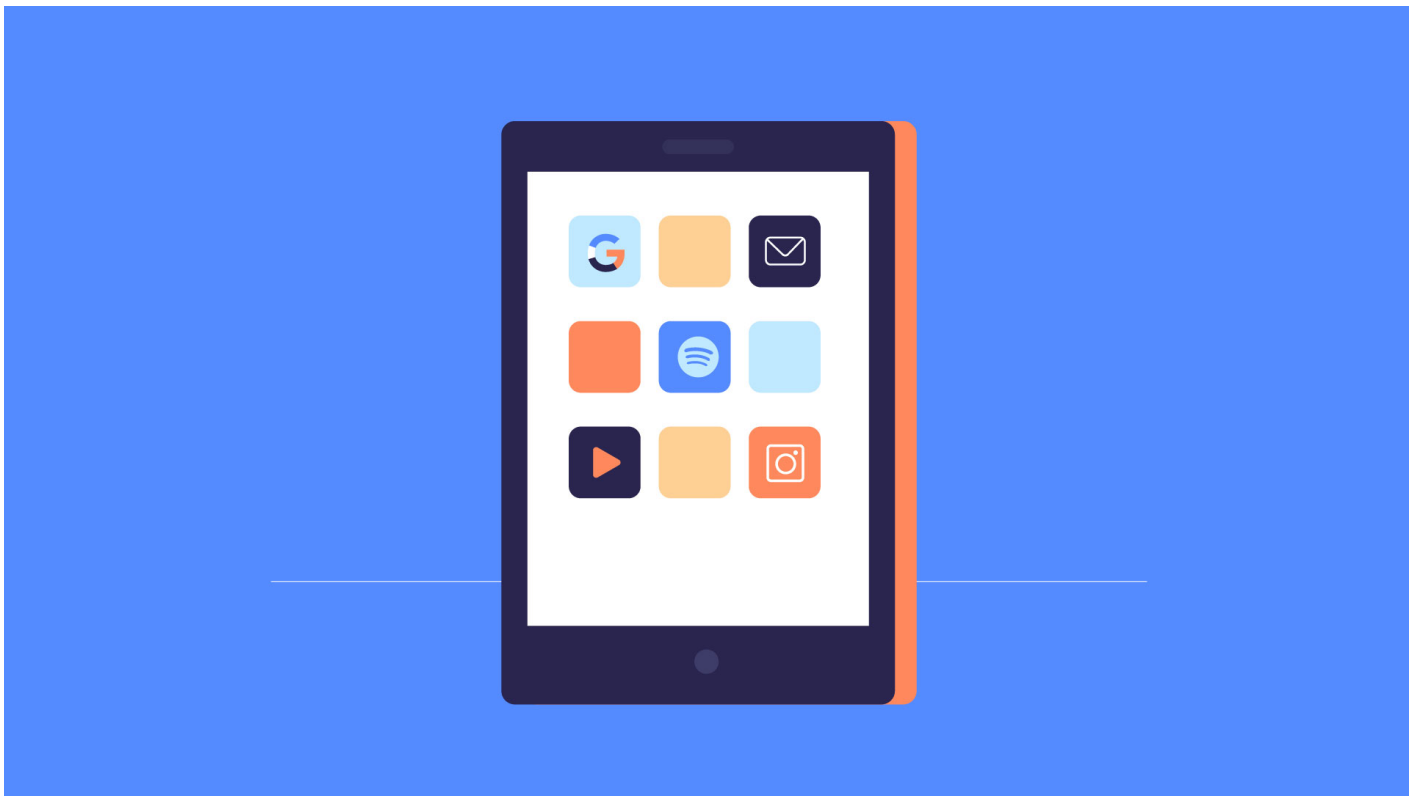
Desktop computers

Many people use **desktop computers** at work, home, and school. Desktop computers are designed to be placed on a desk, and they're typically made up of a few different parts, including the **computer case**, **monitor**, **keyboard**, and **mouse**.
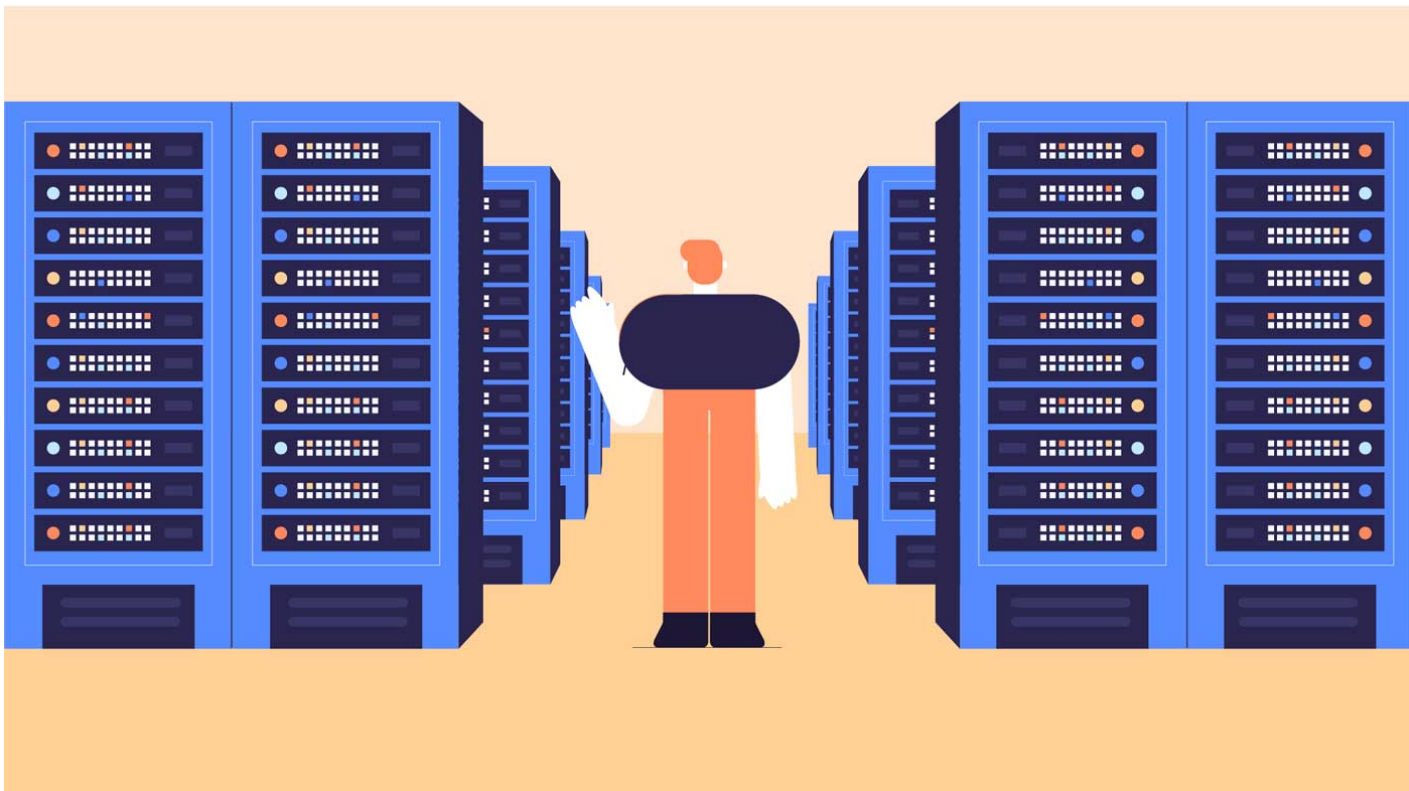
Laptop computers

The second type of computer you may be familiar with is a **laptop computer**, commonly called a laptop. Laptops are battery-powered computers that are **more portable** than desktops, allowing you to use them almost anywhere.

Tablet computers

Tablet computers—or **tablets**—are handheld computers that are even more portable than laptops. Instead of a keyboard and mouse, tablets use a **touch-sensitive screen** for typing and navigation. The **iPad** is an example of a tablet.

Servers

A **server** is a computer that serves up information to other computers on a network. For example, whenever you use the Internet, you're looking at something that's stored on a server. Many businesses also use local **file servers** to store and share files internally.
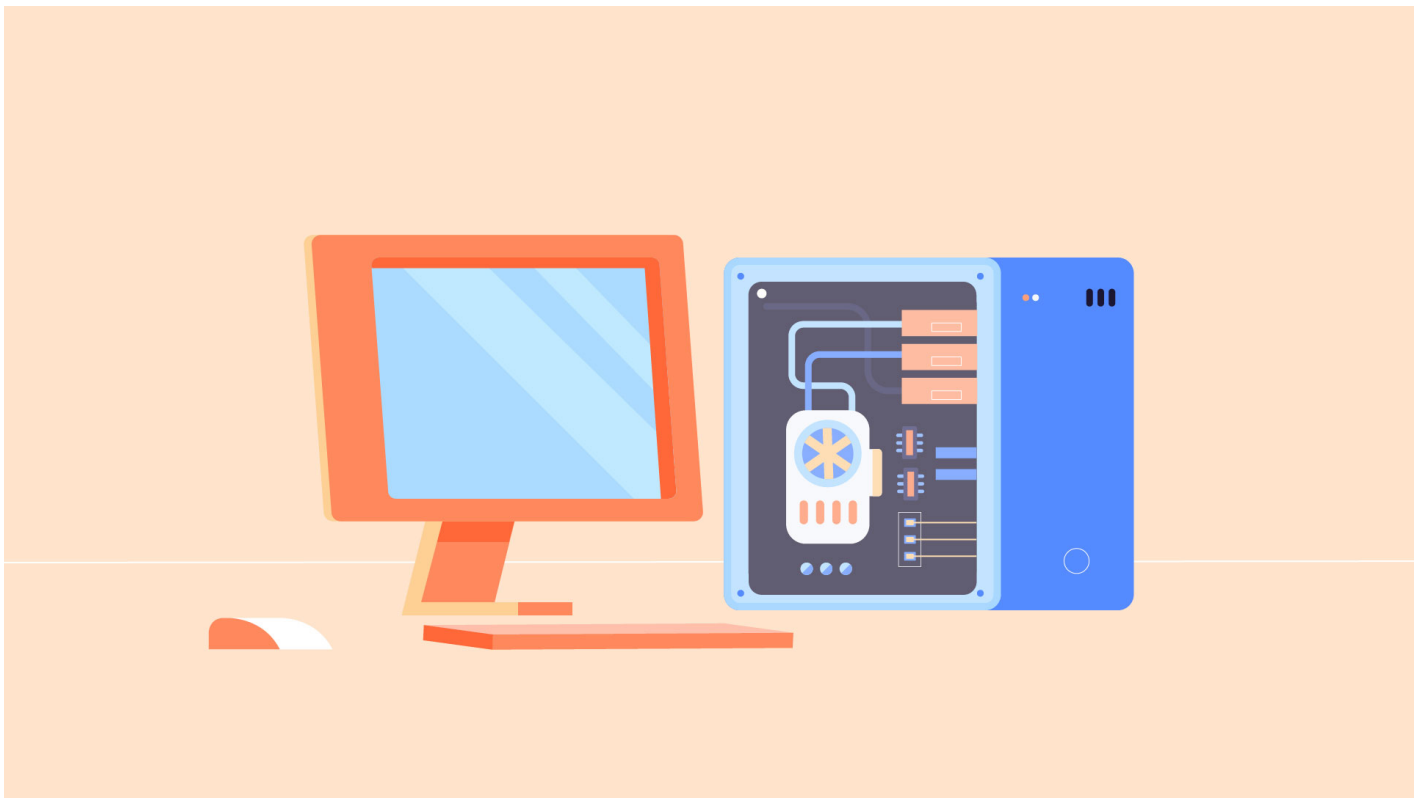
Other types of computers

Many of today's electronics are basically **specialized computers**, though we don't always think of them that way. Here are a few common examples.

- ▶ **Smartphones**: Many cell phones can do a lot of things computers can do, including browsing the Internet and playing games. They are often called **smartphones**.

- ▶ **Wearables**: Wearable technology is a general term for a group of devices—including **fitness trackers** and **smartwatches**—that are designed to be worn throughout the day. These devices are often called **wearables** for short.

- ▶ **Game consoles**: A **game console** is a specialized type of computer that is used for playing **video games** on your TV.

- ▶ **TVs**: Many TVs now include **applications**—or **apps**—that let you access various types of online content. For example, you can stream video from the Internet directly onto your TV.
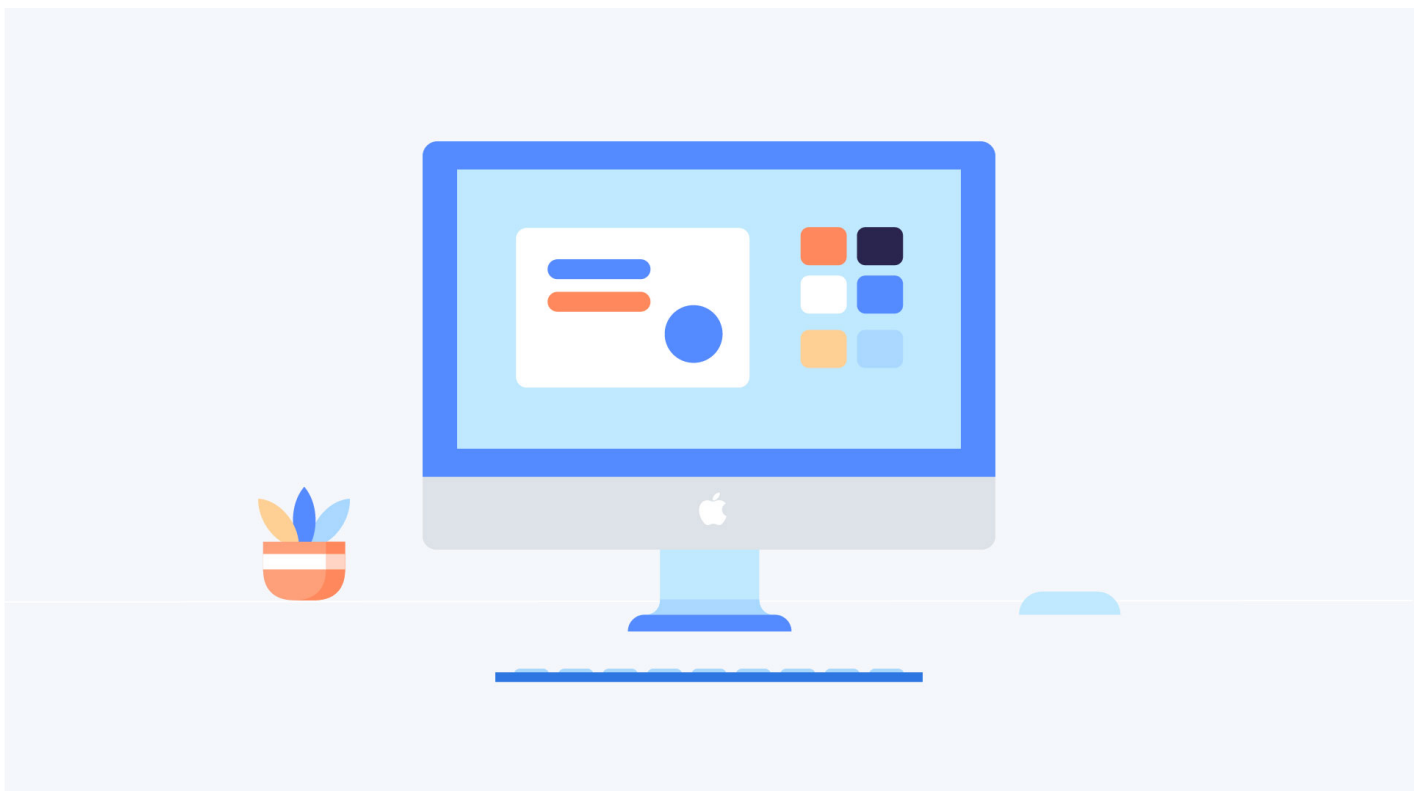
PCs and Macs

Personal computers come in two main styles: **PC** and **Mac**. Both are fully functional, but they have a different look and feel, and many people prefer one or the other.

PCs

This type of computer began with the original **IBM PC** that was introduced in 1981. Other companies began creating similar computers, which were called **IBM PC Compatible** (often shortened to **PC**). Today, this is the most common type of personal computer, and it typically includes the **Microsoft Windows** operating system.

Macs

The **Macintosh** computer was introduced in 1984, and it was the first widely sold personal computer with a graphical user interface, or **GUI** (pronounced **gooey**). All Macs are made by one company (**Apple**), and they almost always use the **Mac OS X** operating system.

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