



## Working of Touchscreens

A **touchscreen** is a surface that combines two functions: to **receive inputs** for a computer (say, tapping on an app) and to **display the output** (launching the app).

- There are two most common types of touchscreens: **capacitive** and **resistive**.
  - **Capacitive touchscreens** are used in most smartphones and tablets. They work by sensing the **electrical properties** of the **human body** when a finger touches the screen.
    - Such a **touchscreen** consists of a surface with a **grid of capacitors**. Capacitor stores electric charges and when a finger touches the screen, sensors detect the distortion and **relay the information to determine the touch location**.
  - **Resistive touchscreens are pressure-sensitive** and work by sensing the pressure applied to the screen.
    - Resistive touchscreens are cheaper to make and require less power to operate.
    - A resistive touchscreen uses resistance. That is, there are two sheets, both **conductors**, separated by a small gap. When a finger touches one sheet, it moves it at that point to touch the underlying sheet, allowing a current to pass there.

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