**What is a Web Service?**

A **web service** is a way for two software applications (usually on different devices or systems) to **talk to each other over the internet** using a common format like **HTTP**.

Think of it as:

"A service that lives on the internet and responds to requests from other programs."

It allows one application to send data to another, ask for information, or perform actions remotely.

**Real-Life Example of a Web Service:**

**Example: Weather App on Your Phone**

* When you open a weather app, it doesn't calculate the weather itself.
* Instead, it **calls a web service** (like from Weather.com or OpenWeatherMap) that gives real-time weather data for your city.
* The app sends a **request** (e.g., "Give me weather for Mumbai") and the web service sends back a **response** with temperature, humidity, etc.

This "ask-and-get" mechanism is made possible through **web services**.

**Behind the Scenes**

Your phone (the **client**) → sends a request → to a server (where the **web service** is) → gets the response → and displays it to you.

A web service is like an online waiter that takes your order (request) and brings you what you need (response), all through code.