# DAY-9

## Introduction to Backend Development and Basics of Node.js

## What is Backend Development?

- Backend development is like the behind-the-scenes work of a website or app. It includes everything that happens on the server, such as:
  - **1. Managing Data:** The backend stores and retrieves information. For example, when you log into a website, the backend checks your username and password from a database.
  - 2. Server Logic: It handles the requests you make from the front end (the part you see on the screen) and sends back the right information.
  - **3. APIs:** These are like messengers between the front end and backend, helping the two communicate with each other.

<Think of the frontend as the tip of an iceberg (what users see) and the backend as everything under the water that makes it work.>

### What is Node.js?

- Node.js is a tool that allows developers to run JavaScript (the programming language used for websites) on the backend (server side). Normally, JavaScript runs in your browser (for example, when you're interacting with a website), but Node.js lets you use JavaScript to build the server-side part of a website or app too.
- So, instead of using different languages for frontend and backend, with Node.js, you can use JavaScript for both, which simplifies things.

### Key Things About Node.js:

- Fast and Scalable: It's really fast because it can handle many requests at the same time without getting stuck waiting for one to finish.
- 2. **Non-Blocking:** This means if one task (like accessing a database) takes time, Node.js doesn't stop other tasks. It just keeps going.
- 3. **Uses JavaScript:** If you know JavaScript for building websites, you can also use it to build the server part, which makes it easier to learn and work with.