**BACK END**

• What is back end?

Backend is the server-side of the website. It stores and arranges data, and also makes sure everything on the client-side of the website works fine. It is the part of the website that you cannot see and interact with. It is the portion of software that does not come in direct contact with the users.

(Server + Database)

• Back End Languages?

**PHP:** PHP is a server-side scripting language designed specifically for web development. Since PHP code executed on the server-side, so it is called a server-side scripting language.

**C++:** It is a general-purpose programming language and widely used nowadays for competitive programming. It is also used as a backend language.

**Java:** Java is one of the most popular and widely used programming languages and platforms. It is highly scalable. Java components are easily available.

**Python:** Python is a programming language that lets you work quickly and integrate systems more efficiently.

**JavaScript:** JavaScript can be used as both (front end and back end) programming languages.

**Node.js:** Node.js is an open-source and cross-platform runtime environment for executing JavaScript code outside a browser. You need to remember that NodeJS is not a framework, and it’s not a programming language. Most people are confused and understand it’s a framework or a programming language. We often use Node.js for building back-end services like APIs like Web App or Mobile App. It’s used in production by large companies such as **Paypal, Uber, Netflix,** **Wallmart**, and so on.

The other back-end program/scripting languages are **C#, Ruby, REST, GO**, etc.

3)Libraries and Frameworks

The list of back-end frameworks are:

**• ExpressJS** (used with node js)

**• Django** (python)

**• Rails** (Ruby)

**• Spring** (JAVA)

4) Common Back End tasks?

• Database creation , integration and management.

• Using backend framework to build server side software.

• Data Validation

• Integrate user facing elements with server side logic.

5) Databases for back end

• MySQL

• Oracle

• Mongo DB

• Postgre SQL

Summary

• Back end Development refers to the server-side development

• Back end developer skills include Development Languages, Database and cache, Server, API (REST & SOAP), etc.

• The backend web developer should understand the goals of the website and come up with effective solutions

• The languages that a front-end developer should be familiar with are HTML, CSS, and JavaScript whereas Back End web developer should be familiar with the database, Server, API, etc.

• Front-end development service can’t be offered independently but Backend web development service can be offered independently.