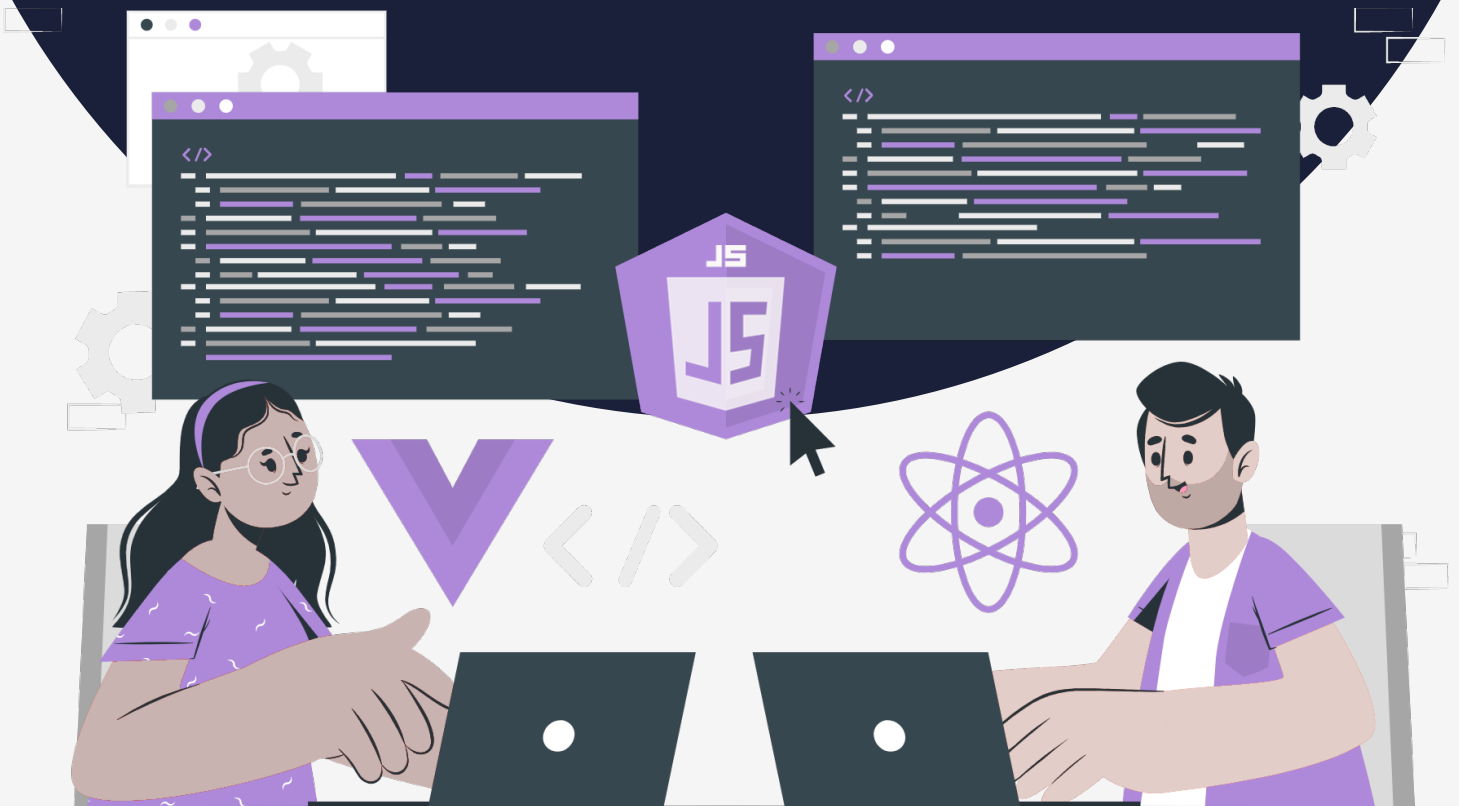


Lesson:

# What is Full Stack Development?



# Introduction

Web development is the process of building, creating, and maintaining websites. In other words, it is the process of creating websites that are accessible on the internet through web browsers.

The word web development is made up of two words-

1. **Web:-** It refers to the website
2. **Development:-** It refers to building the application from scratch

Before moving ahead we should be clear about two more terms, those are-

1. **Webpage:-** It is a single document or file that is accessible on the internet which is mainly a part of the website
2. **Web Application:-** It is a collection of related web pages together.

**Example:-** The checkout and payment pages are web pages while Amazon is a website.

## Web development and its technologies-

Web development is majorly divided into two parts which involve different technologies to make everything functional

1. **Frontend:-** It mainly refers to the part of a website that the user interacts with directly. It typically involves designing and coding the user interface using web technologies such as HTML, CSS, and JavaScript. Frontend developers focus on creating a visually appealing and user-friendly experience that allows users to easily navigate and interact with the website or application.
2. **Backend:-** It refers to the behind-the-scenes functionality that powers a website or application. This includes database management, and other tasks that are necessary for the website or application to function properly. Backend developers focus on creating the logic and algorithms that drive the website or application and ensure that data is stored, processed, and retrieved accurately and efficiently. Technologies like NodeJS and MongoDB are used for these.

## Tools requirement for web development

1. **Text editors:-** It is used to create and edit the HTML, CSS, and JavaScript code. Examples include Notepad, Sublime Text, Atom, etc.
2. **IDEs (Integrated Development Environments):-** These are comprehensive tools that include text editors, debuggers, code completion, and other features which help us in smooth and faster development. Examples include VS Code, Eclipse, etc.
3. **VCS (Version Control System):-** It is used to track changes made in our code over time. Examples include Git and SVN
4. **Web Browsers:-** It is used to visualize our code output and also help us to test and debug our web page. Examples include Google Chrome, Mozilla Firefox, Microsoft Edge, etc
5. **Web Frameworks:-** These are software libraries that provide a standardized way to build web applications. Examples include Node.js, Ruby on Rails, Django, Flask, and Laravel.
6. **Databases:-** These are software programs that allow developers to store and retrieve data. Examples include MySQL, PostgreSQL, MongoDB, and Redis.