About WEB

The World Wide Web (WWW), commonly known as the Web, is the world's dominant software platform. It is an information space where documents and other web resources can be accessed through the Internet using a web browser.The Web has changed people's lives immeasurably.It is the primary tool billions of people worldwide use to interact on the Internet.It was invented at CERN in 1989 and opened to the public in 1991. English computer scientist Tim Berners-Lee invented the World Wide Web in 1989 while working at CERN in Switzerland.In 1990, he developed the foundations for the Web: HTTP, HTML, the WorldWideWeb browser, a server, and the first website in order to manage documentation.The browser was released outside CERN to other research institutions starting in January 1991, and then to the general public in August 1991. The Web was a success at CERN, and began to spread to other scientific and academic institutions.

The terms Internet and World Wide Web are often used without much distinction. However, the two terms do not mean the same thing. The Internet is a global system of computer networks interconnected through telecommunications and optical networking. In contrast, the World Wide Web is a global collection of documents and other resources, linked by hyperlinks and URIs. Web resources are accessed using HTTP or HTTPS, which are application-level Internet protocols that use the Internet's transport protocols. Viewing a web page on the World Wide Web normally begins either by typing the URL of the page into a web browser or by following a hyperlink to that page or resource. The web browser then initiates a series of background communication messages to fetch and display the requested page. In the 1990s, using a browser to view web pages—and to move from one web page to another through hyperlinks—came to be known as 'browsing,' 'web surfing' (after channel surfing), or 'navigating the Web'. Early studies of this new behavior investigated user patterns in using web browsers. One study, for example, found five user patterns: exploratory surfing, window surfing, evolved surfing, bounded navigation and targeted navigation.

Website development is the process of designing, developing, and maintaining a website. Essentially, the difference between web development and website design is that the designer in website design designs the user interface of the website. The website development process defines the functionality, applicability, and general functioning of your website. When it comes to your target audience's perception of your business or organization, it may make a significant difference in whether or not they become consumers. A user-friendly user interface on a website will result in a considerably greater conversion rate, which will translate into more business and profits.

Importance of Web Development:

1. Maintaining Ownership
2. Control Your Content With Good Web Development
3. Create a Content Hub
4. Attracting Search Traffic
5. Monitor, Tweak and Improve

Web Development can be classified into two ways

1. Frontend Development
2. Backend Development

1. Frontend Development: The part of a website that the user interacts directly is termed as front end. It is also referred to as the 'client side' of the application.

Frontend Development Roadmap:

- HTML: HTML stands for HyperText Markup Language. It is used to design the front end portion of web pages using markup language. It acts as a skeleton for a website since it is used to make the structure of a website.
- CSS: Cascading Style Sheets fondly referred to as CSS is a simply designed language intended to simplify the process of making web pages presentable. It is used to style our website.
- JavaScript: JavaScript is a scripting language used to provide a dynamic behavior to our website.
- Bootstrap: Bootstrap is a free and open-source tool collection for creating responsive websites and web applications. It is the most popular CSS framework for developing responsive, mobile-first websites. Nowadays, the websites are perfect for all the browsers (IE, Firefox, and Chrome) and for all sizes of screens (Desktop, Tablets, Phablets, and Phones).

Frontend Frameworks and Libraries:

- AngularJS
- React.js
- VueJS
- jQuery
- Bootstrap
- Material UI
- Tailwind CSS
- jQuery UI

    Some other libraries and frameworks are: Handlebar.js Backbone.js, Ember.js etc.

2. Backend Development: Backend is the server side of a website. It is the part of the website that users cannot see and interact. It is the portion of software that does not come in direct contact with the users. It is used to store and arrange data.

Backend Roadmap:

- PHP: PHP is a server-side scripting language designed specifically for web development.
- Java: Java is one of the most popular and widely used programming language. It is highly scalable.
- Python: Python is a programming language that lets you work quickly and integrate systems more efficiently.
- Node.js: Node.js is an open source and cross-platform runtime environment for executing JavaScript code outside a browser.
- Back End Frameworks: The list of back end frameworks are: Express, Django, Rails, Laravel, Spring, etc.