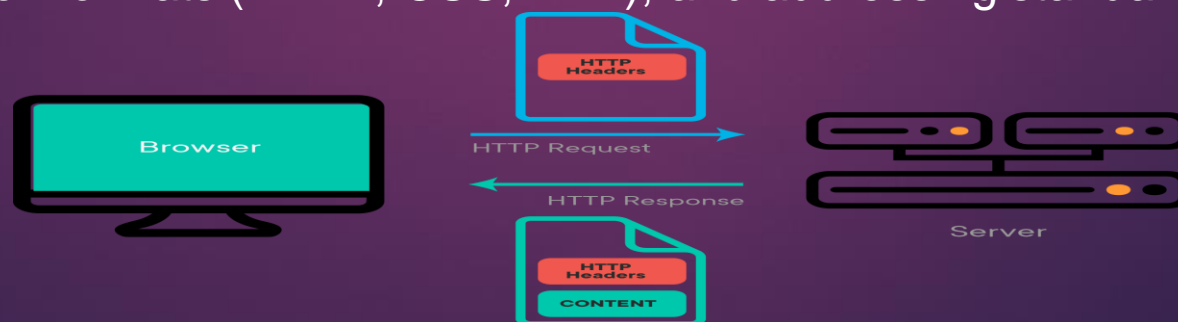


# How does the Web Work?

The web, which is short for World Wide Web, is one part of the internet (others include email, FTP, and instant messaging services). The web is composed of billions of connected digital documents that are viewed in a web browser.

The Web is known as a *client-server system*. The computer is the client and the remote computers that store electronic files are the servers that have a particular type of software running on them that knows how to speak the HTTP protocol and knows which information stored on the computer should be made accessible through the web.

The WWW is a constantly changing medium that enables communication between different users and the technical interaction. The basis for this is different components and data formats, which are usually arranged in tiers and build on each other. Overall, they form the infrastructure of the internet, which is made possible by the three core components of data transmission protocols (TCP/IP, HTTP, HTTPS), representation formats (HTML, CSS, XML), and addressing standards (URI, URL).



# *What do you need to be a web developer?*

To become a Web Developer, we should have an understanding of HTML, CSS, and JavaScript. It's also recommended to learn about CSS and CSS frameworks.

So, the best first step to becoming a Web Developer is to start learning web development fundamentals, including an understanding of HTML (Hypertext Markup Language), CSS (Cascading Style Sheets), and JavaScript.

Second, we'll need to choose an area of specialization : A Full-Stack Developer is familiar with both front-and back-end development and works with both sides of a website.

With a grasp of the basics in HTML, CSS, and JavaScript, and a foundation of programming skills, we're ready to begin building using an ever-growing set of Web Developer skills. Some of these are technical skills, or "hard" skills, like programming in SQL or Python, using the jQuery library of functions for more efficient programming, or using tools like Git for version control. And, we'll need to learn : Foundations, Programming fundamentals, Front-End Frameworks, Web servers, Server-Side Programming, and Databases.

Finally, build a Web Development Portfolio that shows off our strongest skills is our best tool when applying for web development jobs.

# *What's the Role of a web developer? (1)*

A Web Developer is responsible for the coding, design and layout of a website. As the role takes into consideration user experience and function, a certain level of both graphic design and computer programming is necessary. Once a website has been created, a Web Developer will generally assist with the maintenance and upkeep of the website.

**In short, web developer create the visual representation of the World Wide Web**

The web Developer role should cover :

- Writing efficient code.
- Creating websites/a website using standard HTML/CSS practices.
- Working closely with web designers and programmers to produce the website.
- Constant communication with other colleagues to develop and deploy their content and ensuring there is a clear establishment of what can be created.
- Researching different software programs, maintaining software documentation.
- Implementing contingency plans in case the website goes down.
- Maintaining and expanding/enhancing the website once built.
- Managing a team might also be part of the job role.

# What's the Role of a web developer? (2)

## *(A journey of a web developer)*

Of course, all web developers are proficient in certain programming languages. However, different developers will work with different languages depending on their specific job title and area of expertise.

### FRONTEND DEVELOPERS

- Code the frontend of a website; i.e. the part that the user sees and interacts with
- Bring the web designer's designs to life using HTML, JavaScript and CSS
- Ensure responsive design

### BACKEND DEVELOPERS

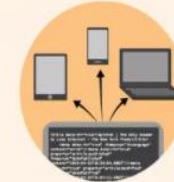
- Work behind-the-scenes, building and maintaining the technology needed to power the frontend
- Ensure that everything the frontend developer builds is fully functional
- Create and manage the database

### FULL STACK DEVELOPERS

- Experts in both backend and frontend development
- Guide on strategy and best practices
- Well-versed in both business logic and user experience

### A Day in the Life of a Web Developer

Build user interfaces and prototypes from wireframes and designs



Code and deploy applications in a cross-platform, cross-browser environment

Build products using HTML/CSS/JS



Update current websites to meet modern web standards