**How does the web work?**

* **Computers connected to the web are called clients and servers**
* **When you type a web address into your browser**

1. **The browser goes to the DNS server, and finds the real address of the server that the website lives on**
2. **The browser sends an HTTP request message to the server, asking it to send a copy of the website to the client .This message, and all other data sent between the client and the server, is sent across your internet connection using TCP/IP.**
3. **If the server approves the client's request, the server sends the client a message and then starts sending the website's files to the browser as a series of small chunks called data packets**
4. **The browser assembles the small chunks into a complete web page and displays it to you**

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

1. **Learn Web Development Fundamentals :**

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.

1. **Choose a Development Specialization :**

As you continue to grow your skills, you’ll need to choose an area of specialization All Web Developers are categorized into three main types:

* **Front-End Developer:** A Front-End Developer works on the “client-side” of web development, meaning any portion of the site or app that users interact with. This can include a site’s layout, design, and the way users interact with it.
* **Back-End Developer :** A Back-End Developer works on the “server-side” of web development. This is focused on the way a site functions and can include databases, servers, networks and hosting, and more.
* **Full-Stack Developer :** A Full-Stack Developer is familiar with both front-and back-end development and works with both sides of a website
* **Build Projects to Develop Your Web Developer Skills :**

With a grasp of the basics in HTML, CSS, and JavaScript, and a foundation of programming skills, you’re ready to begin building. As you go, you’ll gain experience 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. The best way to improve these web development skills is simply to start messing around – the more you use them, the better you’llbe.

**What is the role of a web developer**

* **Web developers need a combination of graphic design skills and technical computer skills that will allow them to create particular designs on web pages. In addition to looking nice, websites need to be functional and secure. It is the responsibility of web developers to create such sites that meet the requirements of employers or clients.**
* **Web developers often implement ideas from less tech-savvy colleagues who lack the know-how to turn their vision into an actual, functional website.**
* **Web Developer Duties & Responsibilities :-**

1. **Know HTML, CSS, JavaScript, PHP, and other relevant web design coding languages**
2. **Create and test applications for websites**
3. **Collaborate**
4. **Present design specs**
5. **Work with graphics and other designers**
6. **Troubleshoot website problems**
7. **Maintain and update websites**
8. **Monitor website traffic**
9. **Stay up-to-date on technology**