**Web fundamentals**

* ***How does the web works*?**

The web is a system for publishing pages of information on the internet, and for linking pages together using links. Anyone can publish a page by uploading it to a web server. Anyone can read that page by typing its address into a web browser. This makes it very easy for people to share documents. Web pages can include embedded links, so simply clicking the link will take you to that page. When we type a web address into the browser:

- The browser goes to the DNS server, and finds the real address of the server that the website lives on.

- 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 an internet connection using TCP/IP.

- 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.

- The browser assembles the small chunks into a complete web page and displays it.

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

To be a developer, first of all we must be passionate about the field and willing to learn, a career in web development is well within we reach. That isn’t to say that forging a successful career in web development is easy. We need a various Key skill to be successful in web development include such as: computer literacy, strong creative ability, attention to detail, Strong communication skills, Excellent problem-solving skills, A logical approach to work, a keen interest in technology. Ongoing self-learning is key to developing in a web development role, in order to stay up to date with ever more frequent technological advancements and updates.

Learning the necessary skills takes time and dedication. So, it must start with the basics:

- Using authoring or scripting languages to build websites

- Writing, designing and editing webpage content

- Identifying and correcting problems uncovered by testing or user feedback

- Converting written, graphic, audio and video components to compatible web formats.

After we have the knowledge, we need to be successful as a web developer, we need to learn to code online, but remember that web development is more than just coding. With a formal training, it will help master our programming skills, gain hands-on training, and prepare to work successfully with clients and find creative solutions to business challenges.

* ***What’s the role of a web developer?***

A web developer builds and maintains websites with the client and consumer in mind. That is, the end design must include services offered and show how users may access these.

Web developers are familiar with technology and understand how computers and web servers operate. They are also very familiar with many software programs, web applications and web programming languages, such as hypertext markup language (HTML), JavaScript (JS), Ruby on Rails, and C++. They must be able to communicate effectively, set goals and meet deadlines.

In addition, as a web developer, we have three sections:

-Front-End Developers: is a web developer that codes the front end of a website. While web design is the way a website looks, front end development is how that design actually gets implemented on the web.

-Back-End Developers: is someone who builds and maintains the technology needed to power the components which enable the user-facing side of a website to exist. Their back-end code adds utility to everything the front-end designer creates.

-Full Stack Developers: understand how every part of the web development process takes place and can guide on strategy and best practices. These developers will have an increasingly important role in the web development, and are able to look at the 'big picture'. They are knowledgeable with the server side as well as the client side’s user experience.