**CODE LIKE ADA Introductory Class**

Web development is the work involved in developing a website. It can range from simple single static page to complex social network services.

In the context of this program however, web development refers to the non-design aspects: markup and coding. Markup is the process of editing text for further processing or display; it involves marking text as a specific type, for example: boldface or italics. HyperText Markup Language (HTML) is the set of markup symbols or codes inserted into a file intended for display on the Internet. The markup tells web browsers how to display a web page’s words and images.

Each individual piece of markup code (which would fall between “<” and “>” characters) is referred to as an element or a tag. Elements often come in pairs of opening and closing tags (“<tag>” as the opening tag and “</tag>” as the closing tag). Some elements called self-closing tags do not come in pairs but standalone (“<tag />”). A good example of this is the line break tag (“<br />” or “<br>”). In HTML 5, it is not necessary to include slashes in self-closing tags.

At its core, HTML is a series of short codes typed into a text-file. The text is saved as an HTML file and viewed through a web browser. The browser reads the file and translates the text into a visible form.

On its own, HTML is not very easy on the eyes. This is where CSS comes in.

CSS stands for Cascading Style Sheets. It is the language for describing the presentation of web pages, including colors, layout, and fonts, thus making our web pages presentable to the users. CSS uses what are known as selectors to target specific HTML elements and applies styles to them.

HTML, in conjunction with CSS, is used to make stylized webpages. However, without a scripting language, users cannot interact with the webpage to a reasonable degree. Bear in mind that a webpage can exist with just HTML or HTML and CSS. However, such a webpage will have limited functionality. A scripting language is a programming language that automates the execution of tasks that would otherwise be performed individually by a human operator. The scripting language we will be learning is JavaScript.

JavaScript is a text-base programming language used both on the client-side and server-side that allows you to make web pages interactive. Where HTML and CSS are languages that give structure and style to web pages, JavaScript gives web pages interactive elements that engage a user. JavaScript enables you to create dynamically updating content, control multimedia, animate images, and pretty much everything else.

HTML, CSS and JavaScript all use comments. Comments allow you and other programmers to view your code without getting overwhelmed. Think of them like traffic signs in a foreign country where you sort of speak the language but aren’t too fluent. You want to be able to navigate properly without getting lost and traffic signs help with that. Comments do the same thing. They help fellow programmers and even your future self to know exactly what a line or block of code does.