Introduction to Front End Development

In this section, we are going to talk about two main objectives which are going to follow in rest of course  
  
1.) Setup Developer environment.  
 We need to things in this. A place to type our code and a place to view this code. We have used Google chrome as web browser. Most of people use this because they have lots of developer tools. As a text editor we have used Sublime Text.

2.) Roles of HTML, CSS and JavaScript.

HTML (hypertext markup language) is known as skeleton of webpage. It used to make bullets, headings, subheadings etc. It describes the structure of webpage.   
CSS used to describe styling of page. HTML is needed to use CSS. Every CSS page has HTML. It is considered as skin of webpage.  
JavaScript adds logic and make the webpage interactive. They add actions to webpage.

HTML

It stands for hypertext markup language. It is structure of the webpage. It specifies the text whether it is bold, italic, text’s size etc. HTML allows us to create hyperlinks. It helps to link to different webpages.  
To create a simple HTML we need to save the file with extension “.html” and to view the page we need to open it in internet browser.

THE GENERAL RULE

<tagName> Some Content </tagName>   
  
Every HTML document we create will start with this boilerplate:  
<!DOCTYPE html>

<html>

<head>

<title></title>

</head>

<body>

</body>

</html>

Here we uses the latest version of HTML that is HTML5.To indicate that our HTML content uses HTML5 we use:

<!DOCTYPE html>

The most common tags that we have used are :

<h1> to <h6> defines HTML headings

<img src = “url”> to upload image  
<p> defines a paragraph

<button> creates a button

<ul>, <ol> and <li> used to create lists

<!--..--> defines a comment

We also created tables, forms, radio buttons, dropdown.  
And in the end we created a page using most of the tags.  
Small exercise including tables, forms, paragraphs were done. MDN and w3schools.com were used as reference.

CSS (Cascading Style Sheet)

CSS is used to describe how things should look. They are not used inside HTML, separate file is made for CSS and linked to html files.

In the head we can create style tag and there we write CSSs tag and selectors. But the problem is that we don’t CSS to be nested in html. There is no change in functionality. We use link tag to include CSS file to HTML file and then we can use it in html.

<link rel="stylesheet" type="text/css" href="fileName.css">

There are three main selectors in CSS that are widely used. They are:

Element type selector: this selector must match one or more html elements of the same name.

ID Selector: It is declared using a hash symbol preceding a string. This selector matches any html element that has an ID attribute with same value as that of selector.

Class Selector: It is declared with dot preceding a string. It is almost same as ID selector but it is used where we need to refer multiple elements

We can change font related property using CSS. We don’t need to rely on customs font. We can also use a custom made fonts or google fonts (google.com/fonts). We can also choose their weight accordingly. Here also we use link tag to include google font.  
  
THE BOX MODEL  
In a document, each element is represented as a rectangular box. In CSS, each of these rectangular boxes is described using the standard box model. Each box has four edges:  
1.Margin edge 3. Padding Edge

2. Border Edge 4. Content Edge

There are four different property of box that we can manipulate.

1. Content 3. Border
2. Padding 4. Margin

BOOTSTRAP

Bootstrap is JavaScript library helps us make good looking site much faster. It is the most popular HTML, CSS and JS framework for developing responsive, mobile first projects on the web. It help us making the styling sheet very quickly. Here also we use link tag to upload bootstrap file. We either can download bootstrap from getbootstrap.com or host it online. If we want to something using bootstrap, we can look for its code on the bootstrap site which is quite small as compared to previous method.   
  
From making forms to NavBars and other things in styling, it is very easy way. It provides lot of helper class that makes development of responsive website very easy and fast. It is fully customizable also. We can choose components and helper classes and then customize as per our requirements. And it is open source. All popular browser supports bootstrap.  
Consistency, Responsiveness, Fast development, easy customization are most important reasons why bootstrap is so much useful.