

A PROJECT REPORT

*ON*

WEB DEVELOPMENT

*FOR*

**EXPOSYS DATA LABS**

*BY*

**G. SHRINIVAS ACHARYA**

DEPARTMENT OF INFORMATION TECHNOLOGY  
PCCE-VERNA, GOA

## **ACKNOWLEDGEMENT :**

First, I would like to thank EXPOSYS DATA LABS for providing me with an opportunity to do an internship in this critical pandemic situation. Although quite short, paid internship, and topic of our own choice, I was able to make maximum use of the given opportunity. It helped me to explore the world of web development and to explore my skills as well. And in doing this, I have developed keen interest in web development.

Special thanks to our TPO, who provided with the details to join the internship provided by you.

## **TABLE OF CONTENTS:**

◆ INTRODUCTION	<b>04</b>
◆ TASK	<b>05</b>
◆ PROJECT OVERVIEW	<b>06</b>
◆ IMPLEMENTATION	<b>09</b>
◆ OBSERVATION	<b>11</b>
◆ SCOPE FOR FURTHER STUDIES	<b>12</b>
◆ CONCLUSION	<b>13</b>
◆ PEFERENCES	<b>14</b>

## ◆ INTRODUCTION:

---

We all are aware of various social media applications/sites such as Facebook, Instagram, Twitter, and E-commerce websites like, Amazon, Myntra, Flipkart, Snapdeal and so on. Web development, a field of Computer Science, deals with creation of such dynamic web application. The key of making a successful and fully functional web application is in the communication with the user.

Unlike the other programming languages such as, C, C++, Python, Java etc... the basic syntax of HTML/CSS is far easier than above mentioned programming languages and maybe that's why lot of people, now-a-days, try to learn these web developmental languages.

For the completion of the task assigned to me, the following web languages and scripts have been used: *HTML* for the construction of the layout, *CSS* for the design of the layout, *JavaScript* for dynamic functioning.

This report is a description of my 5-week (35 days) internship carried out from home, containing details of activities undertaken by me during the course, and finally, a conclusion is drawn from the experience.

## ◆ TASK:

---

Task assigned to the students who applied for web development interns is **TO CREATE A MULTI-PAGE RESPONSIVE WEBSITE.**

## ◆ PROJECT OVERVIEW:

---

### HOW PEOPLE ACCESS THE WEB??

Before we look at the code used to build websites it is important to consider the different ways in which people access the web and clarify some terminology.

User access websites using software called a *web browser*, such as Firefox, Internet Explorer, Safari, Chrome, and Opera. To view a web page, users might type a web address into their browser, follow a link from another site, or use a bookmark. When a browser is asked for a web page, the request is sent across the Internet to a special computer known as a *web server* which hosts the website. Web servers are special computers that are constantly connected to the Internet and are optimized to send web pages out to people who request them.

### HOW ARE WEBSITES CREATED??

All websites use HTML and CSS, but content management systems, blogging software, and e-commerce platforms often add a few more technologies into the mix.

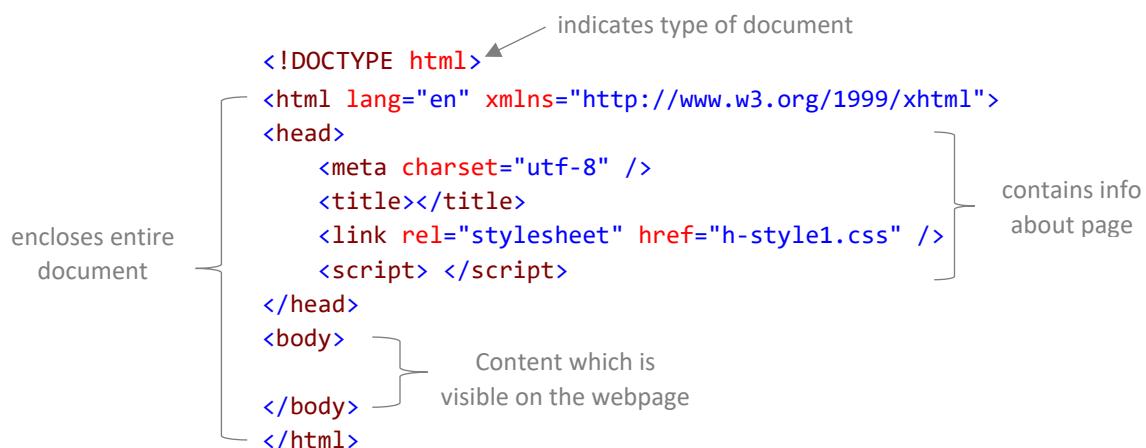
A Website is a collection of pages, usually formatted in *Hypertext Markup Language* (HTML), that contains text, graphics, and multimedia elements. It intermixes content with instructions for how and where to present it on the page. These files are generally saved with the `.html` or `.htm` extension. The main page of a site is known as a home page, which links to other documents in the site by using hyperlinks.

While *Cascading Style Sheets* (CSS) is an essential technology to understand and work with while creating websites. CSS helps revolutionize the structure of a website by separating page's content from the formatting rules. That may not sound like a big deal, but it helps a lot. These files are saved with the `.css` extension and are linked to HTML code using a link tag.

These types of files are created using editors such Notepad editor, Notepad++ editor or software applications like Visual Studio. They can either be created separately and then linked together using specific HTML element or else can be created in the same document.

*JavaScript*, on the other hand, is a scripting language that works with HTML document to create interactive Web pages, such as image rollovers, self-validating forms, and dynamic visual effects. The script can be disabled by users in their browsers. JavaScript code can exist inside an HTML document in two locations: in a script element and inside the event handlers of HTML elements. JavaScript is universally supported by all major Web browsers, including Internet Explorer, Firefox, and Safari.

## THE BASIC STRUCTURE!!



## **STEPS UNDERTAKEN!!**

- ✓ Deciding a subject for creating a website.
- ✓ Planning the basic/rough design or layout.
- ✓ Gathering required information and data.
- ✓ Creating a `.html` file.
- ✓ Generating a corresponding `.css` file.
- ✓ Creating multiple websites and merging them into the main HTML document.
- ✓ Making necessary correction as per the display screen.



## ◆ IMPLEMENTATION:

---

The job involving development of a responsive web page needs lots of patience as all the elements from an HTML document needs to fit all the screens on which it is viewed. Every element defined in the document needs to be viewed and then, as per the requirement certain adjustments/changes should be made.

While, creating multipage website is easier, as its just merging all the other webpages into a single document using a *href* attribute.

The most interesting part of creating a multipage responsive website is working on its CSS file. CSS works by associating rules with HTML elements. These rules govern how the content of specified elements should be displayed and hence, it consumes more time than creating a HTML document.

Here is the overall content of my HTML document used while creating a website, →

```
<!DOCTYPE html>
<html lang="en" xmlns="http://www.w3.org/1999/xhtml">
<head>...</head>
<body>
  <nav>...</nav>
  <section>...</section>
  <script>...</script>
  <div class="abcd">...</div>
  <div>...</div>
  <div>...</div>
  <div class="top">...</div>
  <div id="cx">...</div>
</body>
</html>
```

I have tried to create a business profile of some engineering drawing (graphics) company named ***designX<sup>TM</sup>***, using various HTML tags such as `<img>`, `<p>`, `<h2>`, `<nav>`, `<div>`, `<label>`, `<section>`, `<ul>`, `<a>`, `<br>`, `<hr>` apart from `<html>` and `<body>` tag which are mandatory, and various text editing tags such as, `<b>`, `<sup>`, `<small>` were also used.

The `.css` file is separately created and is linked to the main document using the link tag. Also, the scripting language is used at one section to make the website more realistic and interactive.

## ◆ OBSERVATION:

---

Before launching any new website, it is important to test it in more than one browser, because there can be slight differences in how browsers display the pages. At times, when a website is tested in more than one browser, it might be seen that some elements of a website do not look as it was expected to be. This error may arise due to the compatibility of versions of web browsers.

And since the website created by me was only tried and tested on Google Chrome, it may not run in the same fashion as it is being executed by the Chrome browser.

## ◆ SCOPE FOR FURTHER STUDIES:

---

When the world is moving from cashless transactions to online transactions, from offline classes to online classes, the courses associated with the internet have gained more importance than anything else.

With the digitalization and the availability of electronic devices in the hands of everyone, the one who presents his business on social media and through websites, gets more attention and thus, money.

With the tremendous progress in the launch of websites, there are huge opportunities available for people who want to work in this field.

Many organisations hire web designers for their online work and website development. With rapid advent of online industry, the demand of web development professionals is increasing, and this has created a huge job opportunity for the aspirants in the upcoming days.

## ◆ CONCLUSION:

---

First, the two most important things that I have learnt are: time-management skills and self-motivation.

Secondly, with rapid advent of networking industry, this internship has been an excellent experience and has boosted my interest in this field. I can conclude that, I have learnt lots of things in these few weeks.

The technical aspects of the work I have done may not be flawless and could be improvised. As someone with no prior experience in HTML, CSS, JavaScript whatsoever, I believe my time spent in learning and discovering new features was well worth it and contributed to finding an acceptable solution to an important aspect of web design and development.

## REFERENCES:

---

- ✓ HTML & CSS: The Complete Reference, Fifth Edition, by Thomas A. Powell
- ✓ HTML & CSS- design and build websites, by Jon Duckett.
- ✓ Creating Web Pages All-in-One Desk Reference, Third Edition, by Richard Wagner and Richard Mansfield.
- ✓ Few videos from YouTube.