

INDUSTRIAL TRAINING REPORT

On

Coding the Static Restaurant Site Web Development Master-Class

Submitted by

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Declaration

I hereby declare that the work which is being presented in the Industrial Training “**Web Development Master-Class Complete Certificate Course**”, in partial fulfillment of the requirements for Industrial Training viva voce, is an authentic record of my own work carried under the supervision of “**Udemy.com**”

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Course: Bachelor in Technology (Computer Science Engineering)

Year: 3rd year

Semester: 5th semester





Industrial Training Synopsis

B.Tech. (CSE)-Batch 2020-2021

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Project Information:

Title Of Project/Training/Task	Web Development Masterclass – Complete Certificate Course
Role & Responsibility	Student
Technical Details	<p><u>Hardware Requirements:</u></p> <p>OS: Windows 7 or later Processor: Intel Pentium 4 or later Memory: min. 2GB RAM Screen Resolution: 1280x1024 or larger Internet Connection: Required</p> <p><u>Software Requirements:</u></p> <p>Editor: Visual Studio Code IDE</p> <p>Web Browsers: Chrome, Mozilla, Safari (for testing purposes...also some browsers provide responsive or mobile view)</p> <p>JavaScript libraries: jQuery</p>
Training Implementation Details	Partial Implemented
Training Period	Start Date: 01/07/20 End Date: 15/08/20 Duration Of Training (In Weeks): 6.5 weeks

Summary of the Training Work:

During this Web Development Certification Course, I got to learn about Front-End Web technologies. In Front-End Web Development I learnt –

- **HTML Development:** In this section, I learned the basics of HTML5 and also how to set up my development environment, went over HTML5 basics like valid document structure, which elements can be included inside other elements and which cannot be, the meaning and usefulness of HTML5 semantic tags, and some essential HTML5 tags.
- **CSS Development:** In this section, I learned to use CSS to create stylish, responsive web page layouts. Learned about parts and types of CSS rules, CSS classes, DIVs, and ID's. Used various formatting options, including margins, padding, font properties, backgrounds, transparency, positioning, link styling, and CSS tables.
- **JavaScript Development:** In this section, I learned to use JavaScript coding to add interactivity to static HTML and CSS pages. Learned to use JavaScript using both internal and external scripts, JavaScript output, variable declarations, arithmetic operators, objects, strings, math functions, arrays, conditional statements, loops, functions, and events.
- **Using JavaScript to Build Web Applications:** In this section, I used JavaScript language skills and learned how to utilize them within the context of a web page by learning how to properly manipulate the web page components using the JavaScript Document Object Model API. Used AJAX integration to create dynamic content, how to set up and handle Ajax requests and responses, as well as how to process JSON data.
- **Project:** As a side project, I developed a website using the Front-End Web technologies learned from this Web Development Masterclass – Complete Certificate Course.

Acknowledgement

I would like to express my sincere gratitude to my Trainer, ***YouAccel Training Instructor***, for providing their invaluable guidance and suggestions throughout the training session. I would also thank my college faculties and instructors who guided me in making this project. Therefore, I am grateful to my peers at ***Udemy.com*** for supporting and helping me with my queries whenever I was in doubt. I would also like to thank all those who directly or indirectly supported or helped in completing this project in time. I have taken efforts in this project. However, it would not have been possible without the kind support and help of many individuals. Last but not least, I would like to express our deep sense of gratitude and earnest thanks giving to our dear parents For their moral support and heartfelt cooperation in doing the main project.

Abstract

The project '**Static Chinese Restaurant Site**' is a web-based application. This software provides facility for viewing online Menu, dishes, prices, phone number, address on the various announcements for the particular locality with multimedia content (videos, pictures, verbal). This system allows user to sign up and enter a complaint or register a grievance with multimedia content This system allows user to access all the required information for pickup/delivery, what are the best timings, any notice on festivals etc.

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1. INTRODUCTION: WEB DEVELOPMENT

Website is a collection of related web pages, including multimedia content, typically identified with a common domain name, and published on at least one web server. A website may be accessible via a public Internet Protocol (IP) network, such as the Internet, or a private local area network (LAN), by referencing a uniform resource locator (URL) that identifies the site.

Websites can have many functions and can be used in various fashions; a website can be a personal website, a commercial website for a company, a government website or a non-profit organization website. Websites are typically dedicated to a particular topic or purpose, ranging from entertainment and social networking to providing news and education. All publicly accessible websites collectively constitute the World Wide Web, while private websites, such as a company's website for its employees, are typically a part of an intranet.

Web development is a broad term for the work involved in developing a web site for the Internet (World Wide Web) or an intranet (a private network). Web development can range from developing the simplest static single page of plain text to the most complex web-based internet applications (or just 'web apps') electronic businesses, and social network services. A more comprehensive list of tasks to which web development commonly refers, may include web engineering, web design, web content development, client liaison, client-side/server-side scripting, web server and network security configuration, and ecommerce development. Among web professionals, "web development" usually refers to the main non-design aspects of building web sites: writing markup and coding...

1.1 Several Aspects Of Web Development

Before developing a web site one should keep several aspects in mind like:

- What to put on the web site?
- Who will host it?
- How to make it interactive?
- How to secure the source code frequently?
- Will the web site design display well in different browsers?
- Will the navigation menus be easy to use?
- Will the web site load quickly?
- How easily will the site pages print?

1.2 Process

These are the steps considered while developing a webpage:



Fig 1- Web Developing Process

2. HARDWARE AND SOFTWARE REQUIREMENT:

2.1 Hardware Required:

TABLE 1-HARDWARES REQUIRED

Number	Description
1.	Pentium 4 ,Window XP/Window7
2.	256 MB RAM

2.2 Software Required:

TABLE 2-SOFTWARES REQUIRED

Number	Description
1.	Windows XP ,7
2.	PHP 5.1
3.	MySQL
4.	IIS server/ XAMPP
5.	HTML/CSS/ JavaScript

3. TOOLS

3.1 Introduction

The Translate and Edit application had been planned to consist of two parts-front-end and back-end development. The front-end is the part of the web that you can see and interact with (e.g. Client-side programming). While front-end code interacts with the user in real time, the back-end interacts with a server to return user ready results. The front-end is a combination of HTML, CSS and JavaScript coding. By using JavaScript, modifications of the design of a web page can be made immediately, however only temporary and visible only by the user.

Normally the user would not have rights to modify web content dynamically on the server side. Logically, administrators are the ones who deal with back-end modification of databases for example, as they often contain sensitive data which should not be available to see or modify by the general public. These front-end and back-end tools includes languages like HTML,CSS,JavaScript ,PHP ,MYSQL etc.We will discuss all these languages in brief as given below.

3.2 Features

- Web Page Assests, Resources, and Network Information
- Profiing and Auditing

4. HTML

4.1 Introduction

HTML (Hyper Text Mark-Up Language) is what is known as a "mark-up language" whose role is to prepare written documents using formatting tags. The tags indicate how the document is presented and how it links to other documents.

The **World Wide Web** (WWW for short), or simply the **Web**, is the worldwide network formed by all the documents (called "**web pages**") which are connected to one another by hyperlinks.

Web pages are usually **organized** around a main page, which acts as a hub for browsing other pages with hyperlinks. This group of web pages joined by hyperlinks and centered around a main page is called a **website**.

The Web is a vast living archive composed of a myriad of web sites, giving people access to web pages that may contain formatted text, images, sounds, video, etc.

4.2 What is the Web?

The Web is composed of web pages stored on web servers, which are machines that are constantly connected to the Internet and which provide the pages that users request. Every web page, and more generally any online resource, such as images, video, music, and animation, is associated with a unique address called a **URL**. The key element for viewing web pages is the **browser**, a software program which sends requests to web servers, then processes the resulting data and displays the information as intended, based on instructions in the HTML page.

The most commonly used browsers on the Internet include:

- Mozilla Firefox,
- Microsoft Internet Explorer,
- Netscape Navigator,
- Safari,
- Opera

4.3 Versions Of HTML:

HTML was designed by Tim Berners-Lee, at the time a researcher at CERN (Chinese Ecosystem Research Network), beginning in 1989. He officially announced the creation of the Web on Usenet in August 1991. However, it wasn't until 1993 that HTML was considered advanced enough to call it a language (HTML was then symbolically christened HTML 1.0).

RFC 1866, dated November 1995, represented the first official version of HTML, called HTML 2.0. After the brief appearance of HTML 3.0, which was never officially released, HTML 3.2 became the official standard on January 14, 1997. The most significant changes to HTML 3.2 were the standardization of tables, as well as many features relating to the presentation of web pages.

On December 18, 1997, HTML 4.0 was released. Version 4.0 of HTML was notable for standardizing style sheets and frames. HTML version 4.01, which came out on December 24, 1999, made several minor modifications to HTML 4.0.

Example-

```
<HTML>

<HEAD>

</HEAD>

<BODY>

<H5>THIS IS AN EXAMPLE</H5>

</BODY>

</HTML>
```

5. CSS:

5.1 What Is CSS?

- CSS stands for Cascading Style Sheets.
- CSS describes how HTML elements are to be displayed on screen, paper, or in other media.
- CSS saves a lot of work. It can control the layout of multiple web pages all at once
- External stylesheets are stored in CSS files.
- CSS describes how HTML elements should be displayed.
- CSS Saves a Lot of Work! The style definitions are normally saved in external .css files.
- With an external stylesheet file, we can change the look of an entire website by changing just one file!
- CSS can be either external or internal.

5.2 CSS Syntax:

A CSS rule-set consists of a selector and a declaration block:

CSS selector: The selector points to the HTML element you want to style.

The declaration block contains one or more declarations separated by semicolons.

Each declaration includes a CSS property name and a value, separated by a colon.

A CSS declaration always ends with a semicolon, and declaration blocks are surrounded by curly braces.

The **External CSS** can be declared in the required HTML page as:

```
<link rel="stylesheet" href="CSS_file_name.css">
```

The External CSS file is saved by using the .css extension, whereas the internal CSS is saved in corresponding HTML file using the <style> tag. Using External CSS is much better than using Internal. Here are a few reasons this is better.

- Easier Maintenance
- Reduced File Size

- Reduced Bandwidth
- Improved Flexibility

The selectors that can be used to select the HTML part are-

- Id selector
- Class selector

5.2.1 Id Selector:

The id selector uses the id attribute of an HTML element to select a specific element. The id of an element should be unique within a page, so the id selector is used to select one unique element! To select an element with a specific id, write a hash (#) character, followed by the id of the element. The style rule below will be applied to the HTML element with id="para1":

Example:-

Suppose the HTML content is follow,

```
<h1 id="para1">content</h1>
```

Then Id will be declared as

```
#para1 {  
text-align: center;  
color: blue;  
font-family: jokerman;  
}
```

5.2.2 The class Selector:

The class selector selects elements with a specific class attribute.

To select elements with a specific class, write a period (.) character, followed by the name of the class.

Example-

```
.para1 {  
text-align: center;  
color: blue;
```



```
font-family: Jokerman;  
  
}
```

5.3 CSS Comments:

Comments are used to explain the code, and may help when you edit the source code at a later date. Comments are ignored by browsers. A CSS comment starts with `/*` and ends with `*/`. Comments can also span multiple lines.

Example-

```
.para1 {  
text-align: center;  
  
color: blue;  
  
font-family: Jokerman;      /*this is the single line comment */  
  
}
```

In the example above, all HTML elements with `class=para1` will be blue and center-aligned.

5.4 CSS Styles:

- Background properties
- Border properties
- Padding
- Margin
- Color
- Font properties
- Text properties Link properties / Navigation bar properties

6. JAVASCRIPT:

6.1 What is JavaScript?

JavaScript is an object-based scripting language that is lightweight and cross-platform. JavaScript is not compiled but translated. The JavaScript Translator (embedded in browser) is responsible to translate the JavaScript code.

It is mainly used for:

- Client-side validation
- Dynamic drop-down menus.
- Displaying data and time.
- Displaying popup windows and dialog boxes (like alert dialog box, confirm dialog box and prompt dialog box).
- Displaying clocks etc.

Example of JavaScript-

```
<h2>Welcome to JavaScript</h2>
```

```
<script>
```

```
document.write("Hello JavaScript by JavaScript");
```

```
</script>
```

Here, <script> tag is used to initialize the script and document.write() is a function used to write. Like CSS, JavaScript also can be placed in:

1. Between the body tag of html
2. In .js file (external JavaScript)
3. Between the head tag of html

6.1.1 JavaScript Example: code between the body tag –

In the given example, we have displayed the dynamic content using JavaScript. Let's see the simple example of JavaScript that displays alert dialog box.

```
<script type="text/javascript">
```

```
alert("Hello Javatpoint");
```

</script>

6.1.2 JavaScript Example : code in .JS file –

➤ **message.js file**

```
function msg()
{
  alert("Hello Javatpoint");
}
```

➤ **index.html**

```
<head>

<script type="text/javascript" src="message.js"></script>

</head>

<body>

<p>Welcome to JavaScript</p>

<form>

<input type="button" value="click" onclick="msg()"/>

</form>

</body>
```

We can create external JavaScript file and embed it in many html page.

It provides **code re usability** because single JavaScript file can be used in several html pages. An external JavaScript file must be saved by .js extension. It is recommended to embed all JavaScript files into a single file. It increases the speed of the webpage.

6.1.3 Between the head tag of html

In the example given below, we are having a function msg() which is called. To create a function, we use function name with keyword **function**. For function call, we need to have an event.

Example-

```
<head>

<script type="text/javascript">
```

```
function msg()
{
alert("Hello Javatpoint");
}

</script>

</head>

<body>

<p>Welcome to JavaScript</p>

<form>

<input type="button" value="click" on click="msg()"/>

</form>

</body>
```

6.2 How To Change Content Of HTML using a JavaScript?

One of many JavaScript HTML methods is **getElementById()**.

This example uses the method to "find" an HTML element (with id="demo") and changes the element content (**innerHTML**) to "Hello JavaScript":

Example –

```
document.getElementById("demo").innerHTML = "Hello JavaScript";
document.getElementById("demo").style.fontSize = "25px";
```

```
<html>

<head>

<script>

function myFunction(){

document.getElementById("demo").innerHTML = "Paragraph changed.";

}

</script>

</head>

<body>
```

```
<h1>My Web Page</h1>

<p id="demo">A Paragraph</p>

< button type="button" onclick="myFunction()" >Try it</button>

</body>

</html>
```

6.3 Comments In JavaScript:

The **JavaScript comments** are meaningful way to deliver message. It is used to add information about the code, warnings or suggestions so that end user can easily interpret the code. The JavaScript comment is ignored by the JavaScript engine i.e. embedded in the browser.

6.3.1 Advantages of JavaScript comments:

There are mainly two advantages of JavaScript comments.

- **To make code easy to understand:** It can be used to elaborate the code so that end user can easily understand the code.
- **To avoid the unnecessary code:** It can also be used to avoid the code being executed. Sometimes, we add the code to perform some action. But after sometime, there may be need to disable the code. In such case, it is better to use comments.

Example-

```
<script type="text/javascript">

function msg(){

alert("Hello Javatpoint");           /* this is a comment*/

}

</script>
```

6.4 JavaScript Variable:

A **JavaScript variable** is simply a name of storage location. There are two types of variables in JavaScript : local variable and global variable. There are some rules while declaring a JavaScript variable (also known as identifiers).

- Name must start with a letter (a to z or A to Z), underscore(_), or dollar(\$) sign.
- After first letter we can use digits (0 to 9), for example value1.

JavaScript variables are case sensitive, for example x and X are different variables.

6.5 JavaScript Form Validation:

It is important to validate the form submitted by the user because it can have inappropriate values. So validation is must.

The JavaScript provides you the facility to validate the form on the client side so processing will be fast than server-side validation. So, most of the web developers prefer JavaScript form validation.

Through JavaScript, we can validate name, password, email, date, mobile number etc fields.

Example-

```
<script>

function validateform()

{

var name=document.myform.name.value;

var password=document.myform.password.value;

if (name==null || name=="") {

alert("Name can't be blank");

return false;

}

else if(password.length<6)

{

alert("Password must be at least 6 characters long.");

return false;

}

}

</script>

<body>

<form name="myform" method="post" action="abc.jsp" onsubmit="return validatefor m()">

Name: < input type="text" name="name" ><br/>
```

Password: < input type="password" name="password" >

< input type="submit" value="register" >

</form>

</body>

In this example, we are going to validate the name and password. The name can't be empty and password can't be less than 6 characters long. Here, we are validating the form on form submit. The user will not be forwarded to the next page until given values are correct.

6.5.1 JavaScript Retype Password Validation:

```
< script type="text/javascript" >
```

```
function matchpass() {
```

```
var firstpassword=document.f1.password.value;
```

```
var secondpassword=document.f1.password2.value;
```

```
if(firstpassword==secondpassword) {
```

```
return true;
```

```
}
```

```
else {
```

```
alert("password must be same!");
```

```
return false;
```

```
}
```

```
}
```

```
</script>
```

```
< form name="f1" action="register.jsp" onsubmit="return matchpass()" >
```

Password: < input type="password" name="password" / >

Re-enter Password: < input type="password" name="password2" / >

<input type="submit">

</form>

6.6.1 Advantage of JavaScript function

There are mainly two advantages of JavaScript functions.

- Code reusability
- Less coding

6.5.2 JavaScript Function Syntax

The syntax of declaring function is given below.

```
function functionName([arg1, arg2, ...argN])  
{  
  //code to be executed  
}
```

JavaScript Functions can have 0 or more arguments.

Example-

```
<script>  
function msg()  
{  
  alert("hello! this is message");  
}  
</script>  
<input type="button" onclick="msg()" value="call function"/>
```

Output of the above example:

hello! this is message

6.7 JavaScript Control Statements:

6.7.1 If-else:

It evaluates the content whether condition is true or false. The syntax of JavaScript if-else statement is given below.

```
if(expression)  
{
```



```
//content to be evaluated if condition is true  
  
}  
  
else{  
  
//content to be evaluated if condition is false  
  
}
```

6.7.2 JavaScript Switch:

The **JavaScript switch statement** is used to execute one code from multiple expressions. It is just like else if statement that we have learned in previous page. But it is convenient than if...else...if because it can be used with numbers, characters etc. The signature of JavaScript switch statement is given below.

```
switch(expression){  
  
case value1:  
  
code to be executed;  
  
break;  
  
case value2: code to be executed;  
  
break;  
  
default: code to be executed if above values are not matched;  
  
}
```

Restaurant Site:



This is the front layout of the Chinese restaurant site which is made using HTML, CSS, JavaScript.

Header:

Header contains logo of the Chinese Restaurant, Name of the Restaurant, Navigation buttons such as Menu, about, awards And telephone number to contact the Restaurant for delivery/order food items.

Background:

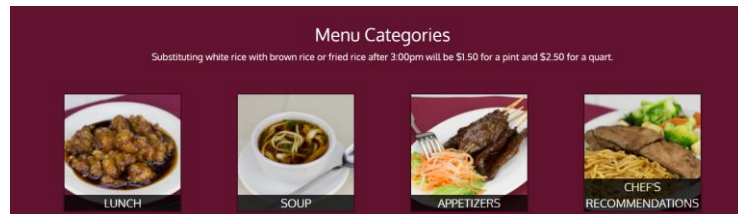
Background is made simple & classy with one large size picture of the restaurant as background image followed by three equal sections named menu for selecting food items, special for some special dishes, map to locate the restaurant on google map.

Footer:

Footer contains a row sections of opening and closing hours/timing of the restaurant, address of the restaurant, an quote on the restaurant.

Menu:

In Menu we have used anchor tag to link menu with the menu page where we have Lunch, Soup, Appetizers, chef's recommendation & all the things like that.



After this page, Suppose the user clicked on Soup section then it will take user to a new page where all the types soup images are present along with every dish name, price & a short description.

Special section directly takes user to the special items web page.

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