

COMSATS University Islamabad (CUI), Lahore Campus Department of Electrical & Computer Engineering

CSC336 – Web Technologies

Lab Manual v 1.0.1

Lab Resource Person

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Theory Resource Person

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Name:	Registration No:	
Program:	Batch:	
Semester:		

Laboratory 02

To construct an HTML Form with semantic accuracy

UNDERSTANDING SEMANTIC HTML WITH FORMS

1 Objective

The purpose of the lab is to introduce students to semantic structure of an HTML document. In addition, students will also get familiarized with HTML Forms creation and user-agent's default and custom form validations.

2 Introduction to HTML Semantics

2.1 Semantics and its importance in HTML

The word "Semantic" refers to the meaning of something or conveying meaningful information. The HTML5 has included many elements which represents their meanings from their tag name(s), such as <figure>, <header>, and <footer>. Their names give a clear impression about their content and/or their placement on the page. Therefore, these elements are called "Semantic HTML Elements". These elements help in developing a more comprehensive web layout by dividing the screen in different identifiable parts based on their concept or meanings. This semantic approach provides more machine-understandable information and assists the browsers, accessibility tools, web crawlers, and search engine optimizers so that they can optimize their basic operations.

2.2 Examples of semantic HTML Elements

The following table lists some of the semantic elements, from HTML 5.

Semantic Tag	Description
<article></article>	Defines an article
<aside></aside>	Defines content aside from the page content
<details></details>	Defines additional details that the user can view or hide
<figcaption></figcaption>	Defines a caption for a <figure> element</figure>
<figure></figure>	Specifies illustrations, diagrams, code listings, etc.

<footer> Defines a footer for a document or section</footer>	
<header></header>	Specifies a header for a document or section
<main></main>	Specifies the main content of a document
<mark></mark>	Defines marked/highlighted text
<nav></nav>	Defines navigation links
<section></section>	Defines a section in a document
<summary></summary>	Defines a visible heading for a <details> element</details>

2.3 Semantic structure of an HTML document

The following structure (Figure 2.1) is a good example of a reasonable semantic structure of an HTML page.

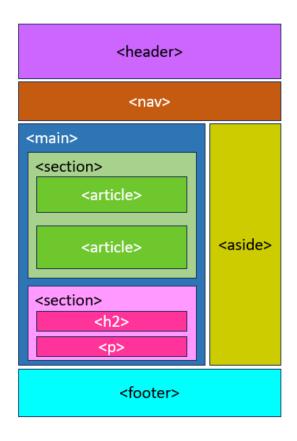


Figure 2.1: Semantic structure of HTML document/Web page

3 Lab Activity

3.1 Task 1

Create the "placeOrder.html" Web app for a restaurant namely, "The Famous Restaurant", which should resemble the image shown in Figure 3.1. Exact match is necessary. Cascading style sheet (CSS) is not allowed.

3.1.1 Instructions

Your page must adhere to the following rules and instructions.

- The web document should be semantically correct.
- Download any free image under the theme of "Biryani" or "Pakistani foods" from the web or use web link for the image of your choice which represents recipes.
- The *Dish* input must be a Dropdown list which must contains three Pakistani dishes to choose from.
- The *Additional Instructions* field must equal 5 rows and 30 columns.
- The *Delivery Date and Time* field must provide options for both date and time simultaneously.

3.2 Task 2

Create the purchase order form following form as shown in Figure 3.2. The exact match is not necessary, develop the closest matching web app for the best outcome. Inline styles are allowed only, if necessary.

4 Home Activity

4.1 Work 1

Create the job application form as shown in Figure 4.1. The exact match is not necessary, develop the closest matching web app for the best outcome. Inline styles are allowed only, if necessary.

4.2 Work 2

Create the sign-up form as shown in Figure 4.2. The exact match is not necessary, develop the closest matching web app for the best outcome. Inline styles are allowed only, if necessary.

The Famous Restaurant Home Menus Place order About Contact Place Order Dish: Chicken Biryani 🗸 Number of servings: First Name: Last Name: Delivery Date and Time: mm/dd/yyyy --:-- --Additional Instructions: please add addiitonal instructions on your order here Are you interested to subscribe us for latest deals? Are you sure, you want to place the order? Place Order

Figure 3.1: "The Famous Restaurant" web page

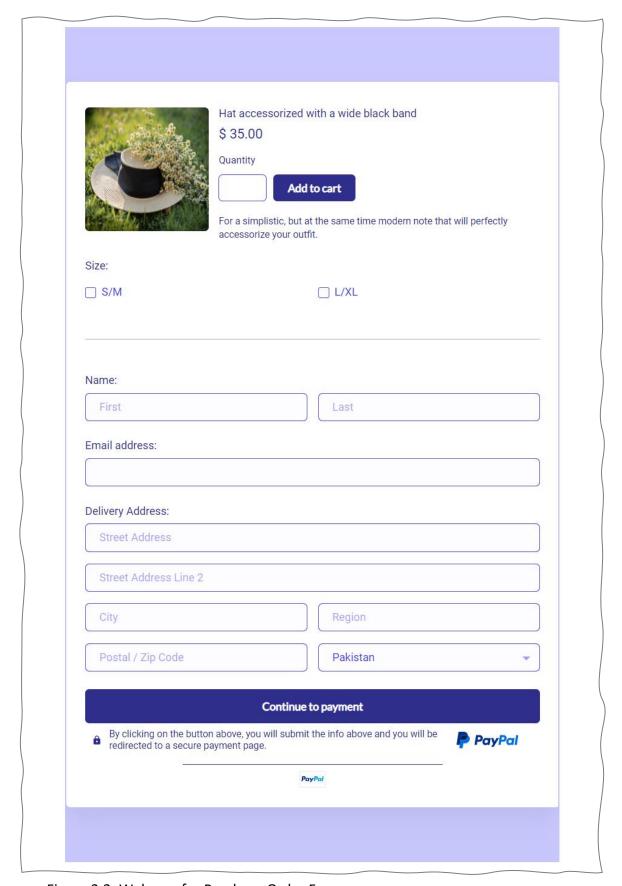


Figure 3.2: Web app for Purchase Order Form

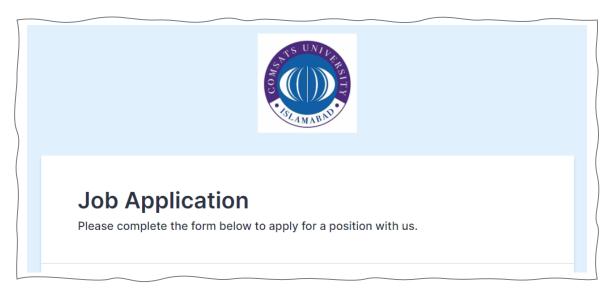


Figure 4.1: Web app for Job Application Form

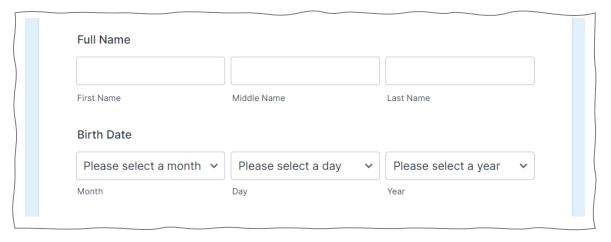


Figure 4.1: Web app for Job Application Form (cont.)

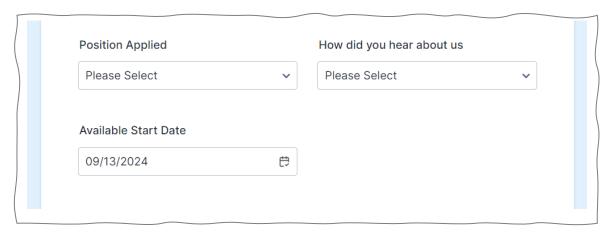


Figure 4.1: Web app for Job Application Form (cont.)

Current Address	
Street Address	
Street Address Line 2	
City	State / Province
Postal / Zip Code	
Email Address	Phone Number
ex: myname@example.com	(000) 000-0000
example@example.com	
LinkedIn	

Figure 4.1: Web app for Job Application Form (cont.)

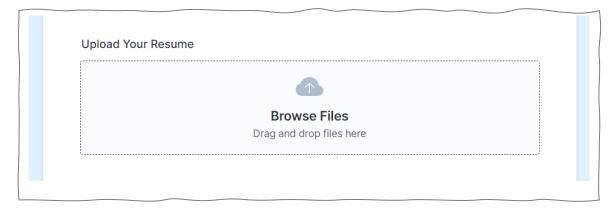


Figure 4.1: Web app for Job Application Form (cont.)

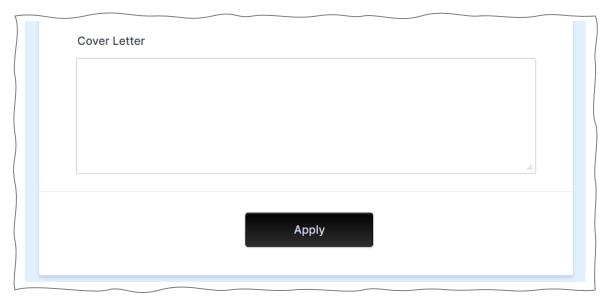


Figure 4.1: Web app for Job Application Form (cont.)

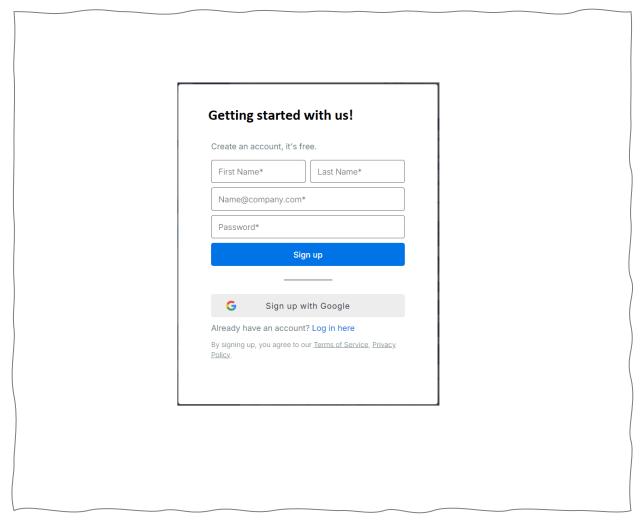


Figure 4.2: Web app for Signup Form

Rubric for Lab Assessment

The student performance for the assigned task during the lab session was:			
Excellent	The student completed assigned tasks without any help from the instructor and showed the results appropriately.	4	
Good	The student completed assigned tasks with minimal help from the instructor and showed the results appropriately.	3	
Average	The student could not complete all assigned tasks and showed partial results.	2	
Worst	The student did not complete assigned tasks.	1	

Instructor Signature: Date:
