

Course: Web Application Development

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Lab 2: HTML Form and CSS.

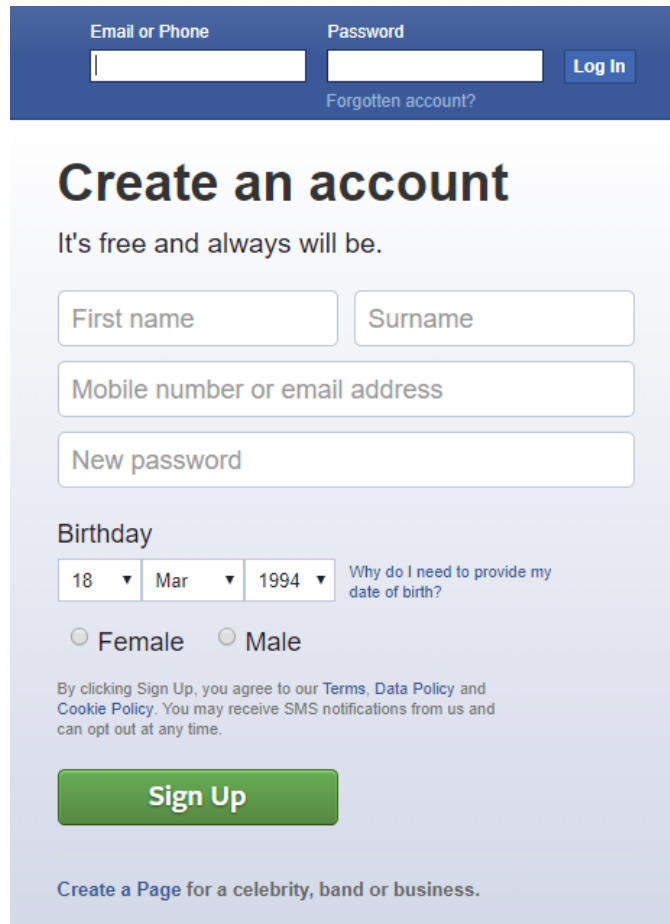
Contents:

- HTML Form:
- Form Elements
- Design Form
- CSS
- Exercises

Duration: 3 hours

Part 1: HTML Form

HTML forms (sometimes called webform or web form) are useful when you want to collect data from user. You can easily encounter form when surfing the Internet: some websites ask you to fill a registration form for membership, e-commerce website ask for order forms, social networks usually have forms for posting status, photos and videos...



The image shows a Facebook registration form. At the top, there is a blue header with two input fields: "Email or Phone" and "Password", followed by a "Log In" button and a link for "Forgotten account?". Below this is a section titled "Create an account" with the text "It's free and always will be." The form includes several input fields: "First name", "Surname", "Mobile number or email address", and "New password". There is a "Birthday" section with three dropdown menus for day, month, and year, and a link "Why do I need to provide my date of birth?". Below the birthday section are radio buttons for "Female" and "Male". At the bottom, there is a green "Sign Up" button and a link "Create a Page for a celebrity, band or business." A small disclaimer text is located above the "Sign Up" button.

Email or Phone Password Log In
Forgotten account?

Create an account

It's free and always will be.

First name Surname
Mobile number or email address
New password

Birthday
18 Mar 1994 Why do I need to provide my date of birth?
☐ Female ☐ Male

By clicking Sign Up, you agree to our [Terms](#), [Data Policy](#) and [Cookie Policy](#). You may receive SMS notifications from us and can opt out at any time.

Sign Up

Create a Page for a celebrity, band or business.

Example: Facebook's simple registration form

In general, a form will take input from user and send to back-end server as a HTTP request message. The server may process input based on defined business logic and return response if needed.

To define a form in HTML files, we use `<form>` element:

```
<form method="..." action="..." target="..." >
//some form elements
</form>
```

In the example above, the form has three attributes:

- **method:** HTTP request methods, it can be GET, POST, PUT or DELETE depended on the purpose of your form.
- **action:** defines the corresponding action will be performed when the form is submitted. For example, if `action = "register.jsp"`, the input will be sent to page `register.jsp` when user submit the form.
- **target:** specifies the response from the server will be displayed in current or new browser tab.

Part 2: Form Elements

Form elements are different types of HTML input elements, like text fields, checkboxes, radio buttons, submit buttons... The most important element is `<input>`, it can be displayed in several ways, depending on the `type` attribute. For examples:

- **Textbox**
`<input type="text" name="T1" size="33">`
- **Check-box**
`<input type="checkbox" name="c1" value="ON">Computer Graphic
`
`<input type="checkbox" name="c2" value="ON">Computer Network
`
`<input type="checkbox" name="c3" value="ON">Introduction to Computer
`
`<input type="checkbox" name="c4" value="ON">Web Programming
`
- **Radio**
`<input type="radio" value="r1" checked name="red">Red`
`<input type="radio" value="r2" checked name="blue">Blue`
`<input type="radio" value="r3" checked name="green">Green`
- **Button**
`<input type="submit" value="Submit" name="s1">`
`<input type="reset" value="Reset" name="s2">`

Besides `<input>` there are also other input elements like `<select>`, `<textarea>`, `<button>`:

- **Drop-down list (Select)**
`<select name="Type">`
`<option>Reading</option>`
`<option>Whatching TV</option>`
`<option>Studying</option>`
`<option>Shoping</option>`
`<option>Internet</option>`
`</select>`

- **Text-area**
`<textarea rows="number of rows" name="tr1" cols="number of columns"></textarea>`
- **Button**
`<button type="button" onclick="alert('Hello World!')">Click Me!</button>`

In HTML5, we have two more form elements `<datalist>` and `<output>`. However, these new elements will not be displayed on old browser (and may cause errors).

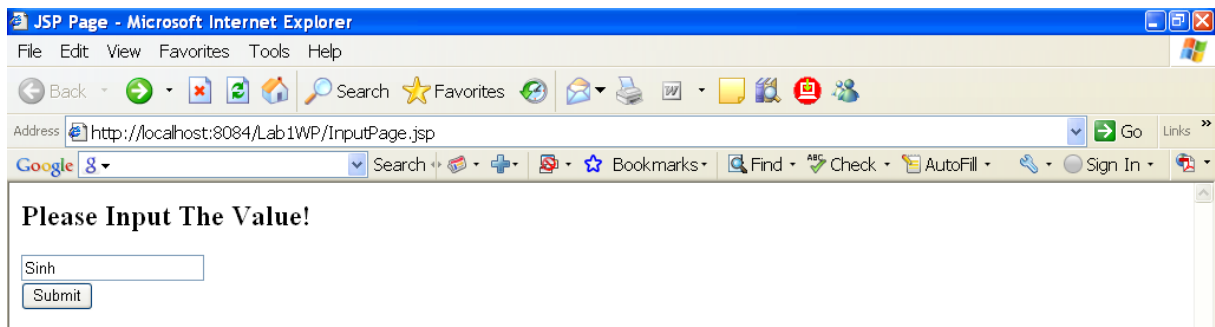
For more input types, please visit this link:

https://www.w3schools.com/html/html_form_input_types.asp

Part 3: Design Form

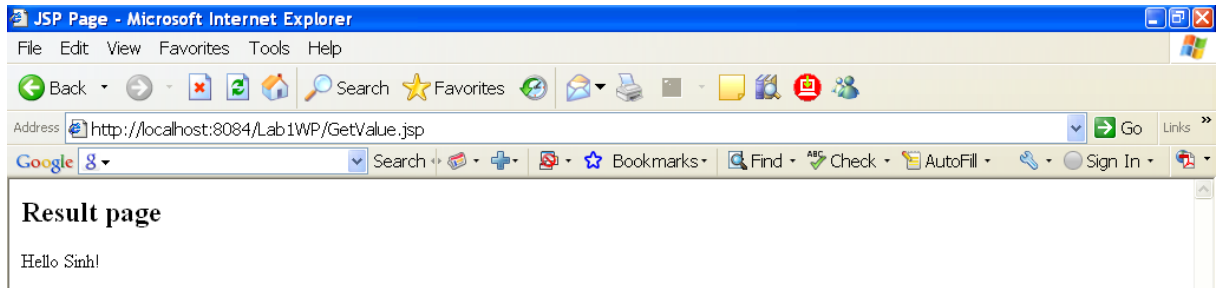
Open your IDE and create a file named **InputPage.jsp** with content like this:

```
<html>
<head>
  <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
  <title>JSP Page</title>
</head>
<body>
  <h2>Please Input The Value!</h2>
  <form method="post" action="GetValue.jsp">
    <input type="text" name = "tx1"><br>
    <input type="Submit" value= "Submit">
  </form>
</body>
</html>
```



Create another file named **GetValue.jsp**

```
<html>
<head>
  <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
  <title>JSP Page</title>
</head>
<body>
  <h2>Result page</h2>
  <%
    String value = request.getParameter("tx1");
    out.print("Hello "+value+"!");
  %>
</body>
</html>
```



Exercise: Try to create a simple form like this

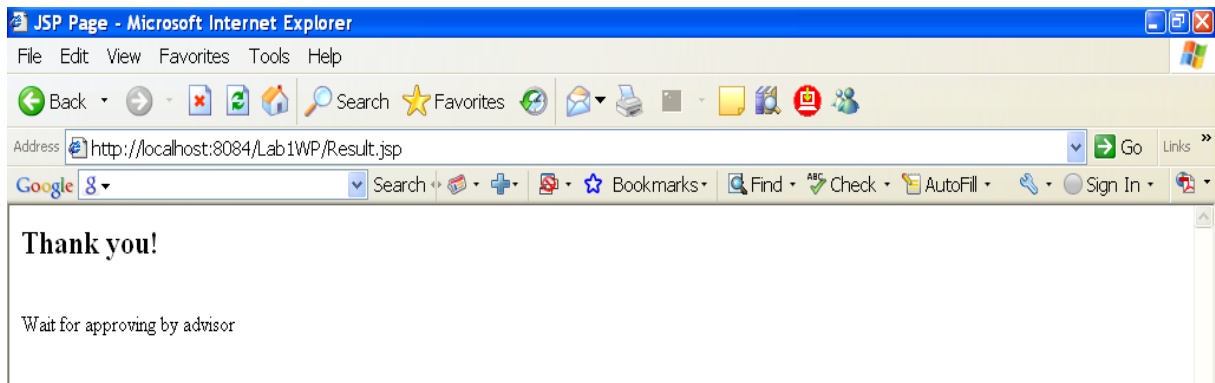
The screenshot shows a Microsoft Internet Explorer window with the title 'JSP Page - Microsoft Internet Explorer'. The address bar displays 'http://localhost:8084/Lab1WP/RegisterForm.jsp'. The page content includes the heading 'School of Computer Science & Engineering' and a form titled 'Register Form'. The form contains the following elements:

- Full Name:** A text field.
- ID:** A text field.
- Email:** A text field.
- Gender:** Radio buttons for 'Male' and 'Female'.
- Field of study:** A dropdown menu (Combo) with 'CS' selected.
- List of subjects:** Check-boxes for 'Principle of EE 1', 'Computer Network', 'Web Application Development', 'Object Oriented Programming', and 'Computer Graphics'.
- Comments:** A text area.
- Buttons:** 'Submit' and 'Cancel' buttons.

Annotations with callouts identify the following form elements:

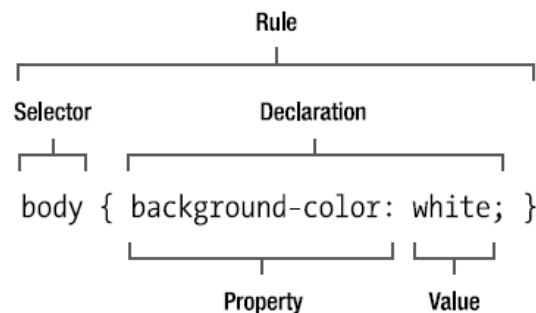
- Text field:** Points to the 'Full Name', 'ID', and 'Email' text fields.
- Radio:** Points to the 'Male' and 'Female' radio buttons.
- Check-box:** Points to the 'List of subjects' check-boxes.
- Combo-:** Points to the 'Field of study' dropdown menu.
- Text-Area:** Points to the 'Comments' text area.

After input information and click “Submit” button, the result should be displayed like:



Part 4: CSS

CSS can add style to your pages, enhancing and improving the presentation of your content.



There are 3 types of CSS:

- External Style Sheet: It is declared and stored in the separate file, then can add and use in all the web pages of the website.
- Internal Style Sheet: It is declared on the header of web page and use for only this page.
- In - line Style Sheet: It is declared in the tag of HTML and use for this line.

Example of External Style Sheet:

```

<html>
<head>
  <title>Spaghetti and Cruft : Our Menu</title>
  <link rel="stylesheet" type="text/css" href="styles.css" />
</head>
<body>
  <h2>Testing External Style Sheet</h2>
  <p>This is the content of page </p>
</body>
</html>
  
```

This is the content of styles.css

```

h2 {font-size: 130%; color:red};
p {font-size: 120%; color:blue};
  
```

Example of Internal Style Sheet:

```

<html>
<head>
  <STYLE TYPE = "text/css">
    H1.titlepage {text-align: center; color: red }
  
```

```
</STYLE>
</head>
<body>
  <H1 class=titlepage>Introduction!</H1>
  <h2>Hello World!</h2>
  <h3>This is lab section of Web Application Development</h3>
</body>
</html>
```

Example of In-Line Style Sheet:

```
<p style = "background:blue;color:red">Example </p>
```

Assignment

Task 1: Complete above exercises.

Task 2: Improve and finish Assignment 1 (create at least 2 forms for your personal website)