

Course: Web Application Development

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Lab 2: Advance HTML and CSS.

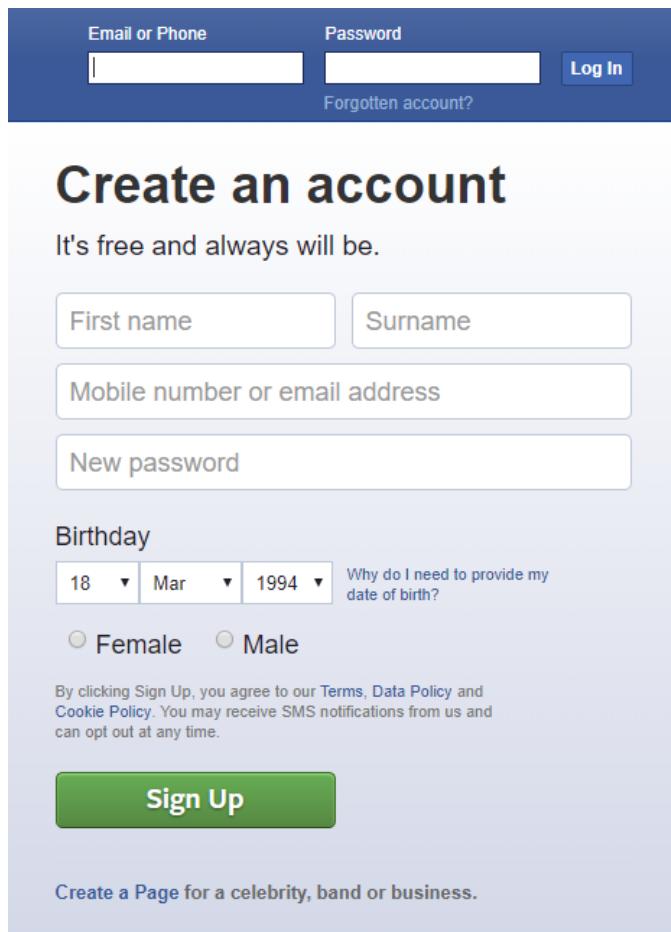
Contents:

- **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 screenshot of a Facebook sign-up page. At the top, there is a blue header bar with input fields for 'Email or Phone' and 'Password', and a 'Log In' button. Below the header, the main title 'Create an account' is displayed in large, bold, dark blue text. A sub-instruction 'It's free and always will be.' follows. The form consists of several input fields: 'First name' and 'Surname' in separate boxes, 'Mobile number or email address' in a single box, and 'New password' in another box. Below these, there is a 'Birthday' section with dropdown menus for day, month, and year, and a link 'Why do I need to provide my date of birth?'. Underneath the birthday fields are gender selection buttons: 'Female' and 'Male'. A note below states: '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.' A large green 'Sign Up' button is centered at the bottom of the form. At the very bottom, there is a link '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 <br>  
<input type="checkbox" name="c2" value="ON">Computer Network <br>  
<input type="checkbox" name="c3" value="ON">Introduction to Computer<br>  
<input type="checkbox" name="c4" value="ON">Web Programming<br>
```

- **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).

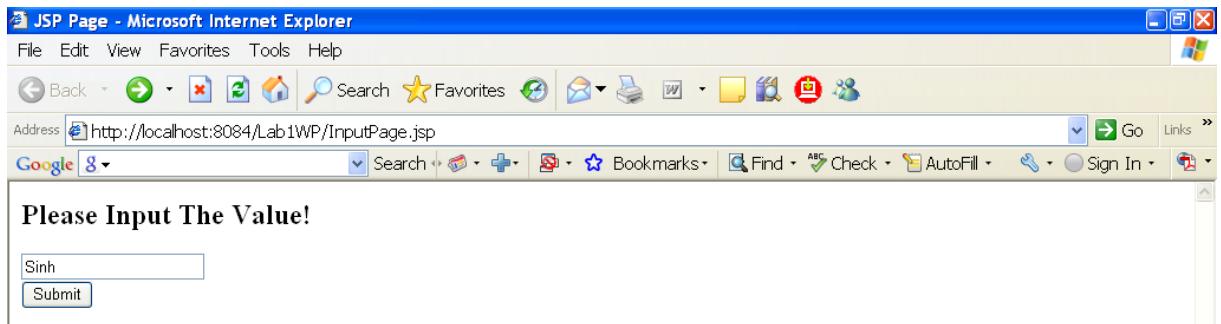
For more input types, please visit this link:

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

Part 3: Design Form

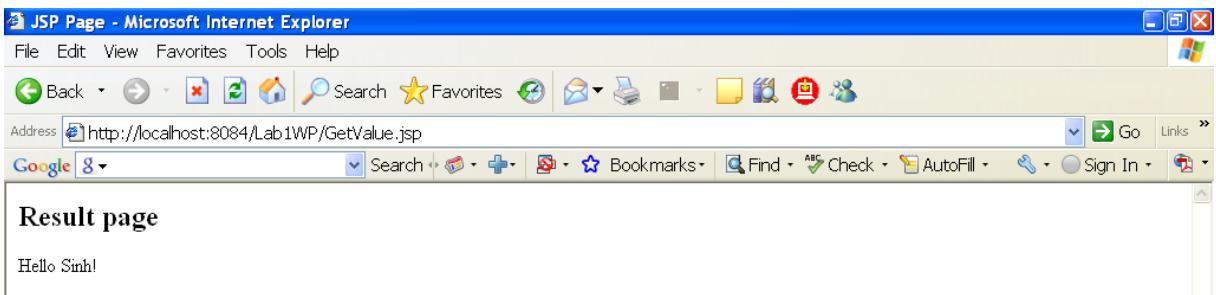
Open your IDE and create a file named **InputPage.jsp** with content like this:

```
<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

School of Computer Science & Engineering

Register Form

Full Name:

ID:

Email:

Gender: Male Female

Field of study:

Principle of EE 1
Computer Network
Web Application Development
Object Oriented Programming
Computer Graphics

List of subjects: IM EE BA BE

Comments:

Submit Cancel

Text field

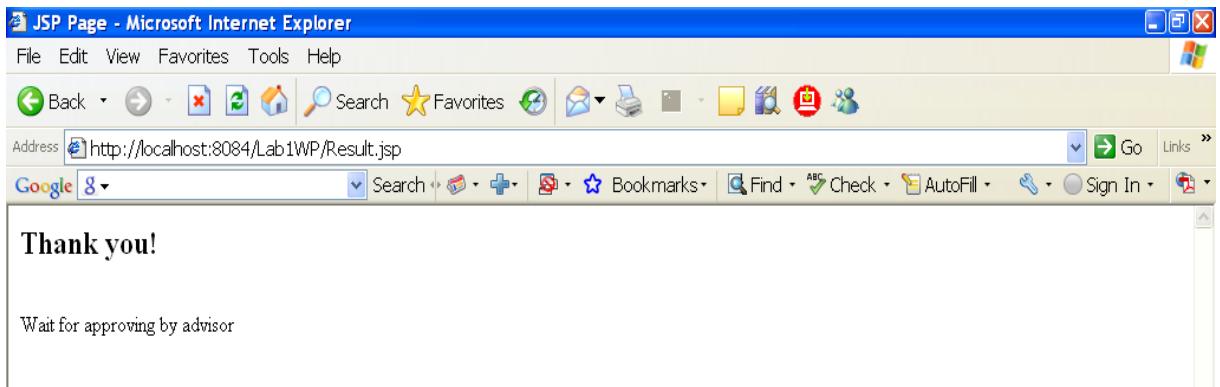
Radio

Combo-box

Check-box

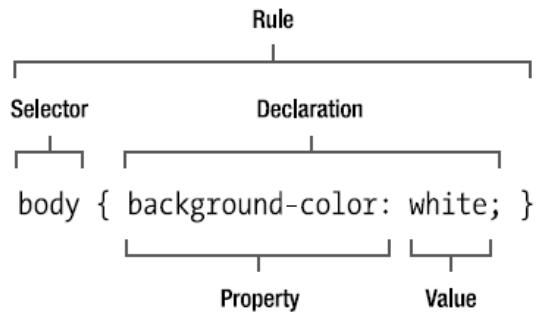
Text-Area

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>Welcome to our site</h1>
    <h2>Testing Internal Style Sheet</h2>
    <p>This is the content of page </p>
  </body>
</html>
  
```

```

</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>

More exercices:

Use HTML to design pages as below figures (you can choose one of them). You are allowed to reuse content, css and images in those pages, but **do not copy everything from them**. Notify me when you finish your work to get bonus mark.

Option 1: <https://vnexpress.net/so-hoa/co-48-trieu-nguo-viet-truy-cap-facebook-tu-thiet-bi-di-dong-3720116.html>



The screenshot shows a news article from VnExpress. At the top, there's a navigation bar with links like 'Video', 'Thời sự', 'Góc nhìn', etc. Below it is a secondary navigation bar with 'Đời sống số' highlighted. The main headline reads: 'Có 48 triệu người Việt truy cập Facebook từ thiết bị di động'. The text discusses the prevalence of mobile internet usage in Vietnam, mentioning Samsung Galaxy S9/S9+ and other platforms like WhatsApp, Messenger, and Instagram. To the right, there are several smaller news cards with images and titles, such as 'Con mèo tên Chó nổi tiếng mạng xã hội', 'Binh đoàn Android chia đôi chiến tuyến vì 'tai thỏ'', 'iPhone bị khóa 47 năm vì nhập sai mật khẩu', 'Bán iPhone giá 50 USD, một cửa hàng tại Malaysia 'võ trận'', and 'Cháy nhà do iPhone nổ, cặp vợ chồng đòi bồi thường 600.000 USD'.

Option 2: <https://tiki.vn/>

The screenshot shows the Tiki.vn homepage with a blue header featuring the Tiki logo and a "ƯU ĐÃI ĐẾN 50%" (Up to 50% Off) button. Below the header is a search bar and navigation links for account management and payment methods. The main content area features several large promotional banners: "SINH NHẬT HUYỀN THOẠI" (Grand Birthday Sale), "BALO HÀNG HIỆU DEAL CHỐP NHỎNG" (Authentic Bag Deal), "TIKI SINH NHẬT TẤT BẮT SẴN DEAL" (Grand Birthday All Ready Stock Deal), and "COUPON LÊN ĐẾN 100.000đ" (Coupon up to 100,000đ). There are also smaller banners for "NHẬP MÃ COUPON MOONY0703" (Enter coupon MOONY0703) and "GIẢM NGAY 7%" (7% Off). On the left, there is a sidebar with a list of product categories such as Điện Thoại - Máy Tính Bảng, Điện Tử - Điện Lạnh, Phụ Kiện - Thiết Bị Số, Laptop - Thiết bị IT, Máy Ánh - Quay Phim, Điện Gia Dụng, Nhà Cửa Đời Sống, Hàng Tiêu Dùng - Thực Phẩm, Đồ chơi, Mẹ & Bé, Làm Đẹp - Sức Khỏe, Thời trang - Phụ Kiện, Thể Thao - Dâng Ngoại, Xe Máy, Ô tô, Xe Đạp, Hàng Quốc Tế, Sách, VPP & Quà Tặng, and Voucher - Dịch Vụ - Thủ Cấp.

Option 3: <https://tuoitre.vn/>

The screenshot shows the tuoitre.vn homepage with a red header containing the website's name and a search bar. Below the header is a banner for "Trường Đại học Mở TP.HCM KHAI GIẢNG ÔN THI CAO HỌC 2019" (HCM Open University High School Entrance Exam 2019). The main content area includes a news article about a flight from Indonesia to Vietnam, a photo of a woman in a red dress, and a photo of a man in a suit. There are also sections for "VĨNH HƯNG VƯƠNG" (Vinh Hung Wang) and a Mazda CX-5 advertisement. At the bottom, there is a "PHOTO GALLERY" section with images of Rita Ora performing, a national delegation visiting France, and a woman doing push-ups.

→ Go on to improve and finish Assignment 1 (create at least 2 forms for your personal website)