

Cairo University
Faculty of Engineering
Computer Engineering Department
Computer Systems Consultation



Lab 1 – HTML, CSS & JavaScript

Create an HTML page that looks exactly like the following figure.

A screenshot of a web form titled "Sign Up Form". The form contains the following fields: "Username:" with a text input, "Password" with a text input, "Retype Password:" with a text input, "Gender:" with radio buttons for "Male" (selected) and "Female", "Age:" with a text input, and "Account Type:" with a dropdown menu showing "Student". Below these fields is a "Submit" button. At the bottom of the form, there is a footer that reads "© Learn 2020-2021".

Sign Up Form

Username:

Password

Retype Password:

Gender: ☒ Male ☐ Female

Age:

Account Type:

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Notes:

- When the user clicks on the “**Account Type**” drop-down list, the following items should appear (in order): **Professor**, **Teaching Assistant** and **Student**.
- “**Student**” account type is selected by default.
- Gender is “**Male**” by default.
- Do not forget the footer of the page. “© Learn 2023-2024”
- To convert from string to int, you can use: Number(str) function.

When the user clicks on the “Submit” button, the following validations should be performed in order:

1- If any of the fields is empty, alert with the following message:

"All fields must be filled."

Sign Up Form

Username:

Password:

Retype Password:

Gender: ☒ Male ☐ Female

Age:

Account Type:

This page says
All fields must be filled.

OK

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2- If the length of the password is less than 8 characters, show a message next to the text box of “Password” showing the following message with a red color.

"A password should be at least 8 characters."

Sign Up Form

Username:

Password: **A password should be at least 8 characters.**

Retype Password:

Gender: ☒ Male ☐ Female

Age:

Account Type:

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3- If the password is at least 8 characters but does not contain any number [0-9] **AND** at least one uppercase letter, show the following error message in red next to the text box of “Password” **"A password should include at least one uppercase character and one numeric digit."**

Hint:

You can use regular expressions and matching:

```
var pattern_1 = /[A-Z]/;
```

```
var pattern_2 = /[0-9]/;
```

```
var text = "Hello World";
```

```
var matches = text.match(pattern_1);
```

```
console.log(matches); // This will output an array containing ["H"] which is the first match. You can use /[A-Z]/g to get all the matches.
```

```
//return null if no match is found.
```

Sign Up Form

Username:

Password: A password should contain at least one uppercase character and one numeric digit.

Retype Password:

Gender: ☒ Male ☐ Female

Age:

Account Type: ▼

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4- If the password and the re-typed passwords do not match, show the following message in red next to the “Re-type password” text box. **"The two passwords do not match."**

Sign Up Form

Username:

Password:

Retype Password: The two passwords do not match.

Gender: ☒ Male ☐ Female

Age:

Account Type: ▼

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5- If the age value is less than 18, show the following message in red next to the “Age” text box. **"You should be at least 18 years old to sign up."**

Sign Up Form

Username:

Password:

Retype Password:

Gender: ☒ Male ☐ Female

Age: You should be at least 18 years old to sign up.

Account Type: ▼

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6- If the user wants to register as a professor but their age is less than 30, alert with the following message "You must be 30 years or above to register as professor".

Sign Up Form

Username:

Password:

Retype Password:

Gender: ☒ Male ☐ Female

Age:

Account Type:

This page says

You must be 30 years or above to register as professor.

OK

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7- If the data is successfully validated and the account type is **Student**, you should alert with a message as shown in the following figure with the username all uppercase.

Sign Up Form

Username:

Password:

Retype Password:

Gender: ☒ Male ☐ Female

Age:

Account Type:

This page says

Hello, AHMED OMAR

You are successfully registered as: Student

OK

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8- If the data is successfully validated and the account type is either **Professor** or **Teaching Assistant**, you should prompt the user to enter their teaching ID as shown in the following figure (the default ID is 0).

Sign Up Form

Username:

Password:

Retype Password:

Gender: ☒ Male ☐ Female

Age:

Account Type:

This page says

Enter your teaching ID.

120210

Cancel

OK

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9- When the user clicks OK, this information should appear in a new page as shown in the following figure.

Hello, **AHMED OMAR**
You are successfully registered as: **Professor**
Teaching ID = **120210**

Use **JavaScript** to perform the previous validations.

Grading Criteria:

HTML form elements with correct attributes **(4 grades)**

Page Formatting as the displayed example. **(1 grade)**

External CSS file used. **(1 grade)**

Validations and Registration Messages **(9 grades; 1 grade per each correct step)**