

7.4D: Website project (Part 2 of 3): Improve your website

Tasks

In the website project task of week 5, you had created the draft web pages of your business website. In this project task, you are expected to improve these draft pages to make them more professional and functional. Follow the steps below to do this task.

Step 1

Go through the draft web pages you created to check if the pages are designed professionally and work properly, then make changes accordingly when necessary. You could consider using JavaScript to enhance the web pages and make them dynamic if needed. The following checklist gives the guidelines to improve your web pages.

Page Layout

- Appealing to target audience
- Consistent site header/logo
- Consistent navigation area
- Information page title includes the company/organization/business name
- Page footer area includes copyright, last update, contact e-mail address
- Displays without horizontal scrolling at 1024x768 and higher resolution
- Balance of text/graphics/white space on page
- Good contrast between text and background
- Repetitive information (e.g., header/logo and navigation) occupies less than one-quarter to one-third of the browser window at 1024x768 resolution

Navigation

- Main navigation links are clearly and consistently labelled
- Navigation is easy to use for the target audience
- If main navigation uses images, clear text links are in the footer section of the page
- Navigation is structured in an unordered list
- All navigation links work

Colour and Graphics

- Colour scheme is limited to a maximum of three or four colours plus neutrals
- Colour is used consistently

- Background and text colours have sufficient contrast
- Use of colour and graphics enhances rather than detracts from the site
- Each graphic used serves a clear purpose
- Attribute `alt` is used for each image to configure alternate text replacement

Content Presentation

- Common fonts, such as Arial, Verdana, Georgia, or Times New Roman, are used
- Writing techniques for the web, such as headings and bullet points, are used
- Fonts, font sizes, and font colours are consistently used
- If web fonts are configured, no more than one font typeface is used
- Content provides meaningful and useful information
- Content is organized in a consistent manner
- **Dynamic elements** (modals/pull-down lists/show-hide) should be provided where appropriate
- Information is easy to find with minimal clicks
- The date of the last revision and/or copyright date is accurate
- Content does not include outdated material
- Content is free of typographical and grammatical errors
- Avoid the use of "click here" when writing text for hyperlinks

Functionality

- All internal and external hyperlinks work
- All forms function as expected
- No JavaScript errors are generated by the pages

Browser Compatibility

- Displays on current versions of popular browsers, such as Edge, Firefox, Google Chrome, Safari, and Opera
- Displays on mobile devices, including tablets and smartphones

Step 2

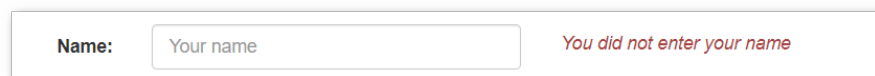
Write scripts in the web pages to make them alive and interactive, especially in this task, you are mainly required to make JavaScript programs to check the form element/control values before the form data being sent to the server for processing.

Specifically you are expected to complete the following tasks for the page that provides the **query function**.

As specified in the project specifications (Task 5.3), the query function should provide a form for users to send queries. The form should include relevant fields for users to provide their contact details (e.g. name, email and phone number).

There should be a field for users to enter their query as well. Appropriate form validation should be implemented using JavaScript when the query form is to be submitted.

- The form validation must include the following checks:
 - All required fields are not blank.
 - Email address should be in email format (e.g., should contain "@" or other patterns).
 - Phone number must be digits and should not exceed a maximum length.
 - Any other checks that you believe are necessary for the website running.
- If the validation fails:
 - The form should not be submitted;
 - An error needs to be generated using JavaScript;
 - An appropriate error message should appear on the webpage (it should not be a popup message). Screenshot of an example is shown below.

A screenshot of a web form element. On the left, the text "Name:" is followed by a text input field containing the placeholder text "Your name". To the right of the input field, the error message "You did not enter your name" is displayed in red text.

Task7.4 Name input error message

In addition to the above checks, you can also try to make other web pages alive or dynamic using JavaScript, such as move the mouse cursor over an element to change its style if you want to draw the user's attention to the element, or dynamically display a greeting message based on the current time, etc..

What will you submit?

You should submit:

- A PDF file that contains the screenshots of all improved web pages shown in a web browser.
- A PDF file that lists the major improvements and provides the html code of all improved web pages.
- Screenshots of the updated web page(s) that implements form validation and/or dynamic effect.