UCM2 - UCM2 TASK 2: MULTIPAGE WEBSITE

FRONT-END WEB DEVELOPMENT — D277 PRFA — UCM2

Preparation

Task Overview

Submissions

Evaluation Report

COMPETENCIES

4074.1.1: Implements Navigational Schemes

The learner implements navigational schemes in websites.

4074.1.2: Develops Reactive Web Interfaces

The learner develops reactive user web interfaces using CSS.

4074.1.3: Implements Data Entry and Data Storage

The learner implements data entry and data storage capabilities in a web environment.

4074.1.4: Implements User-Centered Solutions

The learner implements user-centered solutions from multiple perspectives emphasizing usability and functional page layouts.

INTRODUCTION

Front-end web developers must know how to use HTML, CSS, and JavaScript to make interfaces work in an online environment. In Task 1, you acted as a web designer to create two low-level comprehensive page layouts. In this task, you will use your newly acquired web development skills to create a multipage website. You will use the same two low-level comprehensive page layouts you created in Task 1 as templates for the pages in this task.

Note: Because your site will be live, use caution with the content and images you include on your website. The public will have access to your website, so do not include any sensitive or private information.

Note: All the code in your submission must be your own original work. You may not use premade templates of any sort, including the templates provided in the exercise files of the course, blog software such as Blogger and WordPress, content management systems like Joomla! and PHP-Nuke, GUI web design software like Adobe Dreamweaver, or any type of WYSIWYG application that produces code by clicking a button.

SCENARIO

Congratulations! You got the job! You just finished your first week at the state government office where you completed the orientation and onboarding documentation. You have also met with your new supervisor daily to learn more about the department and expectations of your role, as well as your new colleagues who have been teaching you about the systems used in the office. You are now ready to develop the new website for the state government office.

ASSUMPTIONS

Before you begin this task, remember that you should not begin working on Task 2 until Task 1 has been evaluated as a "Pass," as you will be building upon your work submitted in Task 1. Task 1 must be completed, submitted, and evaluated as a "Pass" *before* you submit this task. If your work on this task is not evaluated as a "Pass," you should contact your assigned instructor for guidance on how to make any necessary revisions.

As you begin, keep in mind that this task involves coding with HTML, CSS, and JavaScript. You can use the code editor of your choice to complete the task, but more advanced editors may be overkill. Plain text editors, such as Notepad, Notepad++, Atom, or Brackets, will work well.

REQUIREMENTS

Your submission must be your original work. No more than a combined total of 30% of the submission and no more than a 10% match to any one individual source can be directly quoted or closely paraphrased from sources, even if cited correctly. The similarity report that is provided when you submit your task can be used as a guide.

You must use the rubric to direct the creation of your submission because it provides detailed criteria that will be used to evaluate your work. Each requirement below may be evaluated by more than one rubric aspect. The rubric aspect titles may contain hyperlinks to relevant portions of the course.

Tasks may **not** be submitted as cloud links, such as links to Google Docs, Google Slides, OneDrive, etc., unless specified in the task requirements. All other submissions must be file types that are uploaded and submitted as attachments (e.g., .docx, .pdf, .ppt).

- A. Create your project and working repository in GitLab. Use the link "GitLab How-To" located in the Supporting Documents section below to find step-by-step instructions for doing this important part of the task. You may also find the README file in GitLab useful. Be sure to do the following steps:
 - Clone the project to a local repository.
 - Commit with a message and push when you complete each requirement listed in parts B, C, D, and E.

Note: You may commit and push whenever you want to back up your changes, even if a requirement is not yet complete.

- Submit a copy of the GitLab repository URL in the attached "Student Project Submission Form."
- Submit a copy of the GitLab pages URL in the attached "Student Project Submission Form."
- B. Using the two low-level comprehensive page layouts you created in Task 1 as templates, use HTML and CSS to do the following:
 - 1. Create **one** home page for the website introducing your chosen state. This page will be the main entry point for the website.
 - 2. Create the following **three** interior pages:
 - a. Create **one** page to present information about the capital city of your chosen state, including the following facts:
 - the city's population
 - the year the city was incorporated
 - the region of the state in which the city is located
 - the classification of the city: urban, suburban, and/or rural

- the average income level of the city compared to the rest of the state
- b. Create **two** pages to present information about **two** noncapital cities of your choice located within the state, including the following facts about *each* city:
 - the city's population
 - the year the city was incorporated
 - the region of the state in which the city is located
 - the classification of the city: urban, suburban, and/or rural
 - the average income level of the city compared to the rest of the state

Note: You may create additional city pages, but it is not a requirement.

- 3. Create **one** page for a web form that includes the following elements:
 - text fields for first name, last name, and email address
 - a confirmation field where users will enter the email address for a second time
 - a text area that allows users to ask a question
 - labels for *each* form field
 - a "Submit" button

Note: The "Submit" button is not meant to submit the form's information to a server.

Note: This web form is intended to collect information from users.

Note: You will add JavaScript to the web form page in part E below.

- 4. Include the following elements in *all* pages from part A:
 - a title in the head section of the source code
 - at least one relevant image, including alternative text for the image(s)
 - a consistent navigation system across *all* pages
 - the semantic elements you included in your two low-level comprehensive page layouts from Task 1
- C. Include each of the following elements within your website using well-formed HTML markup:
 - 1. a link that opens an external website in a new window or tab
 - 2. an ordered list with at least three list items
 - 3. an unordered list with at least three list items
 - 4. an HTML table consisting of at least three columns and at least three rows with content
- D. Create **one** external CSS stylesheet that includes the following CSS declarations and rules:
 - 1. **one** font-family declaration used at least **once** in the HTML files
 - 2. a :hover pseudo-class to create a rollover effect for the navigation links
 - 3. a float property to position one HTML element within the website to the side of another element
 - 4. absolute positioning on **one** page that changes the position of an element
 - 5. relative positioning on **one** page that changes the position of an element
 - 6. **one** of *each* of the following types of CSS selectors:
 - a functioning element selector that is used at least once on the website
 - a functioning class selector that is used **twice** on the same HTML page
 - a functioning id selector used at least once on the website
- E. Add JavaScript code to the web form created in part A3 that produces an alert box if the two email fields do not match.

- F. Create **two** images of the updated layouts based on the final site design using your chosen graphics software.
 - 1. Justify all changes made in Task 2 to your layouts from Task 1 (suggested length of 1–2 paragraphs).

Note: If no changes are made to your original layouts, you can upload your original design images for part F and state, "No changes were made for part F1."

- G. Submit a completed copy of the attached "Student Project Submission Form."
- H. Acknowledge sources, using in-text citations and references, for content that is quoted, paraphrased, or summarized.

Note: All content within your web pages retrieved from sources outside of the course material must be cited in either a footnote on the applicable page or in a separate document.

I. Demonstrate professional communication in the content and presentation of your submission.

File Restrictions

File name may contain only letters, numbers, spaces, and these symbols: ! - _ . * '()

File size limit: 200 MB

File types allowed: doc, docx, rtf, xls, xlsx, ppt, pptx, odt, pdf, csv, txt, qt, mov, mpg, avi, mp3, wav, mp4, wma, flv, asf, mpeg, wmv, m4v, svg, tif, tiff, jpeg, jpg, gif, png, zip, rar, tar, 7z

RUBRIC

A:GITLAB REPOSITORY

NOT EVIDENT

A GitLab subgroup and project are not provided.

APPROACHING COMPETENCE

The subgroup and project are created in GitLab, but 1 or more of the given actions are not completed or are completed incorrectly.

COMPETENT

The subgroup and project are created in GitLab, and *all* the given actions are completed correctly.

B1:HOME PAGE

NOT EVIDENT

The submission does not include a home page.

APPROACHING COMPETENCE

The submission includes a home page, but it does not introduce the chosen state.

COMPETENT

The submission includes a home page for the website that introduces the chosen state.

B2A:CAPITAL CITY PAGE

NOT EVIDENT

The submission does not include a page presenting information about the capital city of the chosen state.

APPROACHING COMPETENCE

The submission includes a page presenting information about the capital city of the chosen state, but it does not include *each* given bullet point.

COMPETENT

The submission includes a page that presents information about the capital city of the chosen state and includes *each* given bullet point.

B2B:NONCAPITAL CITY PAGES

NOT EVIDENT

The submission does not include any pages presenting information on noncapital cities within the chosen state.

APPROACHING COMPETENCE

The submission only includes 1 noncapital city page. Or the submission includes 2 noncapital city pages, but they do not *both* contain *each* given bullet point.

COMPETENT

The submission includes 2 pages presenting information about 2 noncapital cities within the chosen state. *Both* noncapital city pages include *each* given bullet point.

B3:WEB FORM PAGE ELEMENTS

NOT EVIDENT

The submission does not include a web form page.

APPROACHING COMPETENCE

The submission includes a web form page, but it does not contain *each* given element.

COMPETENT

The submission includes a web form page that contains *each* given element.

B4:PAGE ELEMENTS

NOT EVIDENT

The submission does not include the given elements in *any* page from part A.

APPROACHING COMPETENCE

The submission includes *each* given element in only *some* of the pages from part A.

COMPETENT

The submission includes *each* given element in *all* pages from part A.

C1:EXTERNAL WEBSITE ELEMENT

NOT EVIDENT

The submission does not include a link that opens an external

APPROACHING COMPETENCE

The submission includes a link that opens an external website,

COMPETENT

The submission includes a link that opens an external website in

website.

but the website does not open in a new window or tab using the target attribute or does not include suitable markup. Or the HTML code is not well-formed. a new window or tab using the target attribute. The submission includes suitable markup, and the HTML code is well-formed.

C2:ORDERED LIST ELEMENT

NOT EVIDENT

The submission does not include an HTML-coded ordered list.

APPROACHING COMPETENCE

The submission includes an HTML-coded ordered list, but the list includes *only* 1 or 2 list items. Or the list does not use suitable markup. Or the HTML code is not well-formed.

COMPETENT

The submission includes an HTML-coded ordered list with at least 3 list items. The list uses suitable markup, and the HTML code is well-formed.

C3:UNORDERED LIST ELEMENT

NOT EVIDENT

The submission does not include an HTML-coded unordered list.

APPROACHING COMPETENCE

The submission includes an HTML-coded unordered list, but the list includes *only* 1 or 2 list items. Or the list does not use suitable markup. Or the HTML is not well-formed.

COMPETENT

The submission includes an HTML-coded unordered list with at least 3 list items. The list uses suitable markup, and the HTML is well-formed.

C4:TABLE ELEMENT

NOT EVIDENT

The submission does not include an HTML-coded table to organize content.

APPROACHING COMPETENCE

The submission includes an HTML-coded table to organize content, but the table does not have at least 3 columns or does not have at least 3 rows. Or the HTML is not well-formed.

COMPETENT

The submission includes an HTML-coded table to organize content. The table has *at least* 3 columns and *at least* 3 rows, and the HTML is well-formed.

D1:FONT-FAMILY DECLARATION

NOT EVIDENT

An external CSS stylesheet is not provided. Or the stylesheet

APPROACHING COMPETENCE

The external CSS stylesheet includes 1 font-family declaration,

COMPETENT

The external CSS stylesheet includes 1 font-family declara-

does not contain 1 font-family declaration.

but it is not used in the HTML

tion that is used at least 1 time in the HTML files.

D2:ROLLOVER EFFECT

NOT EVIDENT

An external CSS stylesheet is not provided. Or the stylesheet does not include a :hover pseudo-class.

APPROACHING COMPETENCE

The external CSS stylesheet includes a :hover pseudo-class, but it does not create a rollover effect. Or the rollover effect is not applied to navigation links. Or the hover pseudo-class is not well-formed.

COMPETENT

The external CSS stylesheet includes a well-formed :hover pseudo-class that creates a rollover effect for the navigation links.

D3:FLOAT PROPERTY ENHANCEMENT

NOT EVIDENT

An external CSS stylesheet is not provided. Or the stylesheet does not contain a float property.

APPROACHING COMPETENCE

The external CSS stylesheet includes a float property, but the float property does not position 1 HTML element to the side of another within the website. Or the float property is not well-formed.

COMPETENT

The external CSS stylesheet includes a well-formed float property that positions 1 HTML element to the side of another in the web page.

D4:ABSOLUTE POSITIONING ENHANCEMENT

NOT EVIDENT

An external CSS stylesheet is not included. Or the stylesheet does not contain absolute positioning.

APPROACHING COMPETENCE

The external CSS stylesheet includes absolute positioning in 1 area of the web page, but it does not change the position of an element. Or the absolute positioning element is not well-formed.

COMPETENT

The external CSS stylesheet includes absolute positioning in 1 area of the web page that changes the position of an element and is well-formed.

D5:RELATIVE POSITIONING ENHANCEMENT

NOT EVIDENT

An external CSS stylesheet is not included. Or the stylesheet

APPROACHING COMPETENCE

The external CSS stylesheet includes relative positioning in 1

COMPETENT

The external CSS stylesheet includes relative positioning in 1 area of the web page that

does not contain relative positioning.

area of the web page, but it does not change the position of an element. Or the relative positioning element is not well-formed. changes the position of an element and is well-formed.

D6:SELECTOR ENHANCEMENT

NOT EVIDENT

The submission does not include any of the required selectors.

APPROACHING COMPETENCE

more of the CSS selectors.

Or each of the required selectors is included, but 1 or more of the selectors is not well-formed or does not function properly.

The submission is missing 1 or

COMPETENT

The submission includes 1 of each type of CSS selector, and all selectors are well-formed and function properly. The submission meets all the given bullet points.

E:JAVASCRIPT CODE

NOT EVIDENT

The submission does not include JavaScript code.

APPROACHING COMPETENCE

The submission includes
JavaScript code, but the code
does not correctly verify that
the email fields match. Or the
JavaScript code does not produce an alert box. Or the
JavaScript code was not added
to the web form created in part
A3.

COMPETENT

The submission includes
JavaScript code in the web form
from part A3 that produces an
alert box and correctly verifies
that the email fields match.

F:UPDATED LAYOUT IMAGES

NOT EVIDENT

The submission does not include any images.

APPROACHING COMPETENCE

The submission includes only 1 image. Or 2 images are included, but they do not capture the updates made, if applicable.

COMPETENT

The submission includes 2 images of the updated or original layouts based on the final site design.

F1:JUSTIFICATION FOR UPDATES

NOT EVIDENT

The submission does not include a justification or statement stat-

APPROACHING COMPETENCE

COMPETENT

The submission includes an adequate justification for *all* changes

ing that no changes were made.

The submission includes a justification, but it does not focus on technical limitations. Or the submission does not include an adequate justification for *all* changes made in Task 2 to the layouts from Task 1.

made in Task 2 to the layouts from Task 1. Or the submission states that no changes were made.

G:STUDENT PROJECT SUBMISSION FORM

NOT EVIDENT

The submission does not include the attached "Student Project Submission Form."

APPROACHING COMPETENCE

The submission includes the attached "Student Project Submission Form," but the form is incomplete.

COMPETENT

The submission includes a completed copy of the attached "Student Project Submission Form."

H:SOURCES

NOT EVIDENT

The submission does not include both in-text citations and a reference list for sources that are quoted, paraphrased, or summarized.

APPROACHING COMPETENCE

The submission includes in-text citations for sources that are quoted, paraphrased, or summarized and a reference list; however, the citations or reference list is incomplete or inaccurate.

COMPETENT

The submission includes in-text citations for sources that are properly quoted, paraphrased, or summarized and a reference list that accurately identifies the author, date, title, and source location as available.

I:PROFESSIONAL COMMUNICATION

NOT EVIDENT

Content is unstructured, is disjointed, or contains pervasive errors in mechanics, usage, or grammar. Vocabulary or tone is unprofessional or distracts from the topic.

APPROACHING COMPETENCE

Content is poorly organized, is difficult to follow, or contains errors in mechanics, usage, or grammar that cause confusion.

Terminology is misused or ineffective.

COMPETENT

Content reflects attention to detail, is organized, and focuses on the main ideas as prescribed in the task or chosen by the candidate. Terminology is pertinent, is used correctly, and effectively conveys the intended meaning. Mechanics, usage, and grammar promote accurate interpretation and understanding.

GitLab

SUPPORTING DOCUMENTS

Student Project Submission Form.docx

Gitlab How-To Document.pdf