Development of an Interactive Interface for a Software Application
CAP4064

Objective:

This project aims to demonstrate your understanding of fundamental topics of designing and implementing multimedia on the internet, the underlying computer technology that supports it, and hands-on projects incorporating the concepts.

General Specifications:

1. Design and implement a website with HTML 5 elements discussed in this course.
2. Design and implement a website with responsive images using figure and figure caption elements and hyperlinks.
3. Design and implement a website with an Embed map and unordered list.
4. Create an external style sheet and link it to an HTML page.
5. Design the HTML 5 elements within the id and class attribute and define the id and class in your style sheet.
6. Design and define the viewport and insert the viewport element.
7. Identity, use, and implement media query expression.
8. Design and use article, aside, and section elements.
9. Use and implement CSS grid layout.
10. Use and implement opacity, box-sizing, and text-shadow properties.
11. Add a favicon.

Project Structure:

Your project must have the following structure.

The project must provide at least four different pages

1. **Home.html**: This page will briefly describe your major, skill, and experience. It must include a hero image and display different information for your desktop and mobile view. At the bottom of this page, you will include three images (round border). Each image will be linked to the other webpage (courses, project, contact). These images will have a subcaption with an opacity background on top of the image, containing a dynamic pseudo-class hover.

2. **Courses.html**: This page will include the main courses of your major and include a short description of the objective achieved in these courses. Also, you will make an unsorted list highlighting the topics discussed in each course. Must include an image for each course (round border), the grid layout will be one row, and the number of columns will depend on the number of courses (at least three courses). You will display only the images and the unsorted list for the mobile viewport.

3. **Project.html:** This page will include a description of the main research projects, conferences, presentations, etc., that you have been involved in during your undergraduate study. Also, you will make an unsorted list highlighting your responsibility and task in each project, conference, presentation, etc. Must include an image (round border) for each project. The grid layout will be one row, and the number of columns will depend on the number of projects (at least three projects). You will display only the images and the unsorted list for the mobile viewport.

4. **Contact.html:** This webpage will include your contact information, and you may include a link to your LinkedIn profile, Including an Embedded map with FAMU address. For this project, do not use a personal phone number or personal address.

Each webpage will have a navigation bar linked to the different pages as created in class, and the navigation bar will contain a dynamic pseudo-class hover. For mobile view, the navigation bar will have the same layout as the webpage created in class.

You must include a log image on your webpage.

All links must be functional, the design must look clean, and use the appropriate color for your font and background.

Rubric 1: Basic component

1. Describe and use HTML 5 semantic elements
2. Create a webpage template
3. Insert comments in an HTML document
4. Describe and use heading elements
5. Create a home page from an HTML template
6. Describe the image tag and its attributes

Rubric 2: Images and Hyperlinks

1. Describe the image tag and its attributes
2. Add images to a website, including a hero-image.
3. Use a div element within a webpage
4. Create relative links, absolute links, email links, and telephone links
5. Create an unordered list and a description list
6. Embed a map within a webpage

Rubric 3: Working with CSS

1. Implement Describe Cascading Style Sheets (CSS).
2. Create styles that use text and color properties
3. Describe and use the CSS box model to apply margins, padding, and borders
4. Create an external style sheet and link it to an HTML page
5. Create responsive images
6. Use float and clear properties
7. Create and style id and class attributes
8. Use a span element
9. Add comments to an external style sheet and validate a CSS file

Rubric 4: Responsive and Viewport Design

1. Insert a meta viewport element
2. Create a sticky element
3. Integrate custom fonts
4. Create a mobile-friendly navigation system
5. Add a telephone link
6. Make rounded corners
7. Insert a media query to target tablet viewports
8. Create style rules for tablet viewports
9. Insert a media query and create style rules to target desktop viewports
10. Identify and modify breakpoints

11. Explain linear and radial gradients
12. Apply a linear gradient to a webpage for a desktop viewport

Rubric 5: Layout and Design using CSS style

1. Implement the CSS grid layout
2. use the opacity property
3. use the box sizing, text shadow, box shadow properties
4. Insert and style figure and figcaption elements