

SE/COM S 3190 - Construction Of User Interfaces

Midterm Project

Total Points: 240

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Due Date: Mar 13, 2025 11:59 PM CST

This is a team project. Please review the rubric carefully, as points will be awarded for effective communication and collaboration. Ensure tasks are evenly distributed between both members. Plan accordingly and complete the project the right way.

If you need help, try office hours, the schedule is on Canvas. Lots of help is also available through the Piazza discussions. Please start the assignment as soon as possible to get your questions answered right away.

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Overview

The Midterm Project is an opportunity for students to apply the knowledge they've gained in SE/COM S 3190, covering all topics up to and including Week 8.

Students have full creative control over the website's content, allowing them to tailor it to their own interests and preferences. The project requires the development of a multi-page website that incorporates images and text relevant to the chosen theme. The focus is not only on functionality but also on achieving an aesthetically pleasing and user-friendly design.

The Midterm Project will integrate various technologies covered in the course up to Week 8 (for specific details, please refer to the "Requirements" section). While the use of more advanced technologies is encouraged, students should ensure that such additions do not complicate the evaluation process. If a project's complexity hinders assessment, the TA reserves the right to impose penalties during the review.

Demo Week

Before Spring Break, students will present a **mandatory live demo** of their projects as a **team** to the **TA** during the week of **March 10–15**. This demonstration provides an opportunity to showcase functionality, design, and technical implementation while receiving feedback before final submission.

Attendance and participation in the demo session are required to ensure a thorough review and to address any potential concerns in advance.

More details about the demo can be found in the "Demo" section below.

Submission via GitLab

Students are required to submit their project via **GitLab**, and repository access will be provided **by Monday, the end of the day**.

Failure to push the code files to GitLab on or before the due date will result in **penalties**. Make sure all required files are properly structured and pushed to the repository.

Functionality

- **Seamless Navigation:**
 - The website must consist of multiple interconnected web pages with smooth and intuitive navigation.
 - Users should be able to move between pages effortlessly without usability issues.
- **Information-Centric:**
 - The web pages should focus on effectively conveying information rather than requiring extensive data input from users.
- **Responsive Elements:**
 - All navigational elements (buttons, links, etc.) must be fully functional and responsive to user interactions, ensuring a smooth browsing experience.
- **Aesthetic Considerations:**
 - While functionality is a priority, design and creativity are highly encouraged.
 - There is no rigid definition of "good" or "bad" design, allowing students to explore their personal styles and artistic expression.

Requirements

- The minimum technologies that the project must include are
 - ❖ HTML
 - ❖ CSS
 - ❖ JavaScript (including DOM)
 - ❖ JSON Files
 - ❖ Bootstrap

1. Web Pages & Structure

- The website must include a minimum of four web pages containing images with corresponding descriptive text.
- The main web page must be named index.html.
- Additional web pages may be named at the discretion of the students.
- Each web page must contain at least six images, each accompanied by descriptive text.

2. JavaScript & Data Handling

- A JavaScript file named index.js must be stored in the same directory (./) as index.html.
- The descriptive text for the images must be stored in a JSON file named data.json.
- Each image entry in the JSON file must contain at least four properties or attributes, such as:
 - product_id
 - product_name
 - description
 - price
- Additional attributes can be included at the discretion of the students without penalty.

3. Team Information Page

- The website must include a fifth web page dedicated to team member information.
- This page must include the following details:
 - Course Name:
 - Construction of User Interfaces, Spring 2025
 - Date
 - Students' Full Names & ISU Email Addresses
- This page does not require images. However, creativity, design aesthetics, styling, and color themes should be demonstrated.
- Optionally, students may include either personal photos or avatars, but not images of artists, TV personalities, or characters from social media.
- The text content for this page must be managed dynamically using JavaScript by retrieving data from a JSON file.

4. Navigation & Usability

- The website must include a navigation bar to facilitate seamless access between pages.
 - The navigation bar must be consistent across all pages.
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Structure of Files & Folders

Image Repository

Images should be stored in a dedicated folder named `images`, located in the root directory (`./`). Alternatively, images may also be stored remotely. The `data.json` file will specify the local and/or remote locations of images and their associated text content.

CSS Styles

All CSS files should be placed within a folder named `styles`. This ensures a clean and structured separation of styling from other core project files.

Root Files

The essential files that make up the core functionality of the website must reside in the root directory (`./`):

- `index.html` – The main HTML file
- `index.js` – The JavaScript file responsible for dynamic content
- `data.json` – The JSON file containing image URLs and corresponding text

If additional JavaScript or JSON files are required, they can also be placed in the root folder and named appropriately.

Web Page Content & Image Management

- The webpage will be built using HTML as the foundation, with JavaScript dynamically managing at least three images and their corresponding text elements from `data.json`.
 - Additional images and static text can be embedded within the HTML structure to enhance the page's design and usability.
 - If incorporating elements such as company logos, headers, footers, bullet points, emojis, or decorative images that are not dynamically managed by JavaScript, store them in a dedicated folder named `myotherimages`.
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GitLab Submission & Review Process

Push Changes to GitLab

- Throughout the development process, **push all code changes exclusively to GitLab** to ensure version control and proper tracking of modifications.
- **Commit and update** all necessary files, including but not limited to **HTML, CSS, JavaScript, JSON, images, and any dependencies or configuration files**.
- **Use meaningful commit messages** to document changes clearly for both your team and the reviewers.
- Ensure your **repository is well-structured** and follows best practices to maintain readability and organization.

Final Submission on Canvas

- Once the project is complete, **submit the GitLab repository URL on Canvas** as part of the assignment submission.
- The **submission deadline is final**, and any code pushed after the deadline will not be considered for grading.
- The project will be **evaluated based on the submitted repository and its contents** at the time of the deadline.

- **All necessary files and project components must be properly included and functional** to avoid penalties due to missing dependencies or broken links.
- Make sure your **README file is updated** with clear instructions on setup, installation, and usage for ease of review.

Demo Week

- Even though the assignment is officially due on **Thursday, March 13, at 11:59 PM**, you must **push all code files to GitLab and submit the repository URL before your scheduled demo**.
- Due to the challenge of managing **111 teams with individual due dates**, the official deadline applies to all students. However, if your **demo is scheduled for March 11 at 3 PM**, you must **push your final changes and submit the GitLab URL by 3 PM on March 11**.
- Your grade will be **entirely based on how well you present your website during the demo**.
- Your **team TA will send out a Calendly link (or a similar scheduling tool) for you to sign up for a demo slot** during the week of **March 10 - 13**. Please keep an eye out for this notification, as it will **most likely be sent via Discord**.

Project Deadlines & Policies

“Please be proactive in managing your time to ensure the timely completion of the project. The Midterm Project and its associated requirements have been made available with three weeks of advance notice. Consequently, there will be no possibility of extending the submission deadline.”

Given that Midterm Interim grades are due by March 14 at 3:00 PM, no extensions will be granted to anyone. Failure to adhere to this deadline will result in the team receiving a score of 0 for both the 'Midterm Project - Software' and 'Midterm Project - Demo' assignments.

Grading Rubric for the Software & Demo

Item	Item Description	Points
Files Requirement	Does the project includes an index.html and index.js file, along with three additional pages, each with corresponding HTML, CSS, and JavaScript files. Additionally, the project must contain data.json and any other necessary JSON files, including those related to the author and about page.	10
Web Page Requirement	Does the project consists of four primary web pages, each featuring images and relevant text, along with a fifth page containing author details and project information. All pages should properly utilize their corresponding JSON files.	60
Proposal and Video Submission	Does the Documents folder in the Git repository contains both the proposal (which was submitted on Canvas) and a recorded video presentation of the Midterm Project.	10
Teamwork & Collaboration	Evaluates whether both team members have equally contributed to the project, ensuring fair division of work and collaborative effort.	10
Navigation Bar	Assesses whether the website includes a fully functional navigation bar, allowing smooth and intuitive navigation across all web pages.	10
Total		100