

# Team Project

**Category:** Term Project

**Assigned:** January 22nd, 2025

<b>Team Building Due</b>	January 23rd, 2025, 11:59 PM
<b>Project Proposal Due</b>	February 10th, 2025, 11:59 PM
<b>Progress Report Due</b>	February 28th, 2025, 11:59 PM
<b>Project Deliverable Due</b>	April 14 <sup>th</sup> , 2025, 11:59 PM
<b>Code Review Due</b>	April 18th, 2025, 11:59 PM
<b>Final Project Report</b>	April 21st, 2025, 11:59 PM
<b>Final Project Presentation</b>	Week of April 21st, 2025

## Overview:

The final project focuses on Human-Computer Interaction (HCI) and user interface design. Students will work collaboratively **1) to analyze and improve an existing user interface, or 2) work on new UI design ideas**, creating a functional prototype that enhances the user experience. The project includes testing, documentation, and a final presentation, with multiple deliverables due over the semester. This assignment provides practical experience in UI analysis, redesign, and implementation while fostering collaboration and technical skills.

To complete the project, begin by selecting an existing website or app interface with identifiable issues or work on a new UI idea. Collaborate with your team to discuss its strengths, weaknesses, and areas for improvement. Conduct a detailed analysis of user needs and challenges, document the identified UI issues, and brainstorm potential redesign solutions. Start developing a functional, interactive prototype to address the identified problems, ensuring it aligns with the proposed improvements. Continuously

evaluate your progress, refining the prototype and addressing any challenges. Test the prototype to ensure cross-platform functionality on desktop, tablet, and mobile devices and verify compatibility across multiple browsers. Prepare comprehensive documentation that includes a detailed analysis of user goals, the identified issues, and the design rationale. Finally, a presentation will be created and delivered, summarizing the redesign process and demonstrating the final prototype.

## **Key Deliverables and Timeline**

### **Team Building:**

Teams must be formed by January 23rd, 2025, 11:59 PM. Use this time to meet your team members, establish roles, and brainstorm ideas for the project.

### **Project Proposal**

By February 10th, 2025, 11:59 PM, submit a proposal detailing the project topic, chosen UI, identified issues, project goals, a user interface draft, and a completion timeline. Teams must meet with the professor or TAs for approval and feedback.

### **Progress Report**

A progress report update is due on February 28th, 2025, at 11:59 PM, which includes a description of what has been completed, what remains, and any challenges faced using the GANTT chart. Submit documentation, initial code, and a demonstration of the current prototype.

### **Project Deliverables**

The final deliverables are due by April 14th, 2025, 11:59 PM and include a functional prototype and detailed documentation (e.g., user analysis, UI issues, and design rationale). You can publish your project on a website.

### **Code Review**

Submit the completed code for review by April 18th, 2025, 11:59 PM. Ensure that it is functional, well-documented, and follows best practices. We will check for plagiarism.

### **Final Presentation**

On the week of April 21st, 2025, students will present their project with the project demo during class. The presentation should summarize the original UI's issues, your redesign process, and the final prototype, highlighting improvements to the user experience.

**Evaluation Criteria:** The project will be assessed based on several key criteria. First, the user goals analysis will evaluate how well the team understands and addresses user needs. Design alternatives will focus on the creativity and justification of the proposed redesign solutions. The prototype quality will be judged on its usability, functionality, responsiveness, and aesthetic appeal. Effective collaboration within the team, including clear roles and contributions, will also be an essential factor. Finally,

testing and debugging will assess the thoroughness of testing efforts and the resolution of any identified issues, ensuring a polished final product.

### **Project Deliverables:**

#### **1. Documentation:**

*User Goals Analysis:* A detailed analysis of user needs and challenges with the original UI.

*Description of UI issues:* Highlight specific problems with the original design.

*Design Rationale:* Explain the design alternative and how it addresses the identified issues.

#### **2. Prototype: Web-based on in-person demonstration**

Create a functional, interactive prototype showcasing the designed UI. Ensure the prototype resolves the identified issues and offers a smooth, intuitive user experience—test compatibility across multiple devices (desktop, tablet, and mobile) and browsers.

#### **3. Presentation:**

Prepare a presentation summarizing original UI issues, the design process and proposed solutions, and the demonstration of the final prototype and how it improves the user experience.

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We will update the details as we proceed with the semester.