

Web Development 2

Project 1a and 1b

Project Overview

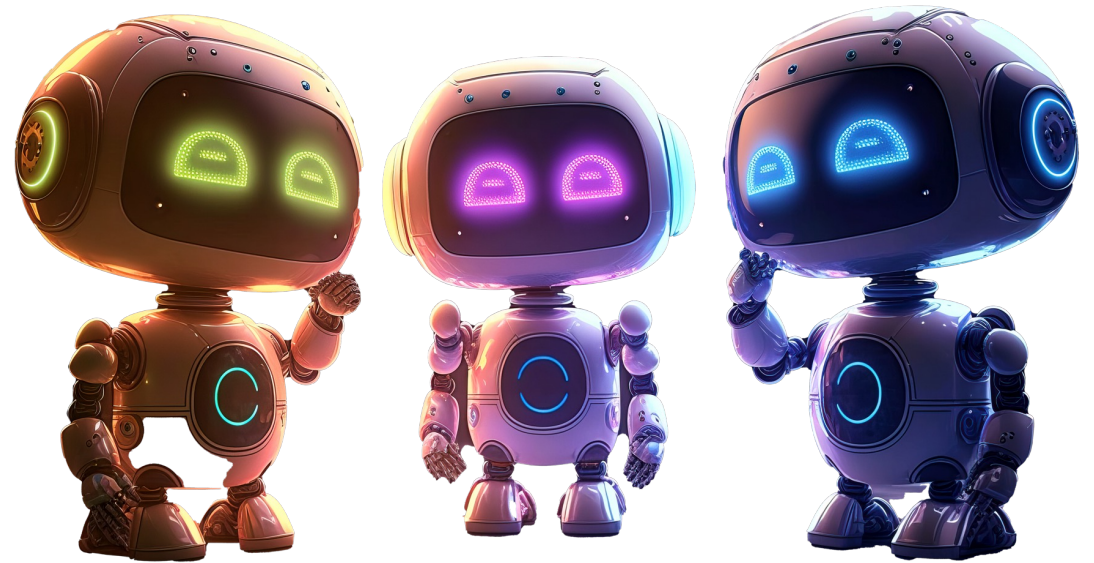
- Research a new web technology as part of a group and present what you have learned to the class
- Create a website that provides an overview of the technology that you researched
- This is a group project
 - The instructor will assign groups
 - Groups will be the same for both projects 1a, 1b, and 2
- Due December 4 – 6
 - Depends on the selected presentation date
- More details can be found on the instruction sheet for this project

Project Objectives

- **Group Collaboration:** Learn the essentials of effective teamwork, contributing equitably to a shared goal.
- **Modern Web Tools:** Gain hands-on experience with contemporary web tools like Git for version control and Sass for CSS pre-processing.
- **Exploratory Research:** Investigate emerging trends or technologies in web development and summarize findings.
- **Knowledge Sharing:** Share acquired insights with the class via a presentation and website, fostering a collaborative learning environment.
- **Presentation Skills:** Develop the ability to convey technical information clearly and compellingly.
- **Communication Skills:** Build essential communication skills vital for succeeding in the professional world.

Groups

- Groups will be randomly selected in class
- Group size will be 4 – 5 students
- Groups will be the same for all projects for the Web Development 2 course



Benefits of Group Work

- **Diverse Perspectives:** Access to a variety of viewpoints that can lead to more comprehensive solutions.
- **Skill Enhancement:** Opportunity to learn from peers, thus improving one's skill set.
- **Resource Pooling:** Sharing of resources, be it time, expertise, or tools, to more efficiently achieve project goals.
- **Shared Responsibility:** Workload distribution among team members can lead to better time management and less stress.
- **Accountability:** Regular group meetings and peer evaluations can foster a sense of responsibility.
- **Conflict Resolution:** Learning to resolve disagreements constructively is a valuable workplace skill.
- **Social Skills:** Interaction within a group helps improve interpersonal skills, including communication and empathy.

Topic Selection

- Each group must select a unique topic
- Topics are selected on a first-come-first-serve basis
 - When your group has selected a topic, notify your instructor



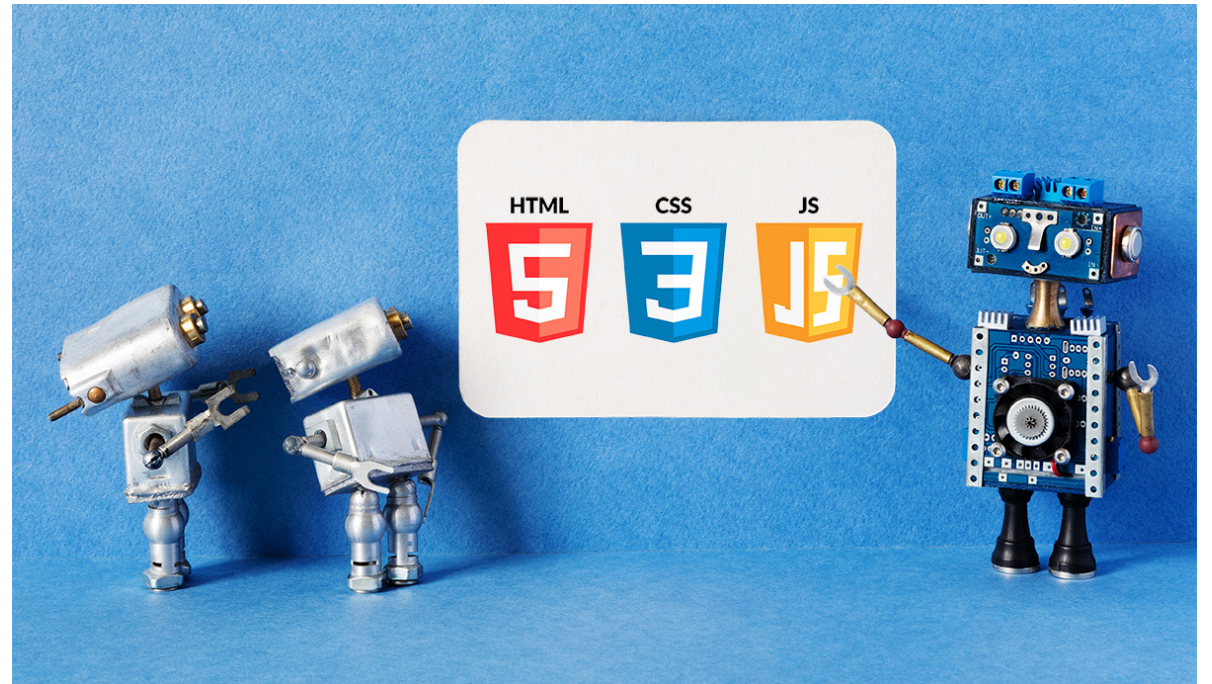
Topic Selection

- Available Topics
 - CSS Custom Properties (CSS Variables)
 - CSS Transitions, Transforms, and Animations
 - CSS Selectors Beyond Class, ID, and Element Selectors
 - 3 - 5 New or Up-and-Coming CSS Technologies
 - SVG
 - Markdown
 - Bootstrap or Similar Framework
 - Web APIs such as Geolocation, Fetch, and Web Storage
 - Static Site Generators
 - Progressive Web Apps
 - Other Topics with Instructor Approval



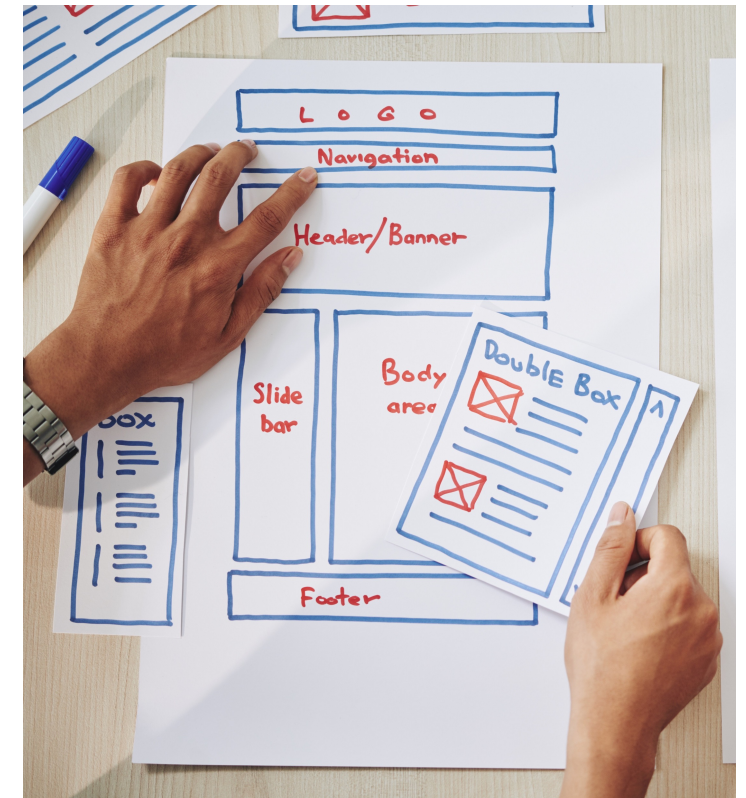
Project 1a - Presentation

- Duration 10-20 minutes
- Content Requirements
 - Technology Overview
 - What is it
 - What does it do
 - Why would you use it
 - Where would you use it
 - Pros and Cons
 - A code demo or technology walk-through



Project 1b - Website

- Technical Requirements
 - One or more page website
 - Hosted and shared using GitHub's Pages feature
 - See this link for instructions on how to create a GitHub Pages site:
 - <https://docs.github.com/en/pages/getting-started-with-github-pages/creating-a-github-pages-site>
 - Share the URL to your site with the class in the Slack channel for the Web Scripting 3 course
- Content Requirements
 - Like the presentation, answer the what, why, where, and how of your chosen topic



Project 1a – Presentation Rubric

- Excellent level for the evaluation criteria
 - **Topic Understanding:** Demonstrate a comprehensive understanding of your selected web technology and articulate its use cases and applications well.
 - **Code Demo and Walk-Through:** Provide an exceptionally clear and insightful code demonstration that not only works but significantly contributes to the understanding of the technology.
 - **Presentation Skills:** Deliver a presentation that is exceptionally clear, engaging, and well-organized, capturing and maintaining the audience's attention throughout.
 - **Group Collaboration:** Exhibit clear evidence of equitable and effective collaboration among all group members, where everyone has contributed significantly to the project.
 - **Relevance and Originality:** Go beyond the basic requirements by adding unique perspectives or elements that are not only relevant but offer original insights into the topic.
 - **Time Management:** Adhere perfectly to the 10–20-minute guideline, utilizing the time effectively to cover all important points without rushing or stretching the content.

Project 1b – Website Rubric

- Excellent level for the evaluation criteria
 - **Content Quality:** Present a comprehensive and insightful overview of the selected technology that fulfills all specified content requirements, leaving no gaps in information.
 - **Design and Usability:** Create an exceptionally user-friendly and visually appealing design that complements and enhances the content, ensuring a seamless user experience.
 - **Code Quality:** Develop clean, efficient code that adheres to industry best practices, demonstrating mastery over the technologies used.
 - **GitHub Pages:** Maintain a well-organized public repository and properly set up the GitHub Pages site. The URL should be shared as instructed, and the repository should facilitate easy navigation.

Project Submission

- Live In-Class Presentation
- One group member should submit a URL to the group's GitHub Pages URL

Project Penalties

- Presentation component
 - 10% for not being in attendance for other group presentations
- Website component
 - 5% per to a maximum of 50%
 - No projects accepted that are more than 14 days late

Strategies for Effective Group Work

- **Clear Role Assignment:** Define roles and responsibilities for each group member to ensure a balanced workload.
- **Communication Channels:** Establish a regular communication channel such as Slack, Microsoft Teams, or regular meetings to keep everyone in the loop.
- **Timelines and Milestones:** Develop a project timeline with milestones and deadlines to keep the team on track.
- **Conflict Resolution:** Agree on a method for resolving conflicts or making decisions, whether by majority vote or consensus.

Strategies for Effective Group Work

- **Version Control:** Utilize version control tools like Git to manage changes and avoid work duplication.
- **Regular Check-ins:** Schedule meetings to assess progress, discuss challenges, and recalibrate roles or tasks as needed.
- **Peer Reviews:** Incorporate a peer review process to evaluate each other's contributions and ensure high-quality output.
- **Feedback Loops:** Create mechanisms for internal feedback before the final submission to improve the quality of the work.

FAQs

- **What technology should my presentation be in?**
 - You can use whatever you like...
 - PPT, Google Slides, Canva, or other web-based presentation tools could be used.
 - Create a web page and present that.
 - Create demo pages and show your code...
 - The goal of the presentation is to communicate what, why, where, and how of the technology to the class.
- **Can we show a pre-existing YouTube video not made by our group on the screen and call it a day?**
 - No, however, if the video you are showing is less than 30% of the total duration of your presentation, then that is fine.
 - You are allowed to include links to videos or embed videos made by others on your GitHub Pages website.

FAQs

- **Can we use Bootstrap for our GitHub pages site?**
 - Yes
- **Can we use other web technologies like Sass and jQuery?**
 - Yes, if it is compatible with GitHub Pages
- **Can we upload our presentation to our GitHub pages site?**
 - Yes, if you think it adds to your webpage.
 - Just make sure to link to it in your document. Don't just upload it to your GitHub repo.
- **Do we have to attend the other group presentations?**
 - Yes, if you do not attend the other groups' presentations without a valid reason, you will receive a 10% penalty.