

Milestone 2: Project Tools & Agile Methodology Summary

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Project Requirements:

Functional:

- This application provides the user with multiple different word search games with different levels that they can play after logging into the system
- This system shall include a user authorization procedure where users must identify themselves using a unique login name and password. Only users who are authorized and have set a username and password may use the application
- The login page will include:
 - Button to go to account creation page
 - Box for the user to enter their username
 - Box for the user to enter their password
 - Title of the game displayed at the top of login page for user to see
- Upon logging in, the user will be prompted to select the type of word search game they would like to play.
- In the word search game the page will:
 - Provide a space for user input that checks if their guess exists in the word-search
 - Only accept alphabetic data entry
 - A space to display current score to the user
- Each page will provide a home button in order for the user to navigate back to the home page. The home button will be included on every screen excluding the home, login, and account creation screens

- The homepage will include a logout button for the user to have to the option to log out of the application
- Level select screen
 - Indicator for previously completed levels (completion of level(s) is stored in the user's information)
- Username and score listed at top of the page

Non-Functional:

- Database to store user information including username, password, highscores, and completed levels
- User input not case-sensitive for word guesses in a level
- Logout button takes you back to the login page
- Can't access the rest of the game until successfully logged in (feedback if username and/or password are incorrect)
- Compare user input to the database
- Avoid cross-site scripting vulnerabilities by handling user input as unsafe data

Project Plan:

Number of sprints: 3

Sprint 1 (3 weeks):

Login Screen:

1. HTML, CSS, Bootstrap implementation | Melissa
2. JavaScript to take user input and give necessary feedback
 - a. Should ask for username/password if not provided | Tucker

User Interface (Initial Level Select/Level Interface):

1. Standard HTML/CSS/Bootstrap for the site | Tucker
 - a. Include logout, level select, level change, main page buttons by default
2. Individual Level JavaScript | Tucker/Jacob

- a. JavaScript used for managing appearance of the level/feedback to the user about their input
- 3. Account Creation Page:
 - a. Create using HTML/CSS/Bootstrap | Liam

Sprint 2:

Create and implement database for user logins/data:

- 1. Create database using PostgreSQL and NodeJS as shown in Lab 9 | Liam/Melissa

Add username and score display into standard appearance:

- 1. Updating standard site appearance to include locations for these | Jacob
- 2. Use NodeJS to pull in the score dynamically | Jacob

Implement NodeJS throughout the site:

- 1. Login Page:
 - a. Check user input against a database | Melissa
 - i. Should advance to main menu if username and password match an account, else should say incorrect username/password
- 2. Level Select:
 - a. Show if a level has been completed by a user (combines with JavaScript) | Jacob
- 3. Level interface:
 - a. Handle and compare user input to database | Melissa/Jacob
 - b. Combine with JavaScript to give effective feedback to user | Tucker
- 4. Account creation page:
 - a. Handle user data input for account creation | Liam/Jacob

Sprint 3:

Finalize UI Implementation:

1. UI components
 - a. Level Select Page:
 - i. Merge with site standard appearance | Tucker/Jacob
 - b. Account Creation Page:
 - i. Merge with site standard appearance | Tucker
2. Link any remaining pages (login/account creation/game/etc) | Tucker

Add more levels | Any team member without work

Stretch Goals:

Add Additional Features (possibly high scores)

Agile Meeting Summary:

We met on 10/28 at 6pm and all team members were in attendance (Liam, Melissa, Jacob, Tucker). In our agile/retrospective meeting, we all covered what we had accomplished since our last meeting. This was mostly comprised of beginning to learn javascript for our project. Everyone agreed that it was difficult to plan ahead with milestones being posted rather sporadically. Things that went well were improved communication over the course of the week as well as starting to make progress on learning the necessary skills to complete the project. The main thing that did not go well was a lack of work completed over the week as it related to completing the milestone. Things that need to be improved on included time management, proactive work completion, and a more concrete outlook going forward. From the sprint retrospective meeting we outlined individual tasks to be completed over the next week as we progress through our 3 week sprint. These tasks mostly related to different coding elements of the project including creating the login screen, to learning NodeJS, to writing the javascript for the main UI.

Project Management Tool Documentation:

We will be using Asana as our project management tool

Milestones:

- ✓ Milestone 2: Project Tools and Agile Methodology Today
- ✓ Milestone 3: Individual Student Meetings and Project Demo
- ✓ Milestone 4: Database Design
- ✓ Milestone 5: Application Testing Plan
- ✓ Milestone 6: Project Presentations
- ✓ Milestone 7: Final Submission
- ✓ Milestone 8: Peer Evaluation and Project Reflection

Sprint 1 (10/14 - 11/4):

- ✓ NodeJS Oct 21 MP

Login Screen:

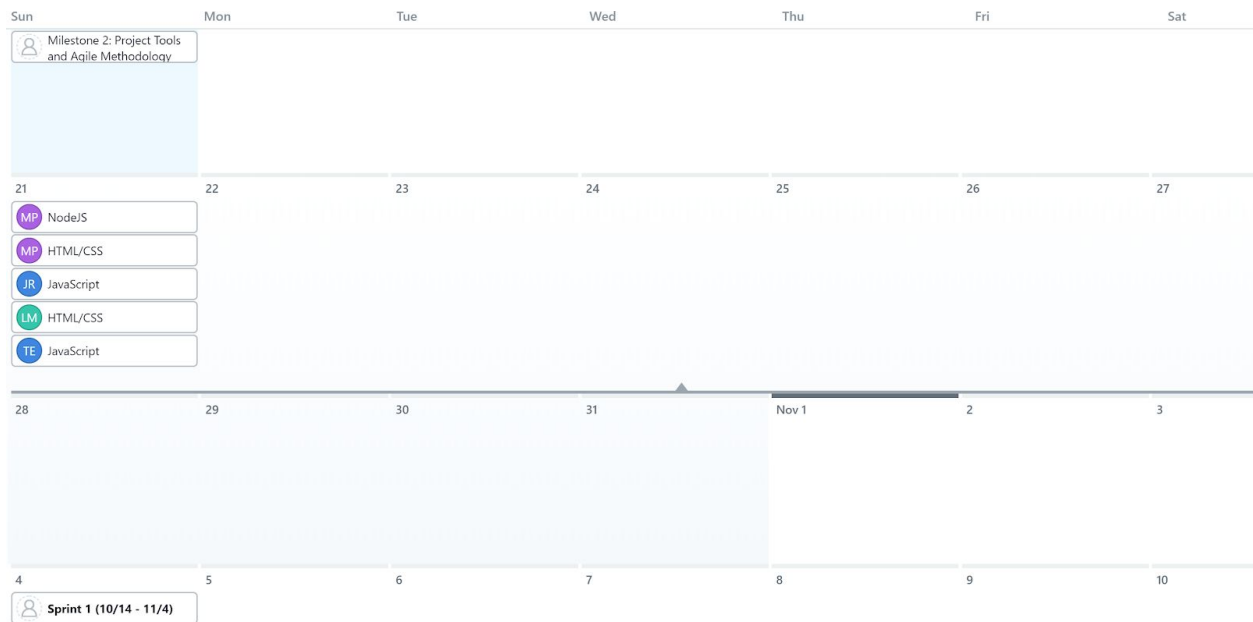
- ✓ HTML/CSS Oct 21 LM
- ✓ JavaScript Oct 21 JR

First UI:

- ✓ HTML/CSS Oct 21 MP
- ✓ JavaScript Oct 21 TE

Stretch Goals:

- ✓ Random Board Generation



NOTE: Planning at this stage is difficult as we must also plan around learning through labs and completing Milestones