Sophia Krieg
Dalton Nickerson
Dipesh Dave
Jacob Stern

Project Documentation

File Descriptions

- serv.js - This file runs the Express server on Node.js. It handles all communication between the website and the database.
- gameapp.js - This file serves as the main script for the web page. It contains the AngularJS controller.
- games.js - This file contains the code for the embedded Pong game. It is called by gameapp.js.
- index.html - This file contains the web page's basic layout and links to the stylesheet and script files.
- style.css - This file contains the styling information for the web page.
- youtube.js - This file contains a script that accesses the YouTube API to embed cat videos into the webpage.

User Guide

The goal of this website is to create a relaxation zone for the user so that when they decide to take a break, they can open up the webpage, create a username, and then have the choice of either exploring youtube videos or playing a game of pong online. Once the user has played a game of pong against the AI, the webpage will automatically saved the highest score of the user, so that if they wanted to come back later on and log in, they can try to practice and beat their high score.

To begin with, when the user opens up the web page, he or she will be given the opportunity to create a new username if they've never entered the arcade. Once the user types in their username, they will have three icons that give them the choice of either playing a game of pong, exploring youtube videos, or logging out of their account.

If the user decides to play a game of pong, a random game will generate against an AI and they can continue to play the game until the user loses a point. Once the user loses their high score will automatically be saved into a database with their username. If the user decides to come back later on and types in their username again, the pong game will automatically pull their high score record, so the user can try to beat their high score.

If the user decides to explore videos, then they can click on the explore videos icon which will load videos from youtube for them to watch.

The final option for the user will be clicking the logout button which will allow them to logout in case they fear tampering of their high scores from hackers.

Technologies Used

1. Mongo DB & Node Module Mongoose- **Group effort**
   a. Database used to store user information and high scores
      i.   Profiles and high scores for games
   b. Implement database
   c. Link database to application via node
2. Angular
   a. Implement login/sign-up features
3. Express/Node
   a. Used to set up local server and load index.html automatically
4. Javascript
   a. Find/create simple Javascript games
   b. Embed games into page
   c. Modify games to extract scores
5. Design -CSS/HTML styling
6. YouTube IFrame API
   a. Used to create an embedded loop of videos
   b. Set controls and autoplay

Project Work Log

Initial Task Management & Assignment-
7. MongoDB - **Group effort**
   a. Design and define structure for database
      i.   Profiles and high scores for games
   b. Implement database
   c. Link database to application via node
8. Angular- **Jacob**
   a. Implement login/sign-up features
   b. Implement data validation
9. Express/Node- **Sophia**
   a. Set up server
   b. Supply page(s) to user via express.
10. General Javascript - **Dalton**

      a. Find/create simple Javascript games
      b. Embed games into page
      c. Modify games to extract scores
  11. Design - **Dipesh**
      a. CSS/HTML styling

GROUP - 04/12/2016:
- Outlined project details, requirements, and delegated tasks within the group
- Discussed what tools we would need to implement our application
- Brainstormed ways to develop our idea into a more complex application

Dalton - 04/14/2016
- Added Angular powered username setting to application.
- Started adding Pong to application.

Dipesh & Sophia - 04/14/2016
- Worked on getting the Express server to run on our machines and application

Sophia - 04/17/2016- Implemented Express server with our application and began MongoDB implementation

Sophia & Jacob- 04/19/2016 - Troubleshot MongoDB errors

Dipesh & Dalton- 04/19/2016 - Wrote the CSS to style our application and enhance user interface

Dalton - 04/20/2016 - Modified Pong game to keep track of high score

Sophia-04/25/2016 **-** Starting implementing a feature to watch continuous, funny cat videos using the YouTube API

GROUP- 04/29/2016 - Troubleshot Angular & MongoDB issues, the username database was being created, but nothing was in the collection

Dalton- 04/29/2016 - Added feature to check and see whether or not a username had already been added to the database so that no duplicate entries would exist

Sophia- 04/30/2016 - Finished creating embedded video loop of funny cats videos, implemented with YouTube IFrame API. Made other small modifications to user interface.

Dalton- 04/30/2016 - Added high score to the Mongoose UserSchema, each time a user logs in their previous high score will be shown. Consolidated overall project so that extra divs and document were not needed. Made various other modifications.

Dipesh-04/30/2016 - Created image icons as buttons to navigate the app. Made other CSS modifications to enhance the user interface and overall design.

Jacob- Assisted everyone in identifying issues and bugs, worked on documentation for the project.