ArcadeHub

Name: ArcadeHub

Logo:

Purpose of the Application

The main goal of ArcadeHub is to provide users with an engaging and nostalgic online arcade experience. It offers a variety of simple but challenging fun games designed to entertain, test your mind and evoke the feel of classic arcades. The platform caters to users looking for a fun interactive way to unwind and enjoy engaging simple games.

Project Scope

ArcadeHub includes the following features and functionalities:

- **Individual Games**: Each team member created a unique game with its own mechanics, APIs, and challenges, ensuring a diverse gaming experience.
- **Integrated Arcade Platform**: All individual game pages are connected within a unified website, creating a cohesive arcade environment.
- **Navigation and Design**: The website features an intuitive layout with easy navigation between games, styled with CSS to evoke a retro arcade aesthetic.
- **Responsive Design**: Ensures accessibility across devices, from desktops to mobile.
- **Scoring and Challenges**: Each game includes scoring features and difficulty levels to challenge users and encourage repeated play.

The project is moderately complex which balances creative game design with technical integration across the arcade platform.

Technologies to be Used

The development of ArcadeHub utilized the following JavaScript concepts, tools, and APIs:

- **JavaScript Fundamentals**: Utilized variables, functions, loops, conditional statements, and event listeners for game mechanics and interactivity.
- **APIs**: Each game incorporates at least one API to enhance functionality (e.g., memory pictures, meme answers, and other dynamic content).
- **HTML & CSS**: Provided structure and styling for the website and games, ensuring an appealing visual design.
- **Responsive Design**: Used CSS media queries for multi-device compatibility.
- **Project Integration**: Combined individual game pages into a single platform with consistent navigation and shared assets.

This project effectively applies key web development principles while offering an enjoyable user experience.

Team Contributions

Brendan

Game: *Cosmic Match*
Developed a picture memory game using space photos, powered by NASA's APOD API. Players flip cards to find matching pairs, earning points for each match. Features include:

- **Dynamic Images**: Card images are dynamically fetched from the NASA API, ensuring REAL unique and stunning space-themed visuals.
- **Reset Functionality**: Players can reset the game at any time, rearranging the images and resetting the score for a fresh start.
- **Interactive Gameplay**: Players can challenge their memory and improve their matching skills with every round.

Giuseppe

Game: *Rock, Paper, Scissors*
A classic game where users can play against a computer opponent. The game features:

Interactive gameplay: Allows users to choose any 3 options and can change options any time to restart.

Mikayla

Game: *Guess the Punchline*
A simple guessing game with Programming based jokes. The start of a joke is shown, players are then to select one of the four punchlines. If the player chooses correctly they gain a point, then the game resets.

- **Interactive Gameplay:** Players guess what punchline best suits the given joke.
- **Score Count:** Tracks the amount of times the player guesses correctly.

Isaac

Game: Snake
A recreation of the classic snake game. Uses events to handle user input (W,A,S,D).

Neil

Game:
(N/A)