Milestone 4

Features

- Route : Getting from the Engineering Building to the UMC
    - Complete each level in a timely manner in order to get through all of CU Campus
- Player can move left, right, and jump
    - When the player presses left and moves left, when they press right they move right
    - When the player presses space the character jumps
    - When the player presses down the character crouches
- Levels (this has been changed to being a linear path. This is due to time constraints.)
    - Level 1: Get out of EC (Platform level *no death*)
    - Level 2: Get through DUAN (Obstacle Course *death*)
    - Level 3: Move on to the Rec Center (Platform level *no death*)
    - Level 4: Get through Folsom (Obstacle Course *death*)
    - Level 5: Get through Norlin Stack (Platform level *no death*)
    - Level 6: Finish at the UMC (Obstacle Course *death*)
- (This feature has become a hard maybe right now. We probably won't be able to implement enemies due to time constraints. That being said, we might still theme a level after avoiding the cult) Avoid the cult (resurrection church) trying to recruit you under the bridge to the hill
    - Pro: They have cookies
    - Con: still a cult
- Time score
    - Score will be decided by how long you take to complete the level.
    - Deaths will not count negatively to the score, but will force you to restart the level, thus increasing the amount of time taken to beat the level.

Priority:

1. Levels
2. Time score
3. Player Movement (Done)
4. Route
5. Avoid Cult

Feature	Functional	Non-Functional
F1: A route through CU's campus	The scoring will be based only on time taken through level.	We will implement use of the system clock to track the user's time
F2: User will control the player through keyboard input	The user should be able to use their keyboard to control the player through the level	We will use Unity libraries to control the player
F3: Levels	The player's goal is to get from the Engineering Building to the UMC and to get through the UMC	We will use Unity level builders to build each of our levels
F4: Avoid the cult (HARD MAYBE)	There will be a cult that tries to recruit the player, they're typically found under the bridge to the hill	These will be built like enemies like koopa troopas or goombas from super mario world
F6: Time score	The player will have a time limit for how long they can take to finish the game	(Time limit - time taken)

User Story 1
As a player I need to be able to log into our game and try to get from the Engineering Building to the Hill and also be able to get through the Hill as the final level.

- Login to portal and have saved game
- Navigate a main menu that allows me to select play game or view scores

User Story 2
As a player I need to be able to move around the levels,using a keyboard, in order to complete them and move on to the next level.

- Move either left or right using the “a” and “d” keys.
- Jump using the “w” key.
- Crouch using the “s” key or the “shift key”, the player can hit either and choose what he/she would like to shift with.

User Story 3
As the player I want to play fun and interesting levels. The levels will translate the feeling of going through CU campus.

- Levels designed after CU campus.
- Levels will allow the player to choose a path that best fits their game play style.

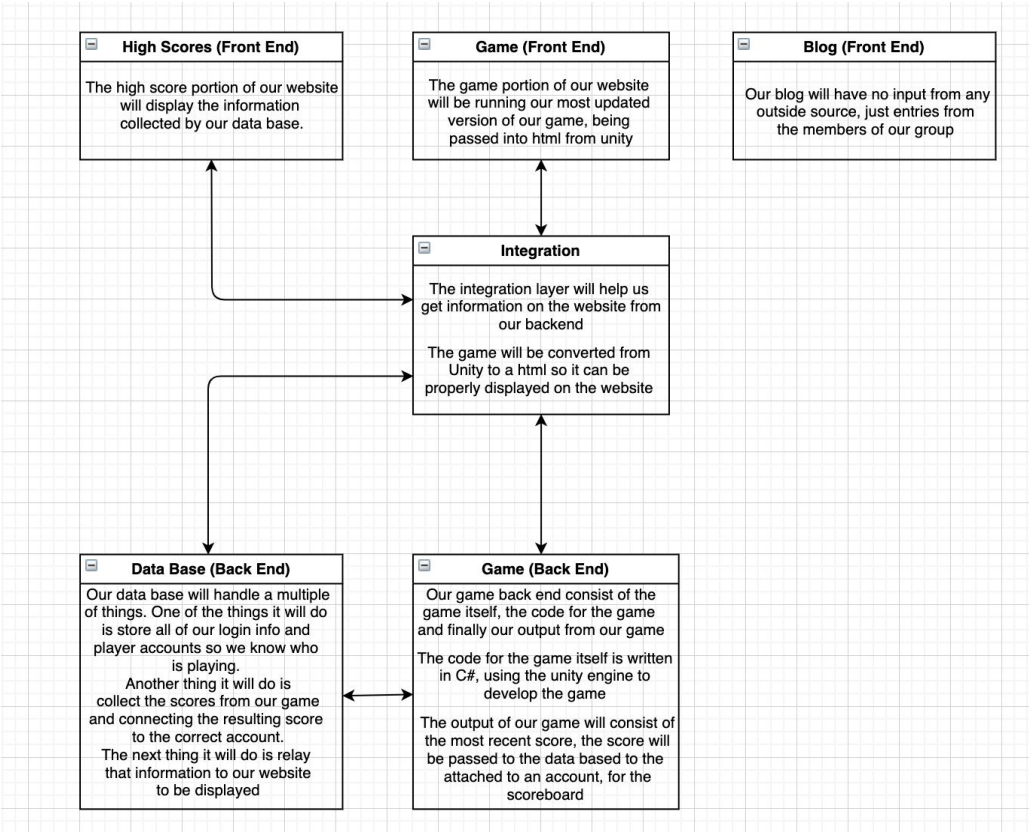
User Story 4 (Avoiding the cult (MAYBE))
As a player I want a side quest so that the story doesn’t feel so 1 dimensional.

- I want a side quest that provides humor but could also provide items useful to my score
- I want a side quest that implements things that only CU students would understand, to help provide a sense of playing a game at CU

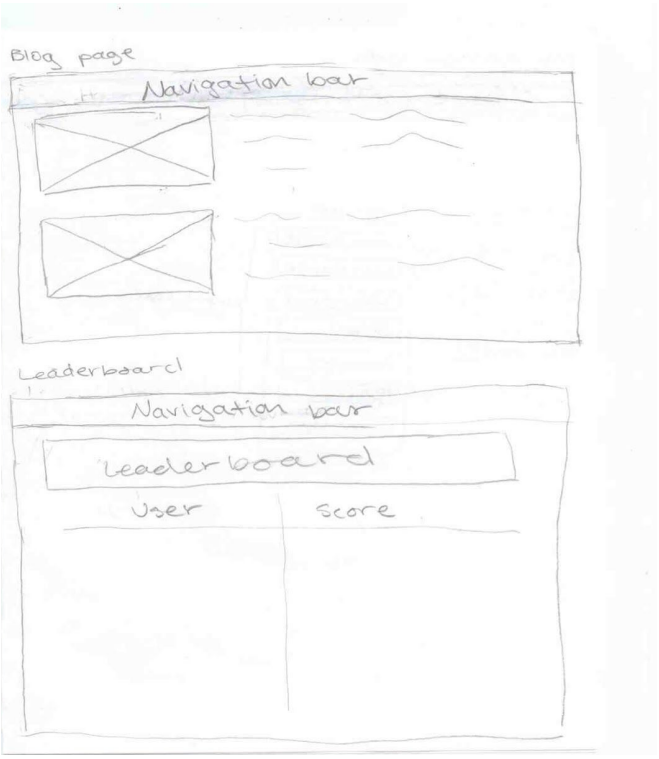
User Story 5
As the player, I will be given the opportunity to get a better score by completing the level in the shortest amount of time.

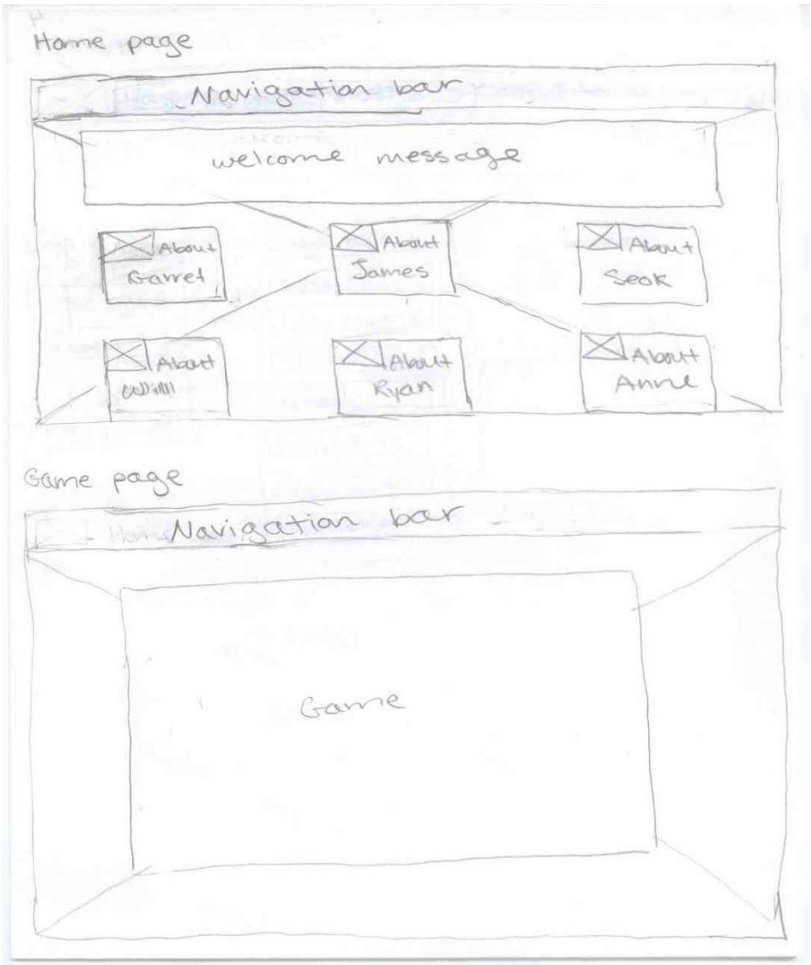
- (Time limit - time taken) (per level)

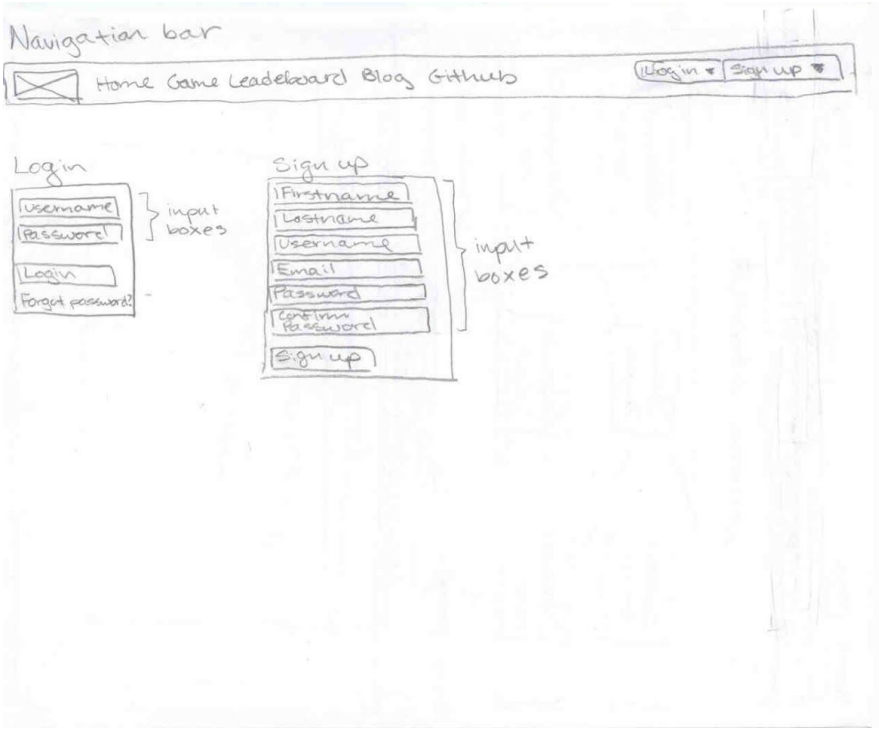
Architecture Diagram



Front End Design




Home page
Navigation bar
welcome message
About Garret
About James
About Seak
About Will
About Ryan
About Anne
Game page
Navigation bar
Game


Navigation bar
Home Game Leaderboard Blog Github
Login
Sign up
Login
Username
Password
Login
Forgot password?
input boxes
Sign up
Firstname
Lastname
Username
Email
Password
Confirm Password
Sign up
input boxes

Web Service Design

- **Home Page**: We are using this page to explain what our website is and what we did with our project. We give a brief overview of things, such as, who the members of our group are, how we went about making the game, and how the levels are meant to work. We want the user to get to know the people behind the game and what our goal was in making it.
- **Game Page**: When it comes to the game page, this is where the users will be able to actually play the game that we are making. We are planning to have 6 levels when we are finished with the game. It is a time based game, so the goal is to finish all six levels in the lowest amount of time possible.
- **Leaderboard Page**: On this page we will display the top 10 users(the users with the best times). We wanted to include this page so people can either feel a sense of achievement, seeing their name on the leaderboard, or so that others could be motivated to beat some of those times in order to break through and get on the leaderboard.
- **Blog Page**: We are using this page to update each other on the things we have accomplished through the creation of our project. This was created because it is a simple way of keeping up to date with the things that everyone in the group has gotten done, along with the things that we know still need to be accomplished.
- **GitHub Link**: We linked our groups GitHub repository to the website so either, people can see how we went about making our website and the game, or to make it easy for us or our profesor to access any of the files we had used.
- **Login/Signup Tabs**: These tabs are used so that the user can create an account, which will send their name into our database. Once they do this they will be able to login in. After login, if the user plays the game, the final time they get will be saved to the database. We will use the names and their associated times to fill the leaderboards.
- **CU Sprint Logo(Top Left Corner)**: This Is pretty simple, if the user clicks on the logo in the top left corner, they will be directed back to the home page.

Database Design

- **Tables**: We will only need one table in our database to store four columns: name, email, password, and high score. We will use encryption to make our table secure using node's built-in encryption tools.
- **Queries**: After loading our initial data into their respective columns we will only need to update our high score columns using a simple comparison to check and see if their current score is greater than their previous high score, update if this is true, and that will be it.
- **Unity/Webpage/Database integration**: Unity will pass a score that we can take and pass through to our database. We will upload our leaderboards using a query to sort our players in descending order by high score.