

Screen Sketches MS_311

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Users

Basic user

- Play Through levels at any speed
- View leader board
- Chat with other users

Student user

- Play only the levels assigned by their teacher
- Join a class of other student users
- Chat with other users
- View class announcements

Teacher user

- Assign levels to students
- Change the scores that students received on levels
- Post class announcements
- Hide or unhide class leaderboards

Nonfunctional Requirements

- Must be able to create a live gameplay setting that is reactive to players
- Must be able to differentiate users based on their username and password
- The application needs to be able to work on Android and a website
- Support a minimum of 30 users (1 class)
- The user should not have to wait more than 10 seconds for confirmation that their request to save is completed.
- The user should not have to wait for longer than 1 seconds for any UI element to respond.

Tables and Fields

User: Tracks information related to a user's account

- User Type
- User Id –Primary Key
- User Name
- User Email
- Password
- Last Login time
- Level Progress - last completed level ID

Class: Tracks users involved in class relationships

- Class ID – Primary Key
- Owner ID – foreign Key to User table
- Student IDs – foreign Key to User table
- Class Name
- Date Started

Level: tracks the different levels available

- Level ID – Primary Key
- Level Name
- Lock Status (for class settings)

Level played: Structure to track information related to a unique user completing a level

- Played ID - Primary Key
- Level ID – foreign Key to Level table
- User ID – foreign Key to User table
- Score
- Time
- timestamp

Assignment Class

- AssignmentClass ID - Primary ID
- Level ID – foreign Key to Level table
- Class ID – foreign Key to User table
- Date Assigned
- Date Due
- Past Due (boolean)

Assignment Student

- Level ID – foreign Key to Level table
- Class ID – foreign Key to Class table
- Student ID - foreign Key to User table
- Assignment ID - foreign Key to AssignmentClass table
- Date Completed
- Past Due (boolean)
- Score

Announcement

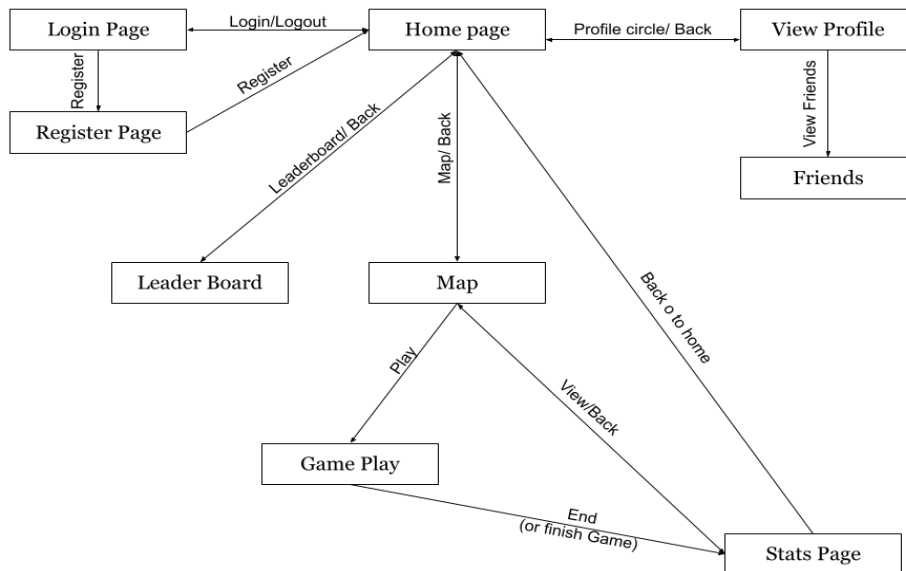
- Announcement ID - Primary key
- Creator ID - foreign Key to User table
- Class ID - foreign Key to Class table
- Contents
- Date

Friends

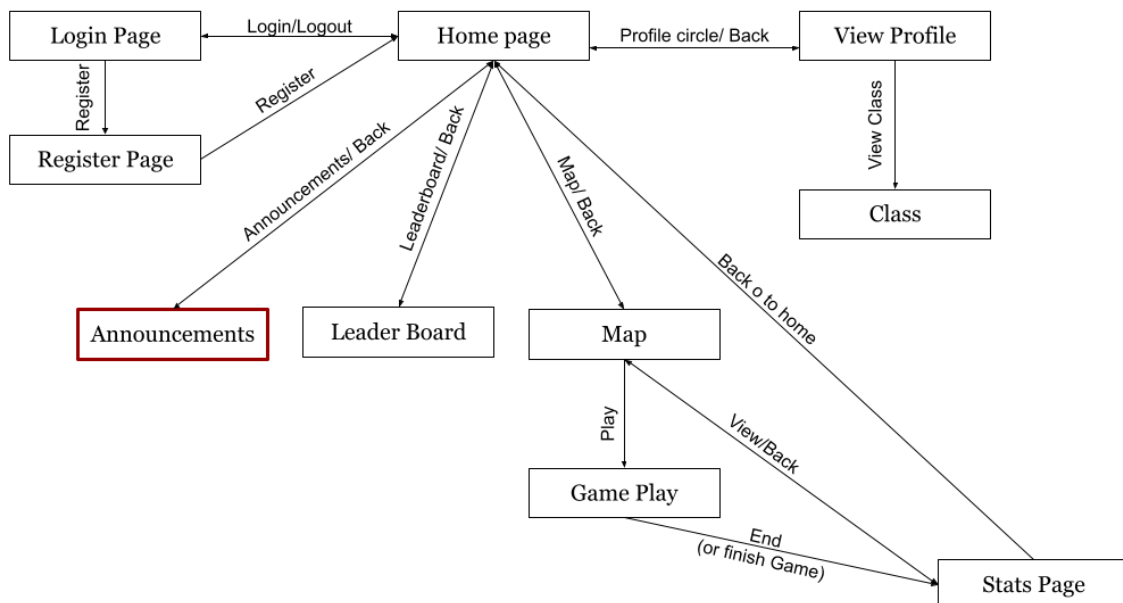
- Friend record Id –Primary Key.
- Friend ID –foreign Key to User table.
- Friend ID –foreign Key to User table.

Screen Flow Diagrams

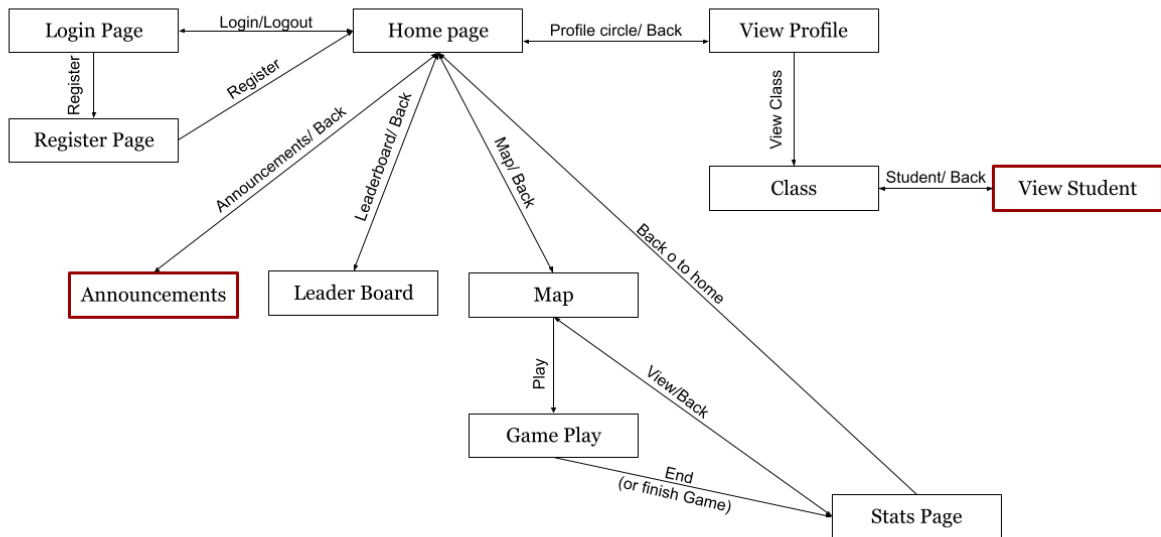
Basic User Screen flow



Student User Screen Flow



Teacher User Screen Flow



Pages

Map Screen



1. The Player Icon
2. Play Button
3. Home Button

The players will see the ship icon move as they move through the levels (1). The play button will let you enter a level, which will bring you to the gameplay page. The home button will take you back to the dashboard. Clicking on a level ahead of your ship will move you through the map.

By: Jaya Davis

1

2

MENU

A

B

C

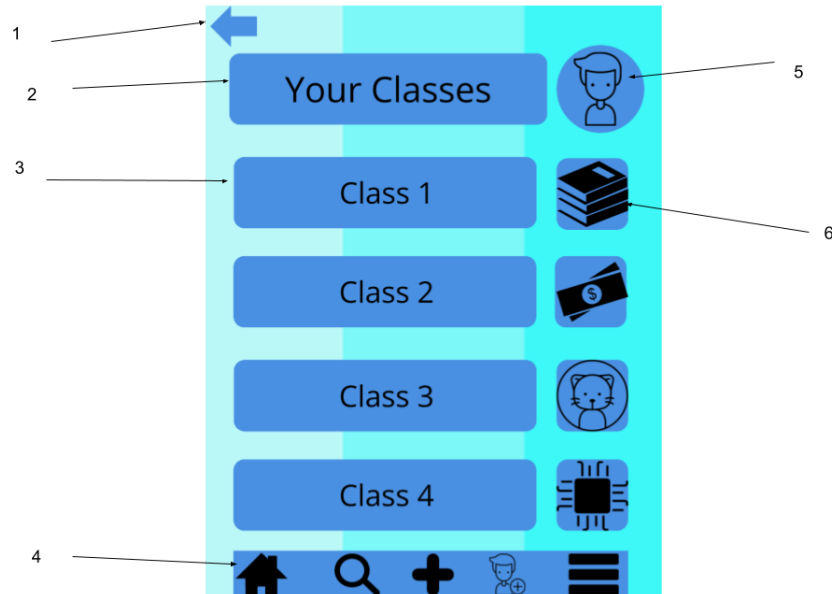
D

Random question Random question random question random question Random question Random question random question Random question Random question random question random question

- This is the page users will see when they are playing the game. It will be interactive, and the questions will vary based on the level chosen. As the questions are answered, the health bar will drop with each correct question.

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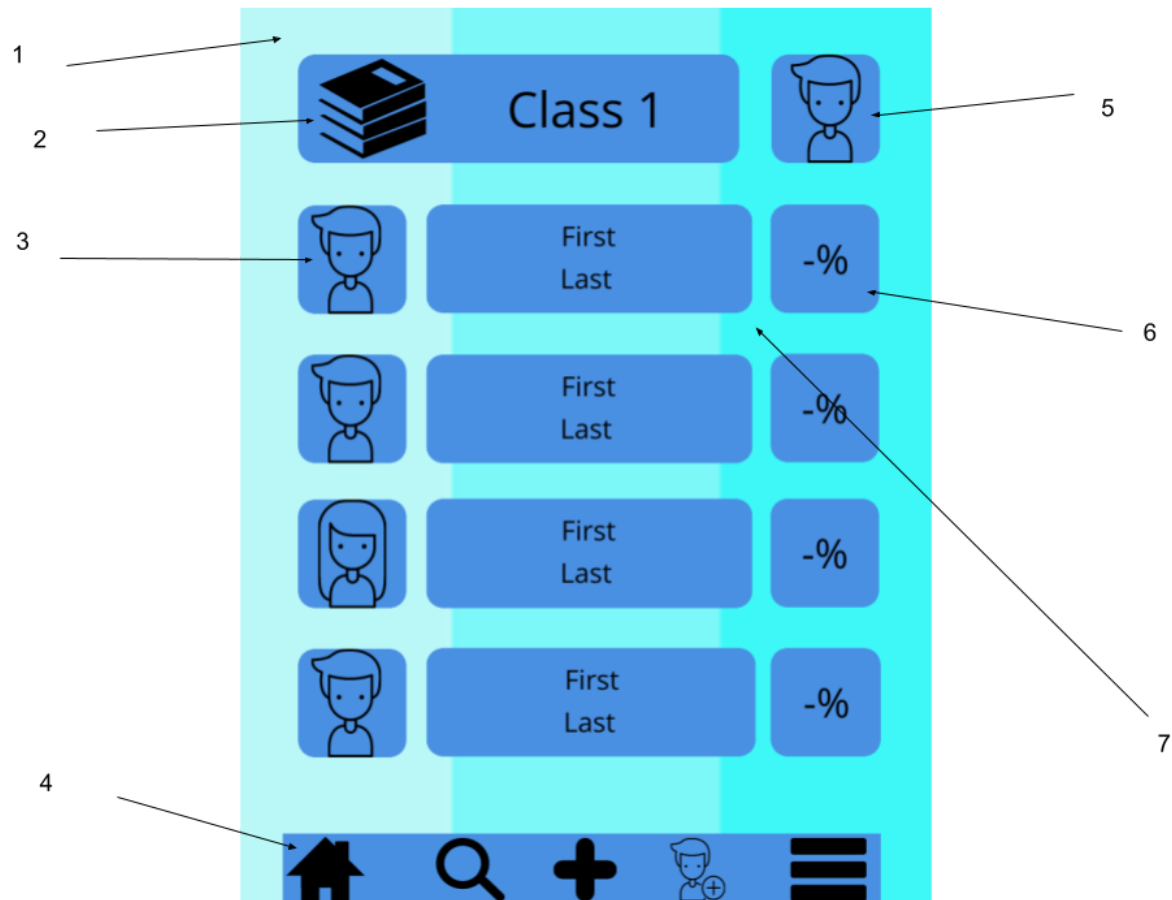
Classes Screen



1. Back arrow (to go back)
2. Title of the page
3. All class names
4. Section bar (fast navigation)
5. Profile of teacher (to teacher profile)
6. Images for the class

The class selection screen is made to easily navigate the classes that a teacher has. A bottom bar to quickly direct teachers to other pages. Each class section screen has the classes and that leads to the class screen. Also has a back arrow to go back to the profile page.

By: Haakon H

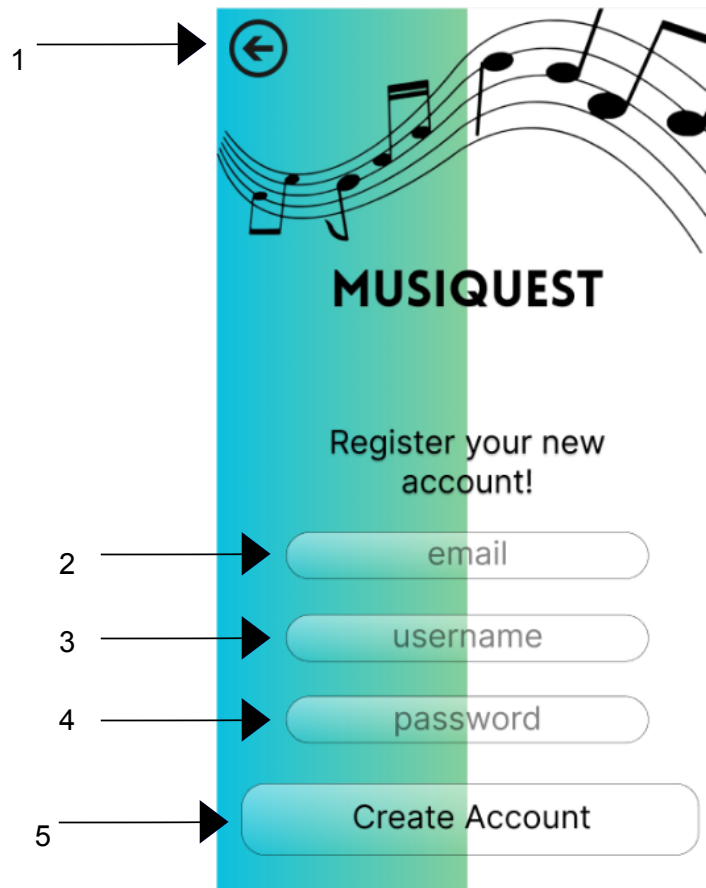


1. Back arrow(to go back) *would be there but I cant download another image from the program I used
2. Class name and image
3. Student image
4. Section bar (easy of navigation)
5. Teacher profile
6. Grade of a student
7. Name of student

The class screen is used for the teacher to see the progress of each student in the class. From here the teacher can change the grade of each student. The section bar has a home for homepage, search, plus to add a class, student add, and more options too.

By: Haakon H

Register Page

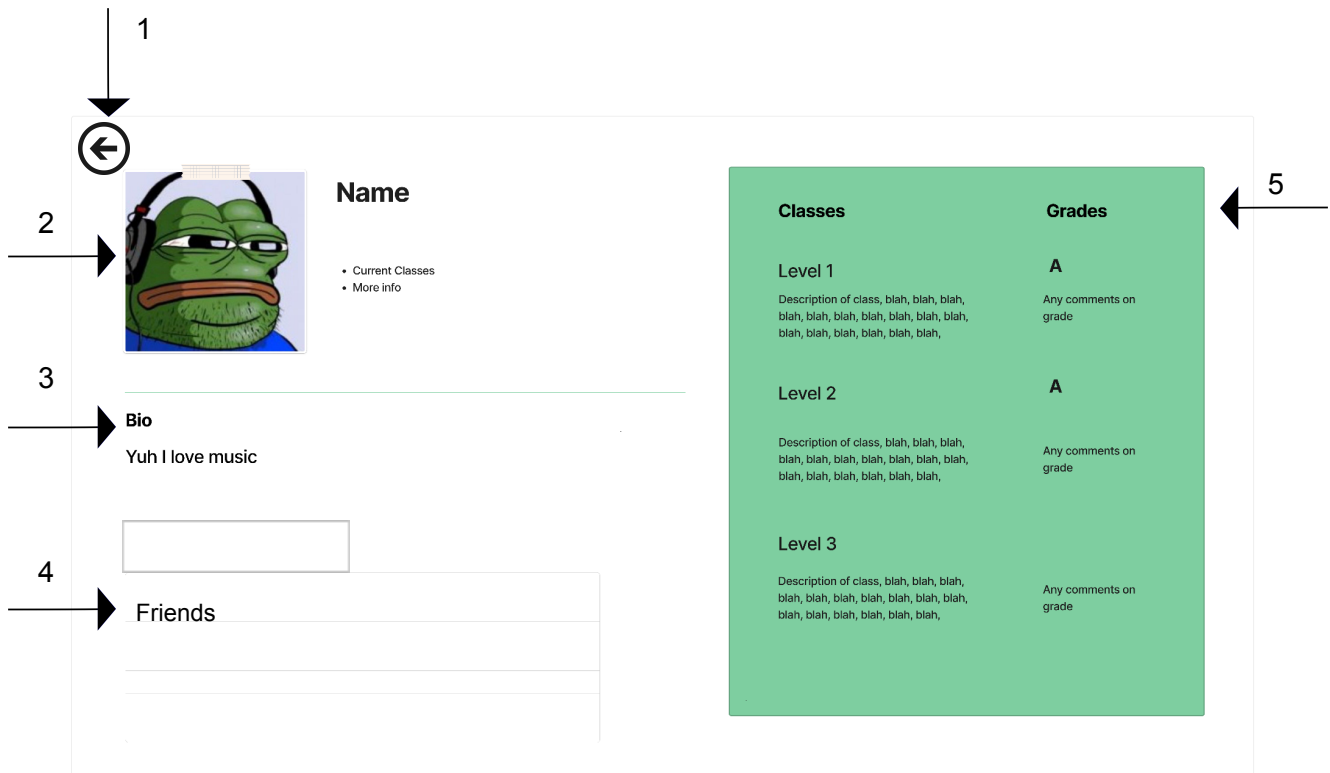


1. A back arrow to return to the login page
2. Email field for creating a profile linked with that email, can not have duplicates and has to be a proper email address. Will let you know under email box if it is valid or already taken
3. Username field for creating a profile linked with that email and password, can not have duplicates and has to be a proper username with an inappropriate word filter. Will let you know under username box if it is valid or already taken (Username is still undecided, probably wont have)
4. Password field for creating a profile linked with that email and password, has to be a certain length with appropriate security requirements for passwords like needing a special character,. Will let you know under password box if it is valid
5. Create Account button that will send data to server to create an account if possible

The register screen is used to create a user account and send that data to the server to create an account if possible and will check criteria to make sure that it is a valid account.

By Tyler Kloser

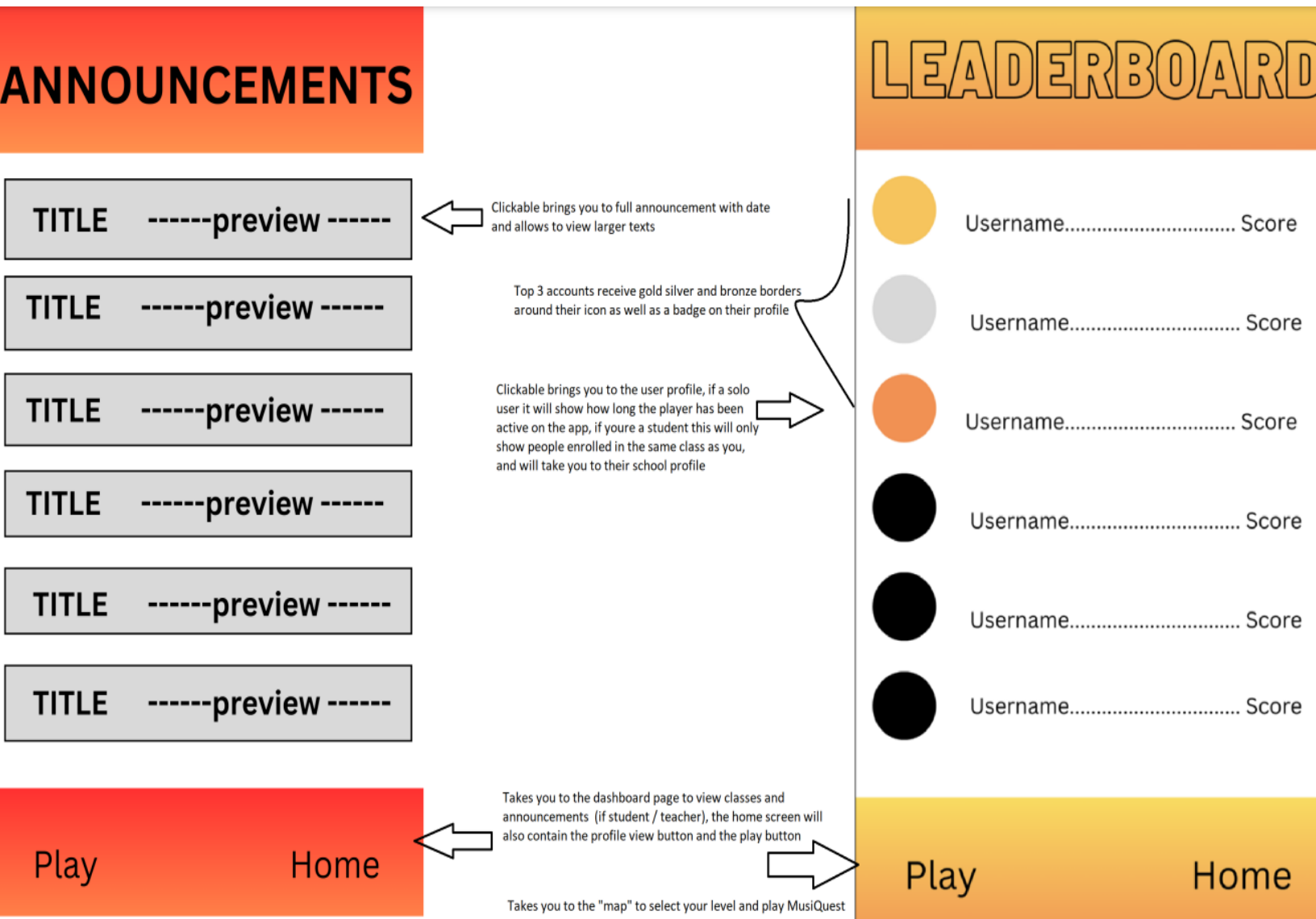
Profile Page



1. Back arrow that will send user back to the home page
2. Profile picture, can change profile picture. When looking at another users profile, a box next to their name will appear to be able to add that user as a friend
3. Bio for your profile, user can write a bio if they would like to with no illegal characters
4. Friends section that will show recent friend requests with the ability to accept or reject the request.
5. Classes and grades, shows what classes the user is currently enrolled in and clicking on the name of the class will take you to the class page. Basic user will not be able to receive comments since they are not in a class

The profile page is used to show a user their profile information including what classes they are in and if they want to change a profile setting. Background image will change to match overall scheme

Announcements and Leaderboard



The announcements page will be used for teachers as a means to send messages to the students in their class. The student will be able to see the announcements on this page and be able to click on the announcement to see it in bigger text. For a basic user this screen will be able to see friends announcements.

The leaderboard page will show the ranking of the students in a class. This will be accessible by all users with the students and teachers being able to see the ranking of a class. The basic user will be able to see the rankings of their friends. Clicking on the profile will bring you to that user's profile.

By: Gabe Bullerman