Screen Sketches Assignment

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Educational Dungeon Crawler

Has been since named "QuizQuest"

Use cases
1. Student
2. Teacher
3. Admin
4. Moderator
5. TA

Student needs:
Compete in the games
View flashcards (but not edit)
View leaderboard
Have login

Teacher needs:
Have login
View student list
View student progress
View flashcards
Create flashcards
View scores

Admin:
Have access to all users
View all user info
Create official card sets
Deny users access
Have login
Set filters

Moderator:
View student participation
View student list
View usernames
Set filters
Have login

TA:
View student list
View student progress
View flashcards
Create flashcards
View scores

Non functional requirements:

Reliability: we want to make sure it is ready any time a teacher needs it, or consumers may be annoyed

Scalability: the more classrooms that use this product, the more students that will need to be signed up and using it will increase exponentially

Performance: as a combat game, performance and the ability to react are key. Students are also not guaranteed to have access to quality devices, so it needs to be easy to run

Usable on multiple platforms: we don't know what device students will have access too, so it needs to be able to run on multiple devices

Tables list and fields
Database
Flashcards(One to Many) relation
        Answers
        Name
        Stats
Leaderboards(One to Many)relation
        Class rank
        Individual rank
        Times played
Classes(One to Many)relation
        Teachers
        Students
Users(One to many)relation
        Name
        Password
        ID
        Class
        School
        Role

User File Format:

//parentheses are in actual documentation
Name: (Users name)
Username: (Username)
Password: (Password Hash)
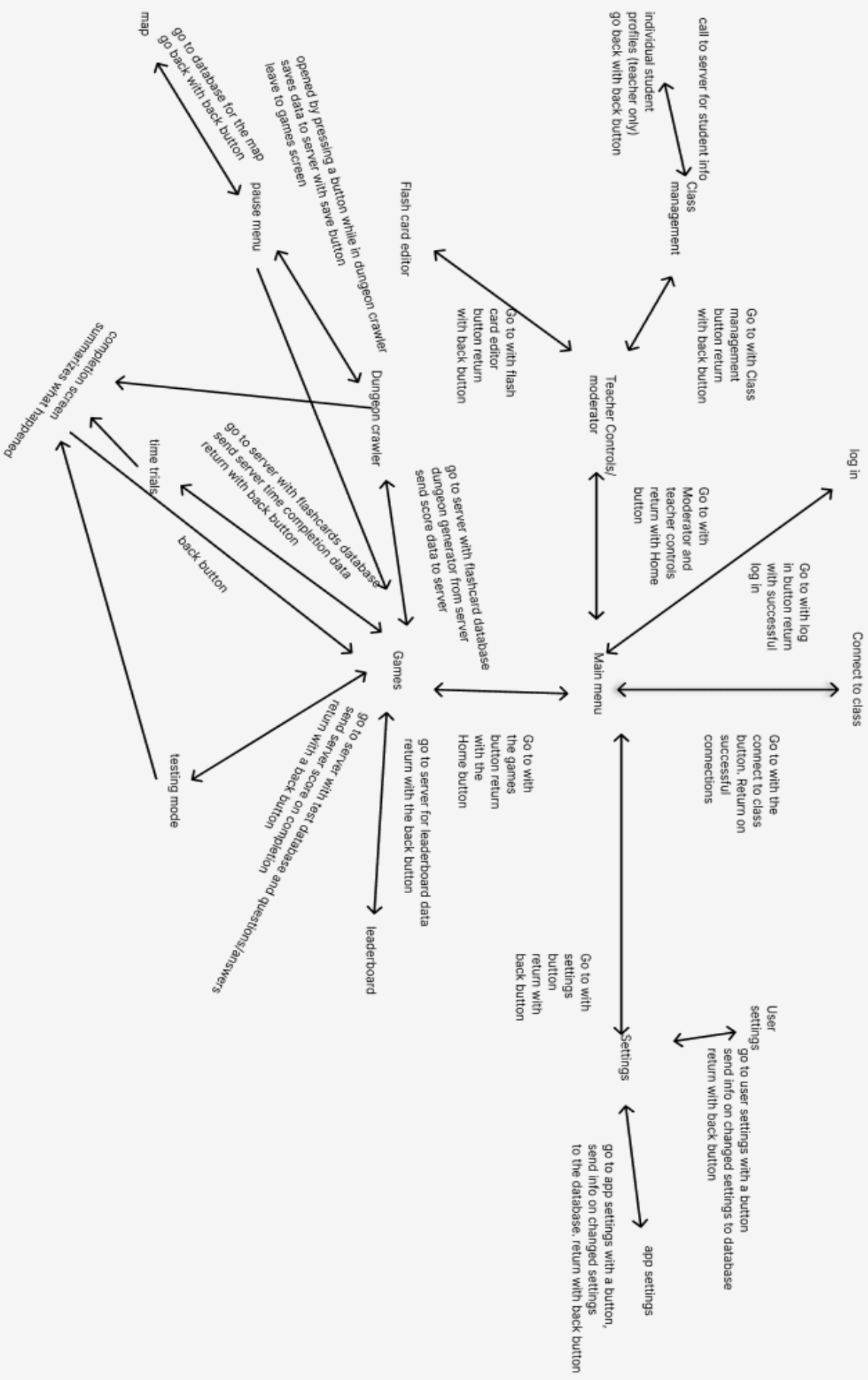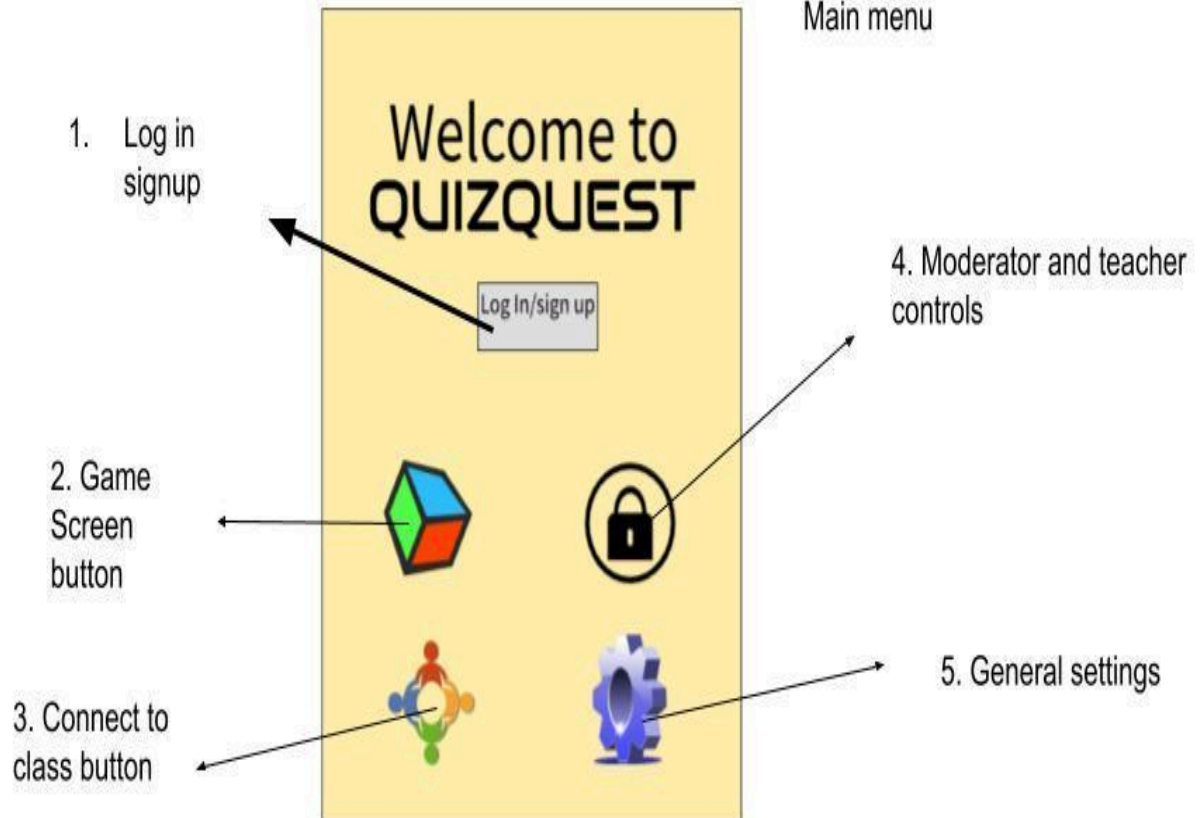School: (School name)
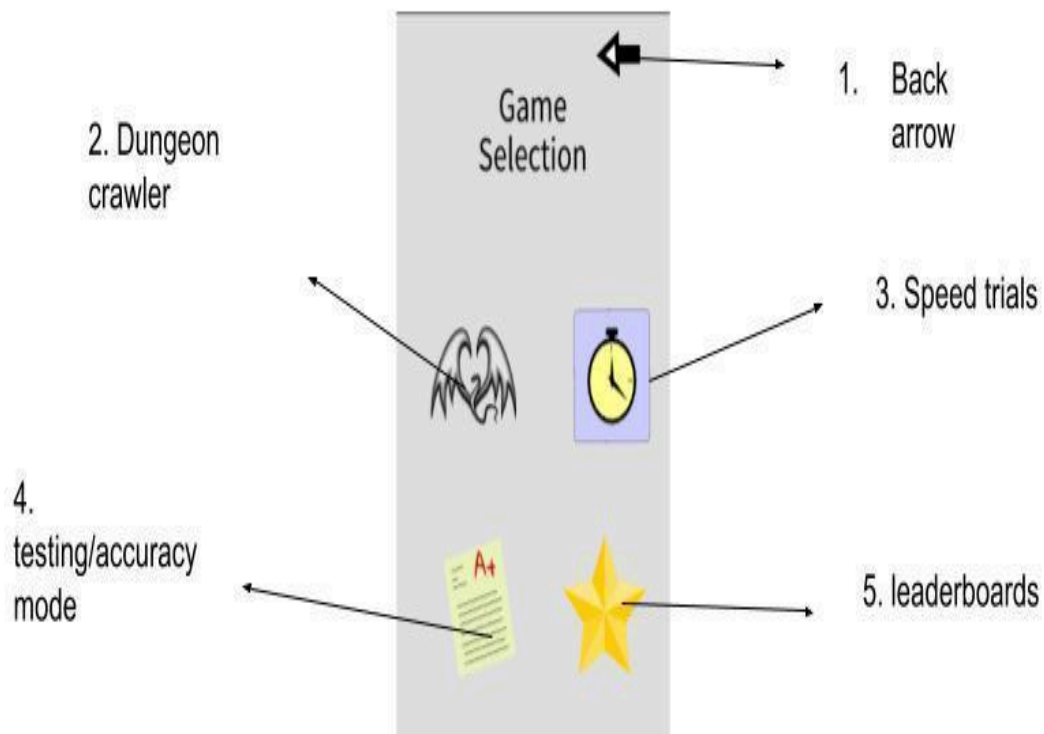User ID: (User's ID)
Teacher: (Y/N)
Admin: (Y/N)
TA: (Y/N)
Enrolled Classes: (ClassID, ClassID) // separated by comma and space

call to server for student info

individual student profiles (teacher only)
go back with back button

Class management

Go to with Class management button return with back button

Teacher Controls/moderator

Go to with Moderator and teacher controls return with Home button

log in

Go to with log in button return with successful log in

Connect to class

Go to with the connect to class button. Return on successful connections

Main menu

Flash card editor

Go to with flash card editor button return with back button

opened by pressing a button while in dungeon crawler
saves data to server with save button
leave to games screen

go to database for the map
go back with back button

map

pause menu

Dungeon crawler

go to server with flashcards database
dungeon generator from server
send score data to server

go to server with flashcard database

time trials

send server time completion data
return with back button

back button

Completion screen summarizes what happened

testing mode

send server with test database
return with a score on completion and questions/answers

Games

go to server with *test database
return with a back button

go to server for leaderboard data
return with the back button

leaderboard

Go to with the games button return with the Home button

Go to with settings button return with back button

Settings

User settings
go to user settings with a button
send info on changed settings to database
return with back button

go to app settings with a button,
send info on changed settings
to the database. return with back button

app settings

1. Log in
   signup

Welcome to
QUIZQUEST

Log In/sign up

4. Moderator and teacher
controls

2. Game
Screen
button

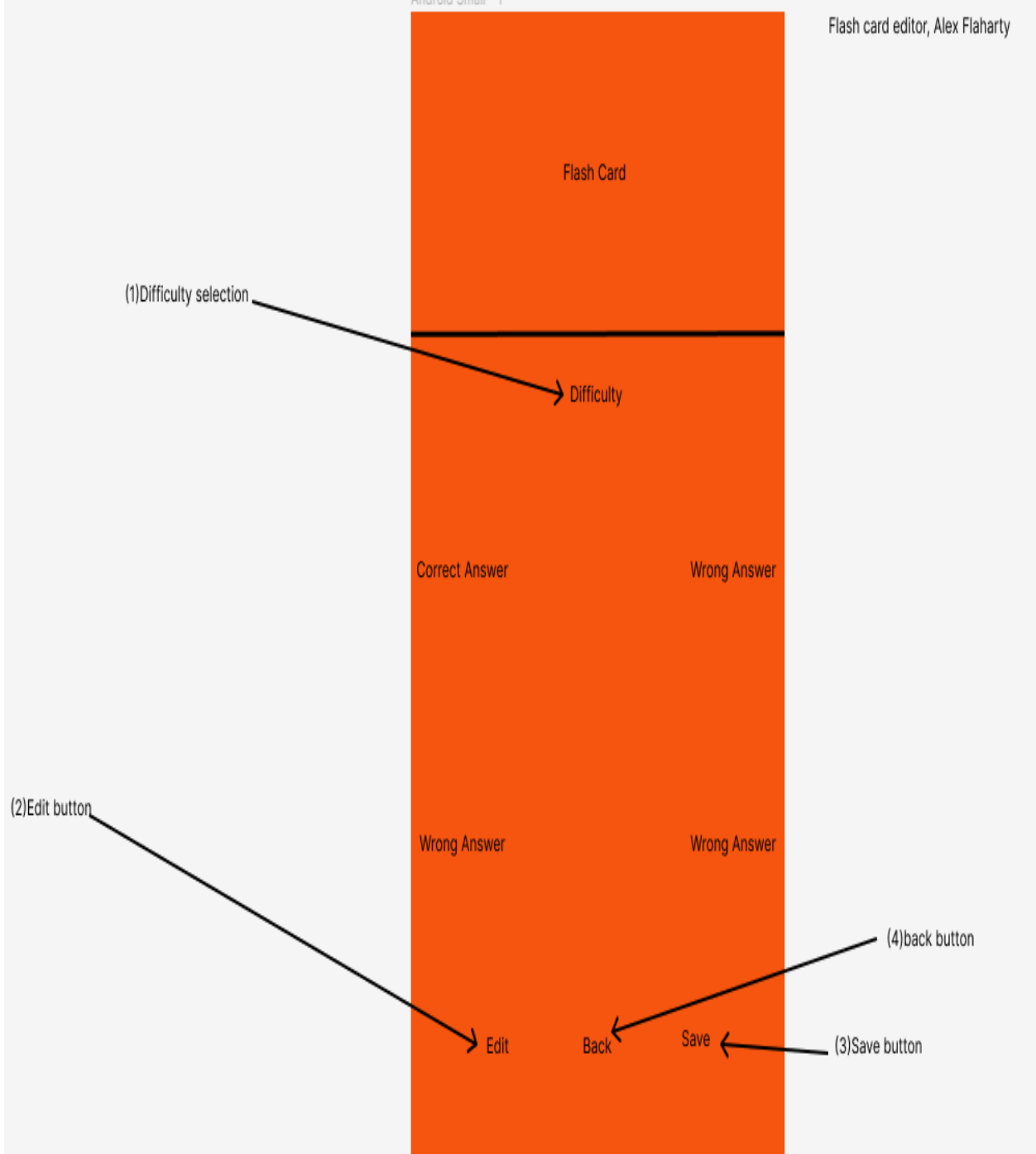5. General settings

3. Connect to
class button

This is the main screen, the screen that opens up when you open up the QuizQuest app. On the main screen there are 5 button options that the user can click and navigate through the app.

(1) is the login or signup button, which will be required for basically any other buttons to become functional. (2) is the game screen button which will open up a new menu with multiple game options to choose from for users (mostly students). (3) is the connect to class button, in which a student will input a teacher's class code and then be able to see that teachers database of flashcards, such as math class with the math teacher and science flashcards with the physics teacher. (4) is the moderator and teacher controls, a menu only accessible with a teacher or moderator account. This is where the flashcards can be edited, the teacher can see the student participation, grade, leaderboard and so on. (5) this is general settings such as volume, username, password change, email change, about information section, etc.

1. Back arrow

2. Dungeon crawler

3. Speed trials

4. testing/accuracy mode

Game Selection

5. leaderboards

The game selection screen of QuizQuest is vital because at its core this is a game for students to play and learn. This screen is a result of clicking the game selection button on the main menu screen and is only accessible to logged in users. The user may select from 3 gamemodes to enhance their learning, or they can check the leaderboards to see how they compare to other students in a competition.

(1)   This back arrow simply takes you back to the main menu screen. (2) dungeon crawler is the main gamemode of QuizQuest, where users answer questions and flashcards assigned by the teachers in order to progress through a dungeon style game and level up. (3) speed trials is a gamemode where students race through a certain number of flashcards, trying to get them correct as fast as they can. (4) testing/accuracy mode is a gamemode in which students go through a set number of flashcards in a test/exam like fashion, seeing their grade at the end and trying to get the highest score possible. Could be used as a real test taking area, or for student free practice (TBD). (5) Leaderboards section is a place for students to compare their scores to their peers on the different gamemodes. Can be turned off by instructors to hide students scores from other students, while teacher will always be able to see leaderboards.

Flash card editor, Alex Flaharty

Flash Card

(1)Difficulty selection

Difficulty

Correct Answer   Wrong Answer

(2)Edit button

Wrong Answer   Wrong Answer

(4)back button

Edit   Back   Save   (3)Save button

The purpose of this screen is for the teachers or the students to be able to make the flash cards used in the games. 1 is a Drop down to select the different types of difficulty so you can make hard questions for bosses rare loot etc. 2 Allows you to change text and switch between question types ie Select all right, multiple choice. 3 Sends the new flash card to the database and resets the statistics 4 sends toy back to the main menu

Map Alex Flaharty
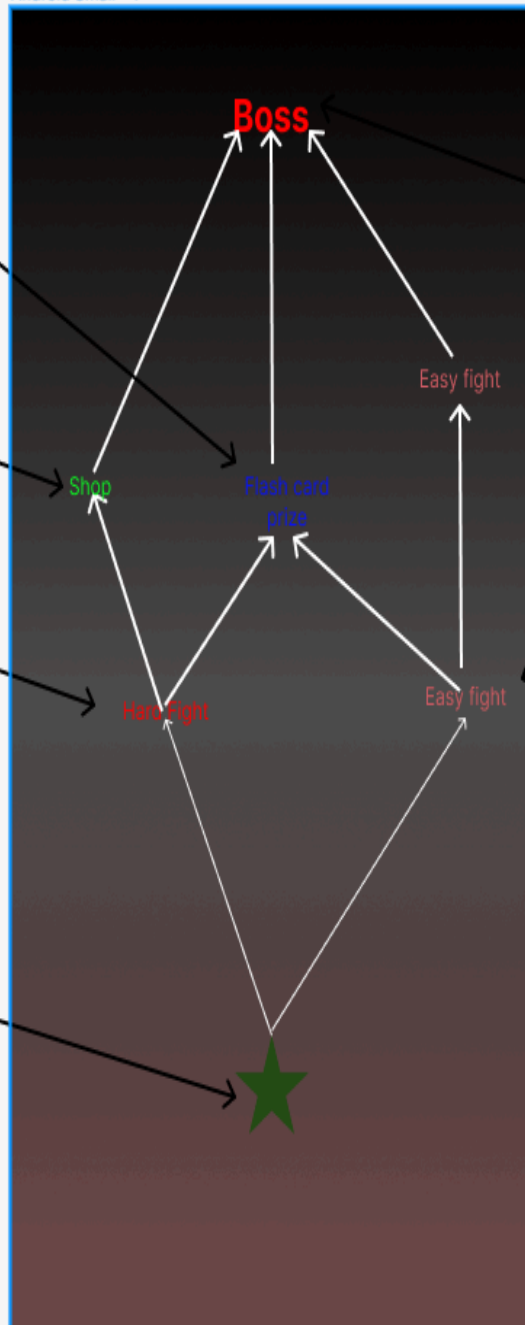
(3)Flash card prize

Boss

(4)Boss

(1)Shop

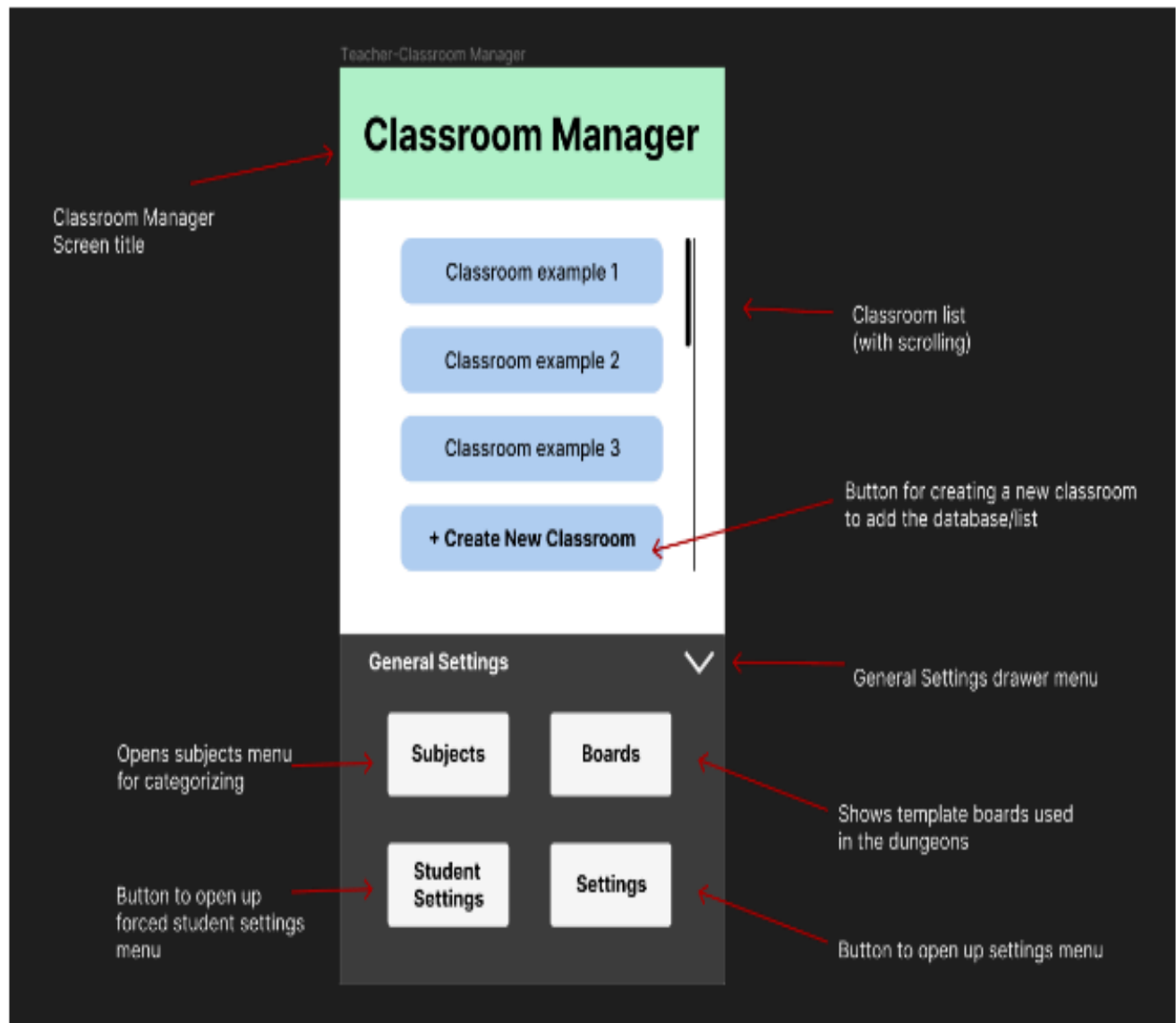Easy fight

Shop

Flash card
prize

(2)Fights

(2)Fights

Hard Fight

Easy fight

(5)Player

The purpose of this screen is to allow the player to chose
between what events they will go to on the way to the boss
(1) is a shop tile that will let you buy items and spend your
money (2) Are fights Hard fights will have harder Enemies
and or harder Flash cards Easier will have not so hard
enemies and flash cards.(3) The flash card event will be
answering some flash cards to win a prize or a curse(4)
Boss/ final event will be the big challenge you are building up
to.(5) currently shows where the player is

Classroom Manager

Classroom Manager
Screen title

Classroom example 1

Classroom example 2

Classroom example 3

+ Create New Classroom

Classroom list
(with scrolling)

Button for creating a new classroom
to add the database/list

General Settings

General Settings drawer menu

Opens subjects menu
for categorizing

Subjects

Boards

Shows template boards used
in the dungeons

Button to open up
forced student settings
menu

**Student
Settings**

Settings

Button to open up settings menu

Menu only accessible to teachers managing classrooms. Essentially the main menu for use in a
Teacher user context.
Dalton Clark MR2 8

Classroom/Student Editor

Chosen classroom menu title →

Classroom example 1

Students:

Student 1 name ⌄
Student 2 name ⌄
Student 3 name ⌄
Student 4 name ⌃

* Student progress information here *

← list of students in the classroom

drawer menu for info on specific student

Opens flashcard menu

Add flashcards button for class →

+ Add Flashcards **View Flashcards** **Leaderboard**

Opens leaderboard menu for whole class

General Settings ⌃ ← example of closed general settings drawer

Another teacher only menu resulting from clicking on a classroom on the previous screen to see more information about it.
Dalton Clark MR2_8