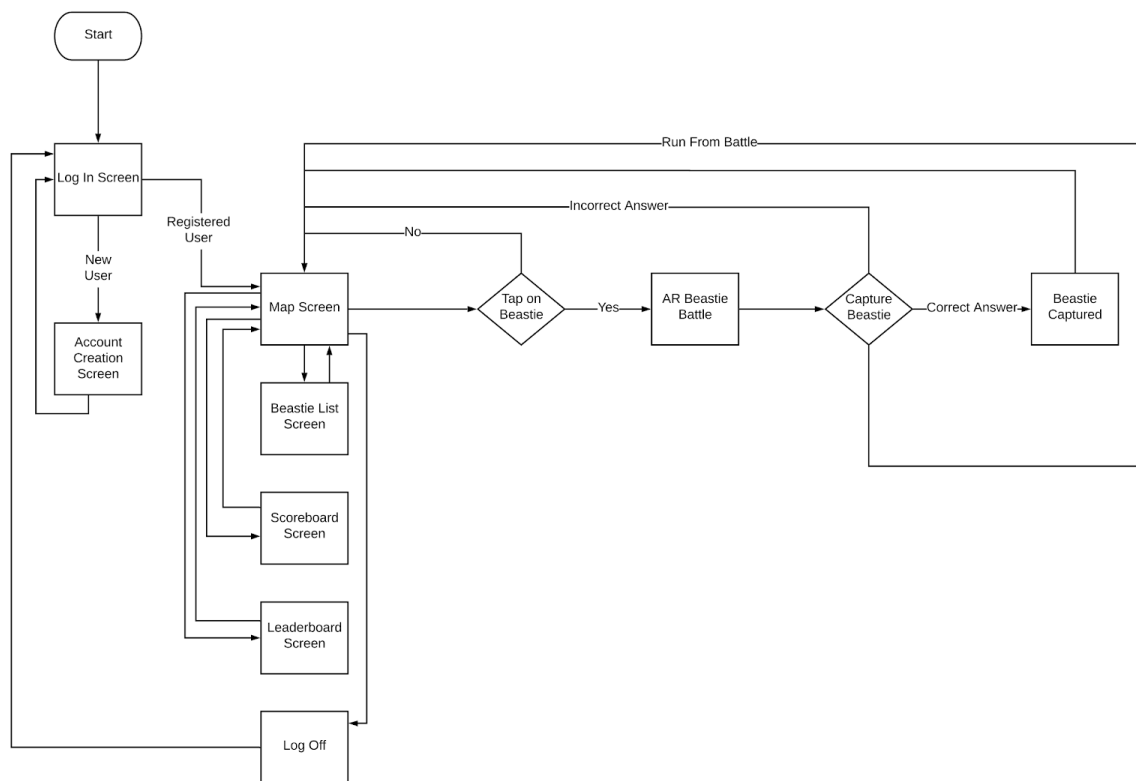


User Experience

The user experience of Math Go! begins with creating a profile and logging in, or just logging in if they have previously created their profile. From the login screen they are taken to a map showing the immediate area around their location.

The user can see their own location as a pin and can also see random beasties that have spawned around them. This is the home screen of the application. From this screen the user can take many actions, they can tap on a Beastie to enter a battle with them and attempt to capture them. They can also view other information by using the navigation bar along the bottom of the screen. This other information includes pages to view their captured beasties, view their personal score, and view the overall leaderboard of the top players.

If the user taps on a Beastie, an AR screen is opened and the user will see the beastie superimposed over their camera image. To attempt to capture the beastie, the user can tap on the beastie on the screen. This will open a screen that contains a K-8 math question and gives the user the opportunity to answer. If they answer correctly, the beastie is captured and they are returned to the home map screen. If they answer incorrectly, the beastie will run away and they are returned to the home map screen to attempt to capture another.



Flow chart of user's experience

Logging in:

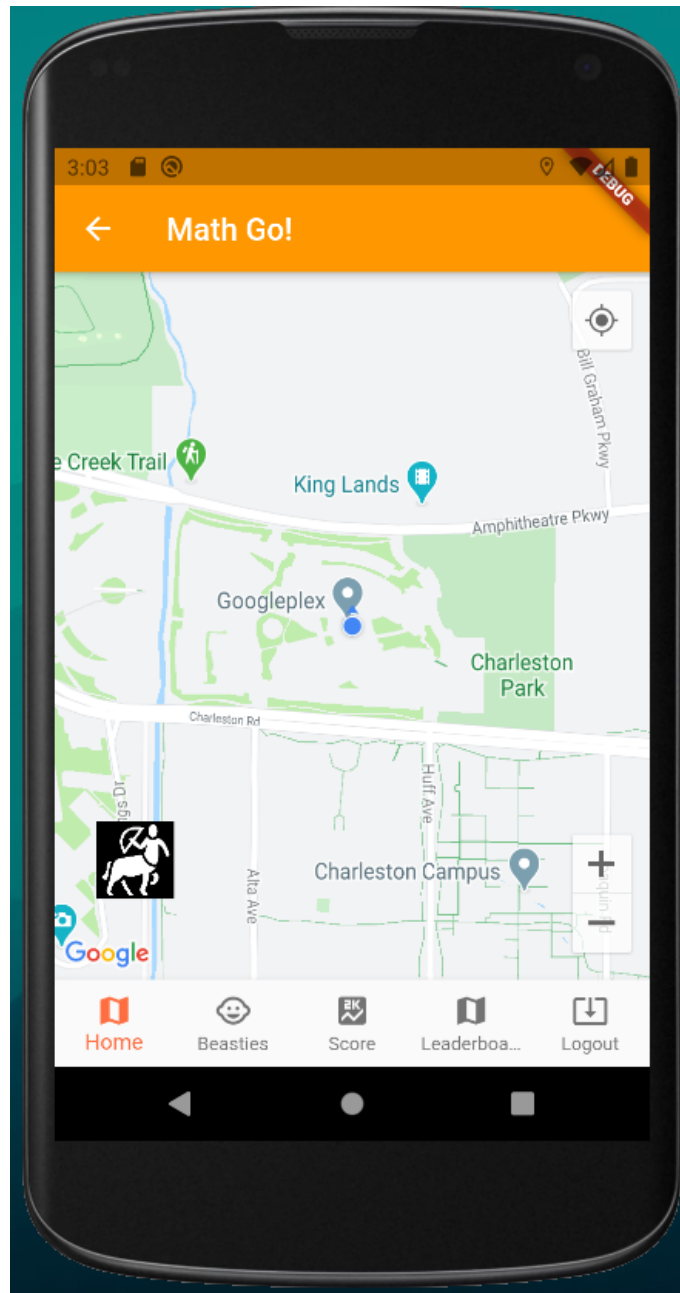
If you are brand new to the application you can use the 'Create New Profile' button on the login screen to enter your desired username and password. Once you hit submit, you will see a message if your profile was created successfully. At that point you can return to the login screen and enter your new credentials, hit 'Submit', and enter the application main screen.

Gameplay:

Main Screen: The main screen consists of the following features:

- Map: Map of the area surrounding the user, using google maps plug-in
- User pin: Shows current location of the user
- Beastie Icons: Shows location of beasties close to the area of the user.
- Navigation Bar: Allows user to navigate to other pages of the app or to logout

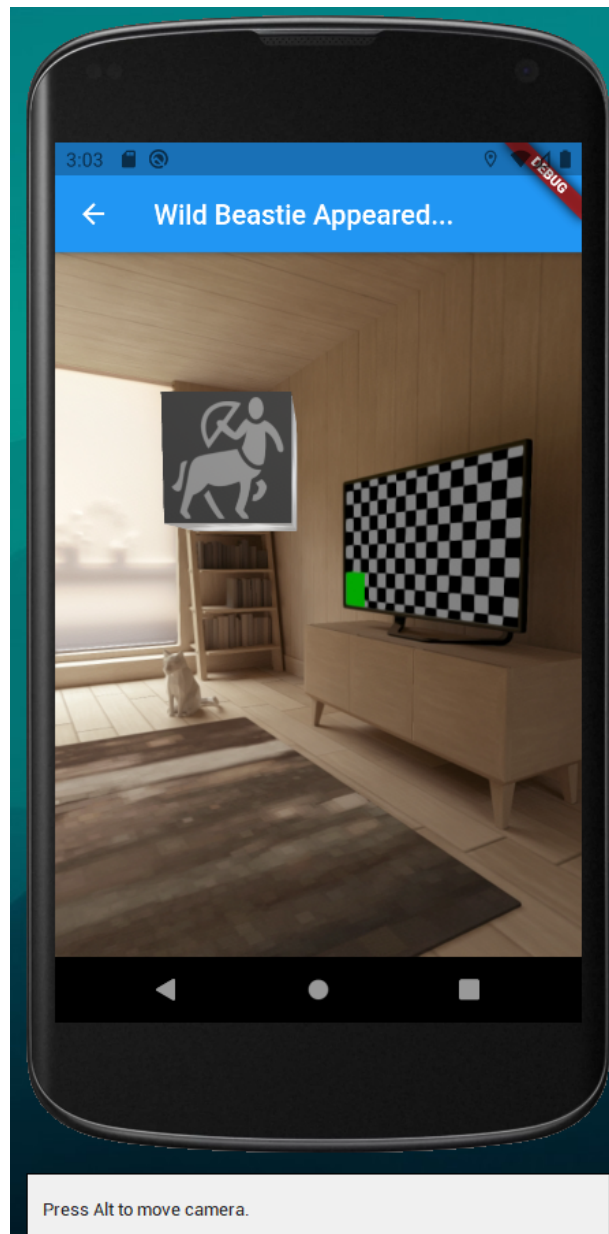
An example of the main screen is seen below, with the user shown in blue and the Pegasus beastie shown in the bottom left. You can also see the bottom navigation bar to navigate to other pages.



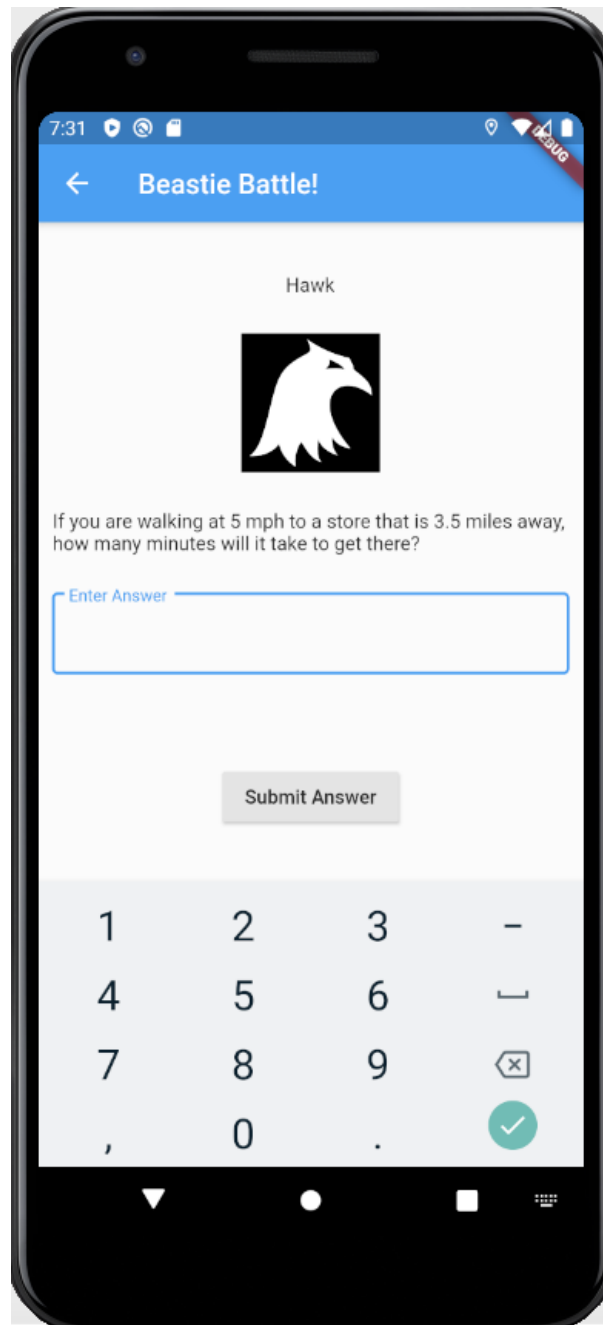
Encountering Beasties: Beasties are randomly placed around the user. To attempt to capture a beastie you are interested in, simply tap on the beasties icon on the map. This will take the user to the AR screen.

AR Screen: Once the user has entered the AR screen, they will see an image of the beastie superimposed over the camera's image. At this point the user can move around until the beastie is in sight. To initiate a battle with the beastie to try to capture it, simply tap on the beasties image in the AR Screen.

An example of the AR screen is seen below. Because we are using an emulator, the camera image is simulated to be inside a room. If a real device was used, the background would be whatever the users camera image is at the moment. The Pegasus beastie will remain in that position as the user's camera moves around. To attempt to capture the beastie, the user needs to tap the screen where the beastie is at.

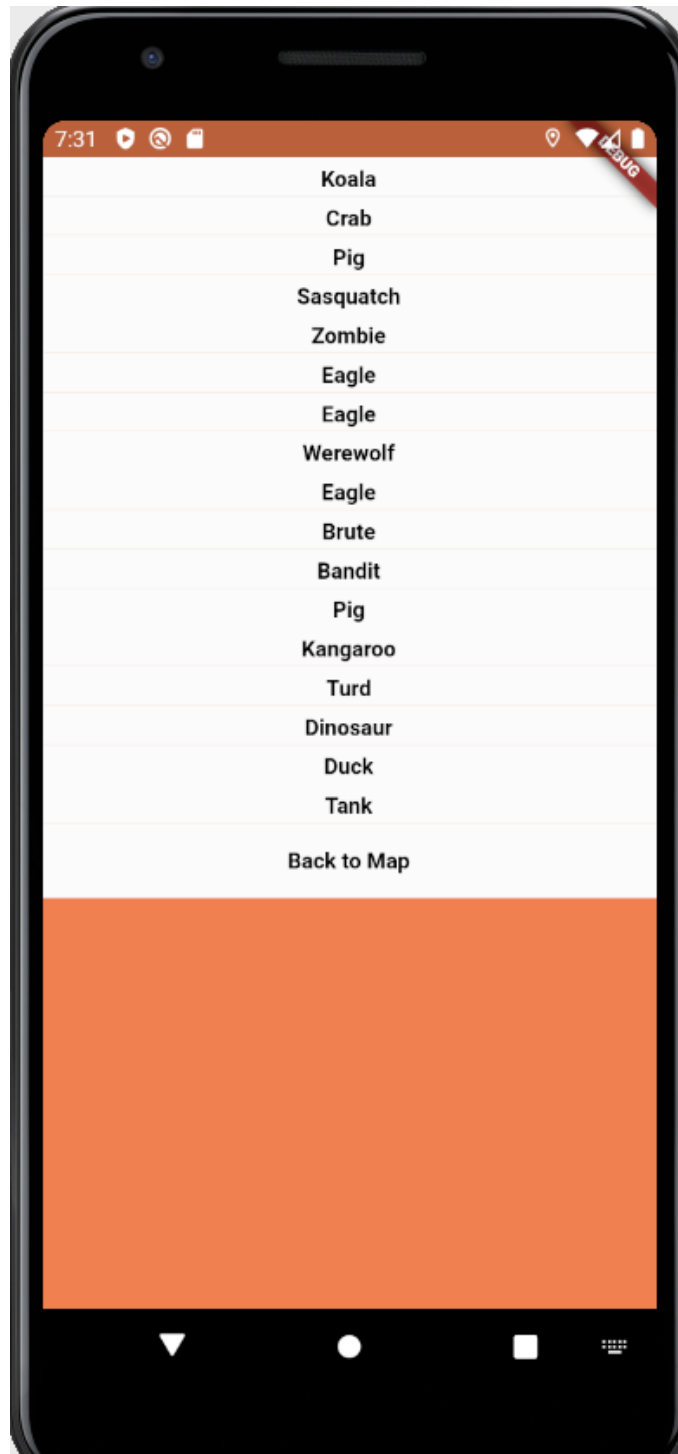


Battle Screen: Here the user will see a K-8 math question and have the opportunity to try to answer the question. The user keys in their answer using the keyboard and then clicks submit. At this point their answer is evaluated and they are told they have succeeded and captured the beastie, or that they have failed and the beastie has run away. After this message the user is returned to the main screen.

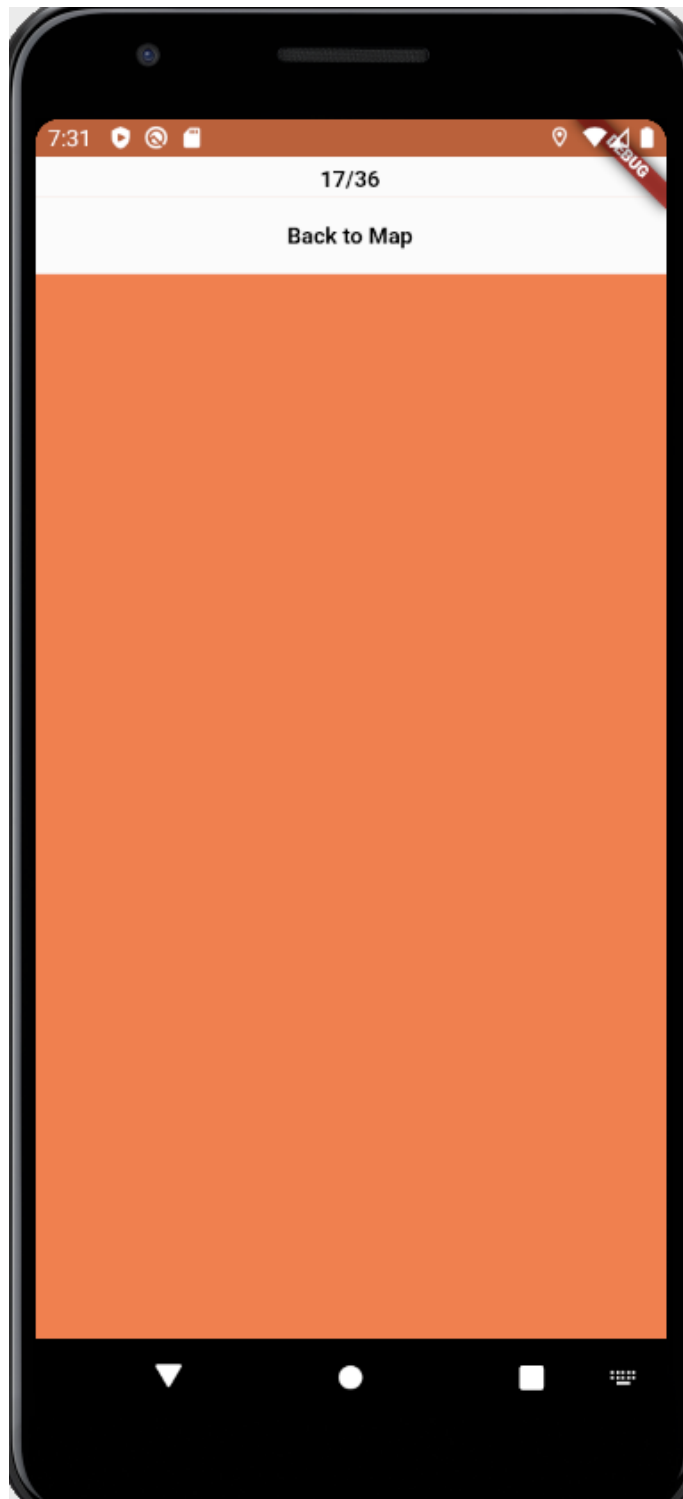


Other Features: These features can be navigated to from the bottom navigation bar on the main screen.

Beasties: This page will show the user all the beasties they have captured in their lifetime. They will be displayed as a list of names of the beasties they have.



Score: This page will show the user their lifetime score of beasties they have attempted to capture. For example, if the user has captured 10 beasties out of 14 beasties they have attempted to capture, their score will display as 10/14.



Leaderboard: This page will show the user the top 5 players in terms of beasts captured and the number of beasts they have captured.

