

GitHub Repository Link: <https://github.com/bentemplin/brodents.git>

User Stories:

- 1) As a User, I want to login to the system, so that I can use the app. (Benjamin Yarmowich)
- 2) As a User, I want to Register for an account, so that I can start reporting rats. (Rikesh)
- 3) As User, I want to see a map of rat sightings, so I can determine where the most rats are found.
- 4) As the App, I need to access the stored information, so that I can retrieve User and Report information. (Ben T.)
- 5) As a User, I want to see a list of rat sightings, so I know where rats are being reported.
- 6) As a User, I want to report a rat, so city officials can address the issue.
- 7) As a User, I want to logout, so that someone else can use the app. (Austin)
- 8) As a User, I want to change my password, so I can secure my account. (Nikolai)
- 9) As a City Official, I want comprehensive report of rat sightings, so I can identify the worst areas.
- 10) As a User, I want to refresh sighting reports, so I can see the most up-to-date info.

Individual Elaborations:

### **Benjamin Yarmowich**

As a User, I want to login to the system, so that I can use the app.

Tasks:

- \* Accept the User's inputted Username and Password
- \* Search the database for the <key, value> pair of the Username and encrypted password hash
- \* Grant or Deny access to app based on whether the pair is found
- \* Offer a forgot password button to reset the password based on email authentication

Acceptance Scenarios:

- \* Given there is a network connection, when the app is launched, app prompts log in.
- \* Given the User enters a valid username and its corresponding password is in the database the main screen of the app is displayed
- \* Given the User enters a valid username and its corresponding password is not in the database the User will be prompted with incorrect Username/Password combination
- \* Given the User enters an invalid username the User will be prompted with incorrect Username/Password combination

- \* Given the User enters 3 or more wrong username and password combination the User will be prompted to recover password and enter their email address or try again

- \* Given the User enters 10 wrong username and password combination the User will be barred from entering a Username/Password for 1 hour

### **Ben Templin**

As the App, I need to access the stored information, so that I can retrieve User and Report information.

Tasks:

- \* Create a MySQL Database on a remote server
- \* Configure remote login on the database
- \* Write a custom Java class to connect a java app to the database
- \* Write a subclass that has the login credentials for the Rat App Database
- \* Create a .jar file with the custom Java classes and add it to the Android Project

Acceptance Scenarios:

- \* Given there is a network connection, when the app is launched, it connects to the database.
- \* Given the app is connected, when a valid database query is made, results are returned.
- \* Given the app is connected, when a valid database update is made, the database is updated.
- \* Given there are valid user inputs, when a query or update is made, the statement is parameterized to prevent SQL injection.
- \* Given there is no network connection, when the app is launched, a message is displayed saying that the app can't connect to the database.
- \* Given the app is connected, when an invalid database query is made, a message is displayed saying how to fix the error and the query is not made.
- \* Given the app is connected, when an invalid database update is made, a message is displayed saying how to fix the error and the update is not executed.

### **Rikesh Subedi**

As a User, I want to Register for an account, so that I can start reporting rats.

Tasks:

- \* Implement a registration link on Log In page.
- \* Create a registration form to gather user name, username, password, and location.
- \* Query the database for an existing account with the given username.

- \* Send credentials server-side if username not found.
- \* Display notification showing success of account creation.
- \* Redirect to main screen of the application.

#### Acceptance Scenarios:

- \* Given the form is valid and complete, when the REGISTER button is pressed, an account is created in the database.
- \* Given the form is not complete, when the REGISTER button is pressed, stay on the form and notify the user of missing information.
- \* Given any state of the form, when the CANCEL button is pressed, return to the Log In page.
- \* Given the user enters a username, when the user exits the field, text displays its validity.
- \* Given the user enters an invalid username, when the form is submitted, stay on the form and notify the user of invalid information.
- \* Given the user enters an invalid password, when the user exits the field, a reminder with password requirements will be displayed.
- \* Given the user enters an invalid password, when the form is submitted, stay on the form and notify the user of password requirements.

#### **Austin Ayers**

As a User, I want to logout of the system, so that someone else can use the app

#### Tasks:

- Accept a button press to log out of the app
- Return the log in screen after a successful log out

#### Acceptance Scenarios:

- Given that the user is logged in, when the user presses the logout button, then the app logs the user out
- Given that the user successfully logs out, when the user returns to the screen, then the app displays a new log in screen

#### **Nikolai Vorobiev**

As a User, I want to change my password, so I can secure my account.

#### Tasks:

- \* Create a new page where the user can change his password
- \* Prompt the user for email, old password, and new password

- \* Check database that the given email is valid and the old password matches
- \* Update the password in the database
- \* Redirect to the main screen of the application

Acceptance Scenarios:

- \* Given the form is valid and complete, when the change password button is pressed, then the password is updated and returns to the main screen
- \* Given the form is not complete, when the change password button is pressed, then prompt the user to fill in the missing information
- \* Given any state of the form, when the cancel button is pressed, then the user returns to the main screen
- \* Given the user enters an invalid email, when the change password button is pressed, then notify the user he entered an incorrect email and let him try again.
- \* Given the user enters an invalid password, when the change password button is pressed, then notify the user the password is invalid and let him try again.