

# ERP Ranger Application



## User Manual

Developed for EPI-USE ERP by The Tenacious Technicians

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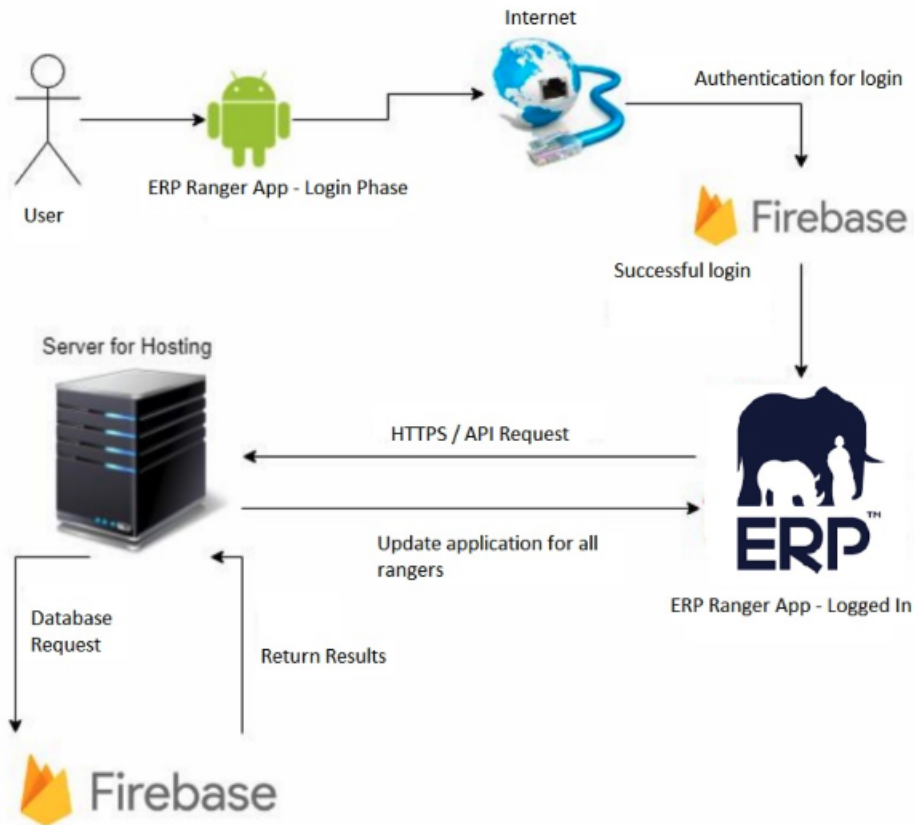
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# 1 Description

The purpose of the Ranger application is to improve the safety and security of nature reserves and the animals inside. This is done by rewarding volunteer rangers with points which they can later exchange for rewards in the form of merchandise or travel vouchers. Points are awarded to rangers for completing certain actions and passing certain checkpoints whilst on patrol. The application will also provide admins with notifications and the ability to monitor the reserve and the rangers whilst they are on patrol.

# 2 System Configuration



System Configuration Diagram.

The picture above gives a brief overview of how the system works in terms of authentication and handling requests for various actions.

# 3 Installation

The steps for the current installation process are as follows:

1. Go to the following link: <https://github.com/cos301-2019-se/ERP-Ranger-Mobile-Application>
2. Download the APK.
3. Copy it to your android device.
4. Enable installations from untrusted sources on your device.
5. Navigate to the APK via the file manager and install it.

# 4 Getting Started

Getting started with the mobile application:

- Upon opening the application the user will be greeted with a login screen unless they have logged in once before.
- After login the user will be presented with the home screen and from here they can start performing actions like starting a shift, managing their next shift and reporting an incident.
- Clicking on "Shifts" will allow rangers to: Book shifts by specifying a specific date and time that they wish to patrol said park specified upon login.
- Clicking on "Reports" will allow rangers to: Select a report type from the supplied drop down list, add pictures to said report and add a short description of the report that the ranger wishes to submit.
- Clicking on "Log Feedback" will allow rangers to: See current amount of points scored and length of their patrol. Feedback details of their patrol can also be entered in the given text box.
- Clicking on "View Assets" will allow rangers to: Browse and select assets currently available in the park to use on their patrols.
- Finally the ranger can close the application or they can logout and close.

Getting started with the web application:

- Open browser and navigate to the relevant url. Upon opening the admin or rangers will be greeted with a login screen.
- After logging in admins and rangers will each be directed to their dedicated areas.
- Admin will be directed to their dashboard which shows them an overview of the park, from here they can add and monitor rangers as well as manage the reserve's settings.
- Rangers will be directed to their profile where they can manager their shifts as well as view their current amount of points and possible rewards.
- Finally they can close the web application or logout and close.

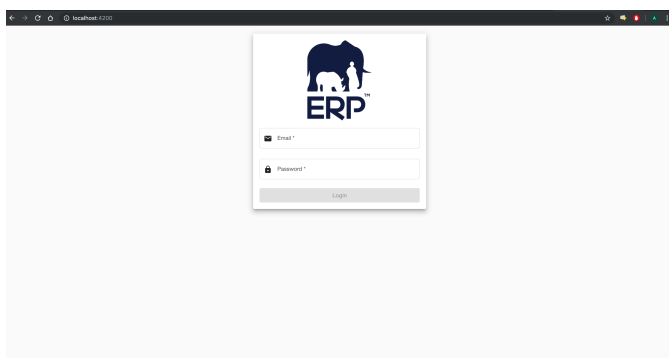
## 5 Using the system:

After successful login, a ranger will be prompted with the main dashboard where rangers will have access to a variety of features in the centre of the page. Some of these features include: Submitting reports, monitoring shifts, viewing assets and logging feedback. By clicking on one of these, it will take you to the respective screen. On the submitting reports screen, rangers will be able to submit any sightings that they might have encountered on their petrol. The monitoring shifts screen will allow rangers to keep track of time spent on their respective shifts. Viewing assets will list all assets available for checkout by rangers on their shifts. The logging feedback screen will enable rangers to log any feedback at the end of their shift and log any assets used during their patrol.

## 6 Administrative Side

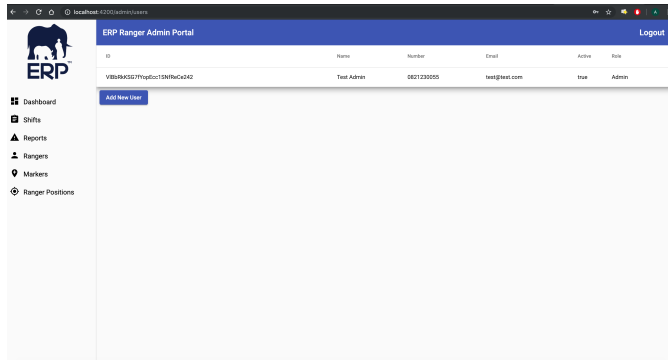
### 6.1 Logging in

Note : All following features require the user to be logged in as an admin



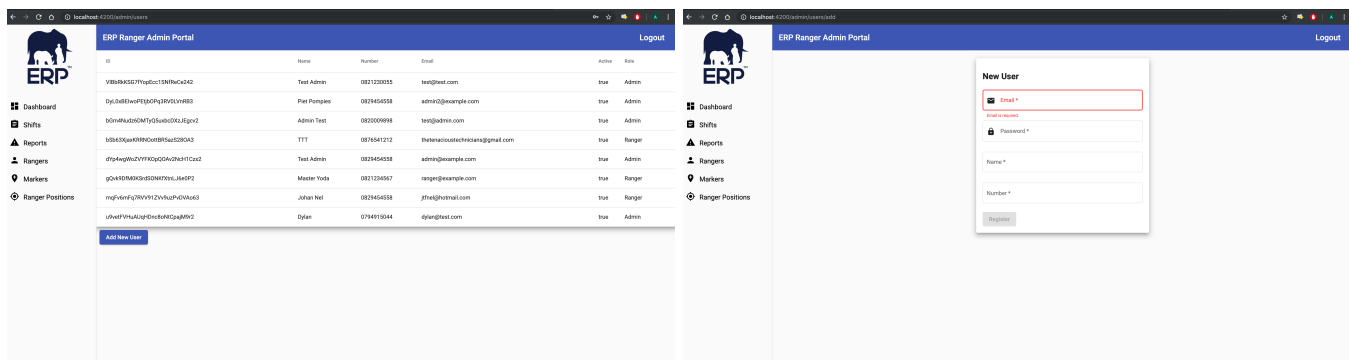
## 6.2 Viewing Rangers

To view All rangers, select Rangers from the dashboard on the left.



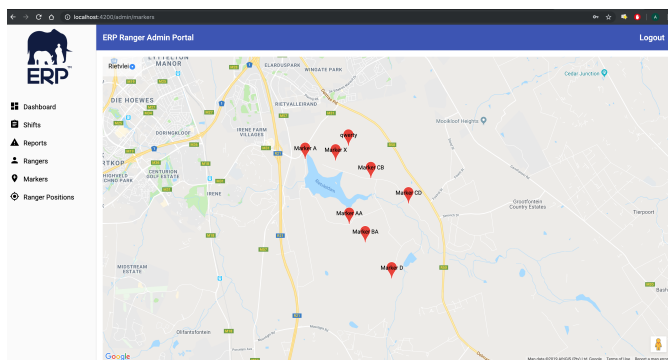
## 6.3 Adding a ranger to the system

To navigate to the this screen, select Rangers from the dashboard on the left and then select the Add ranger button located under the list of users. Once on the screen input the details of the ranger in the relevant fields and click Register. The fields will be reset for more rangers to be added as required.



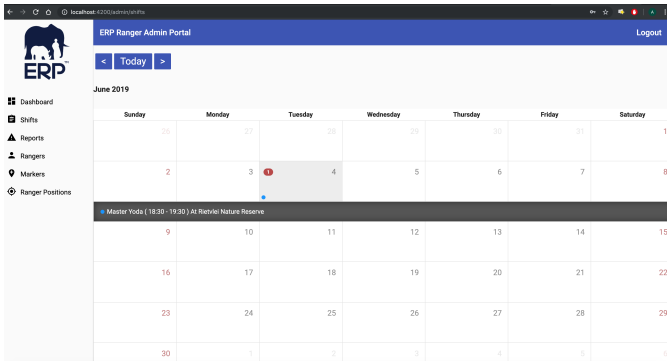
## 6.4 Adding markers

To access this page, select Markers from the navigation on the left and you will be navigated to this screen. Once on this page you will see a large map, to add a marker, find the place you want a marker(You can zoom in for accuracy by using the scroll wheel) then click on this spot. A prompt will appear asking for you to insert the marker name. Type in an appropriate name and hit OK. You should now see your marker appear on the map.



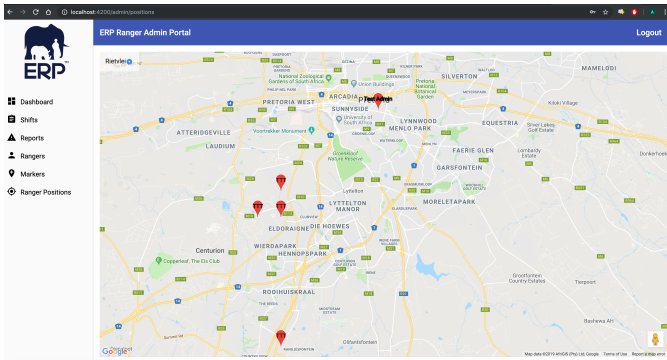
## 6.5 Viewing Upcoming shifts

Using the navigation bar on the left select Shifts. This will take you to a screen showing a calendar. To see different months, use the left and right arrows above the calendar or click on today to bring you back to the current month. To view all shifts on a particular day, click on that day and these will all be listed including the time of the shift, the name of the ranger for that shift as well as the park the shift will be in.



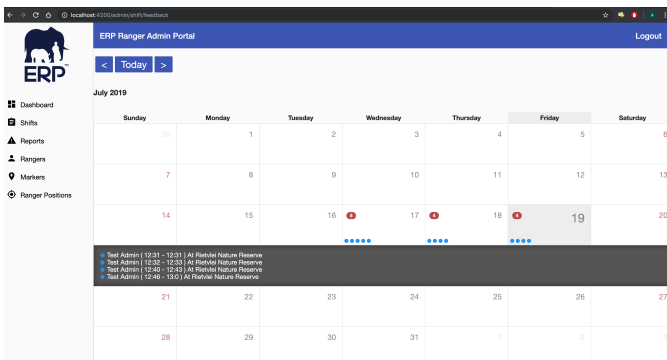
## 6.6 View current ranger positions

Click on Ranger Positions in the navigation bar on the left and then you can view ranger positions as markers on a map.



## 6.7 Viewing Shift feedback

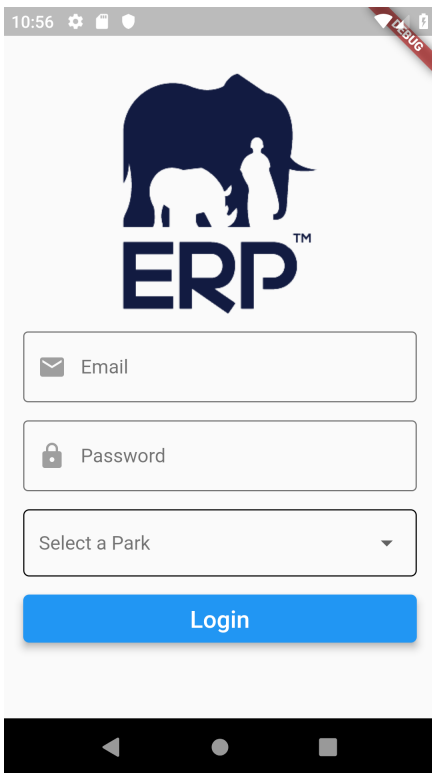
Using the navigation bar on the left select Shift Feedback. This will take you to another screen with a calendar. As before navigate between months using the arrows above and the button saying Today, which will bring you to the current month. To view the feedback of a particular shift, select the day of the shift and then on the listen shift itself. An overlay will appear displaying the shift details. To hide the overlay, click on the cross in the upper right corner.



# 7 Application Side

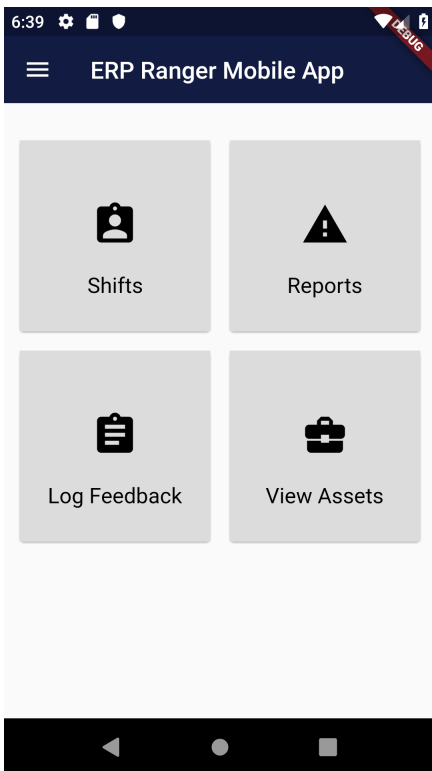
## 7.1 Logging in

Using the application is very straight forward. When you open the application, you will be presented with 2 input fields for an email and a password. Once a user's logged in, their session's cached and rangers will stay logged in until they decide to log out. Rangers will also have the option of selecting which park they which to patrol from the provided drop down list on the login page.



## 7.2 Dashboard

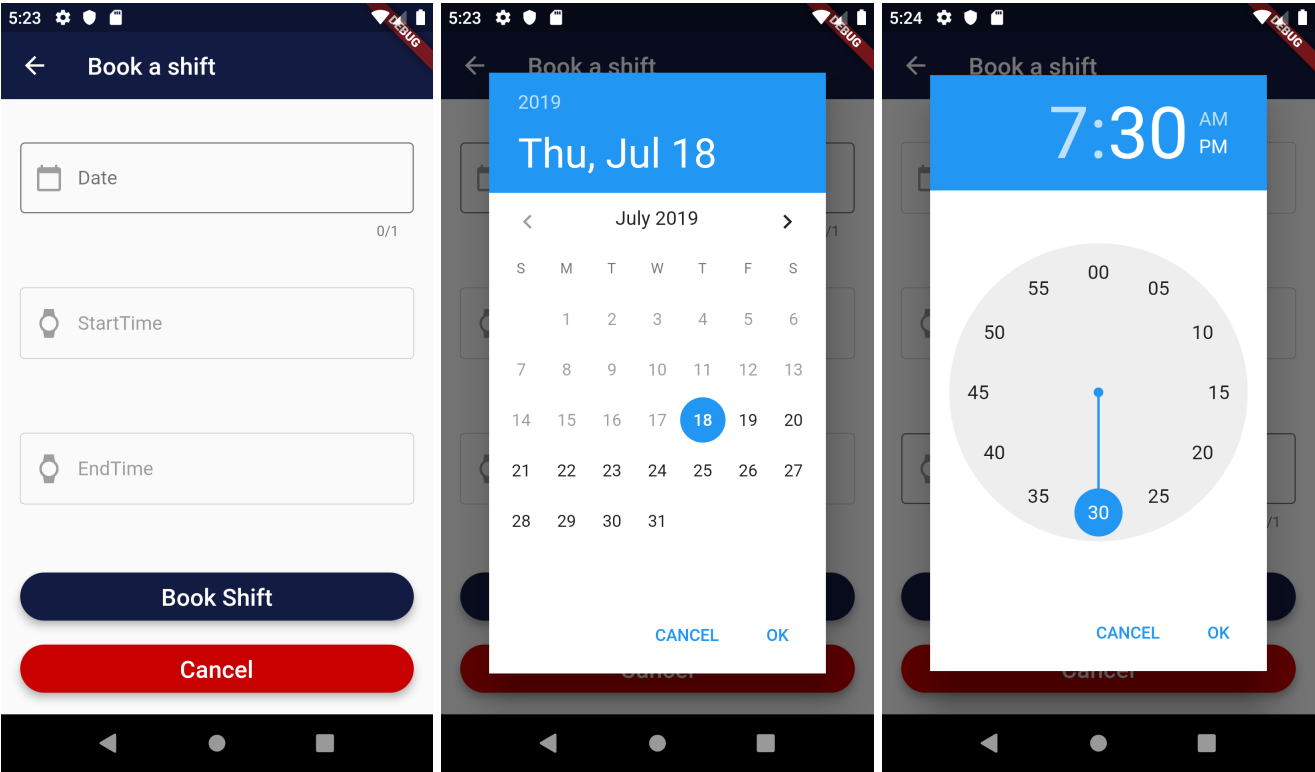
Upon successful login the user will be greeted by a series of options such as the ability to book a shift, report an incident, log feedback on their current patrol and the option to check out assets currently in stock.



## 7.3 Booking a shift

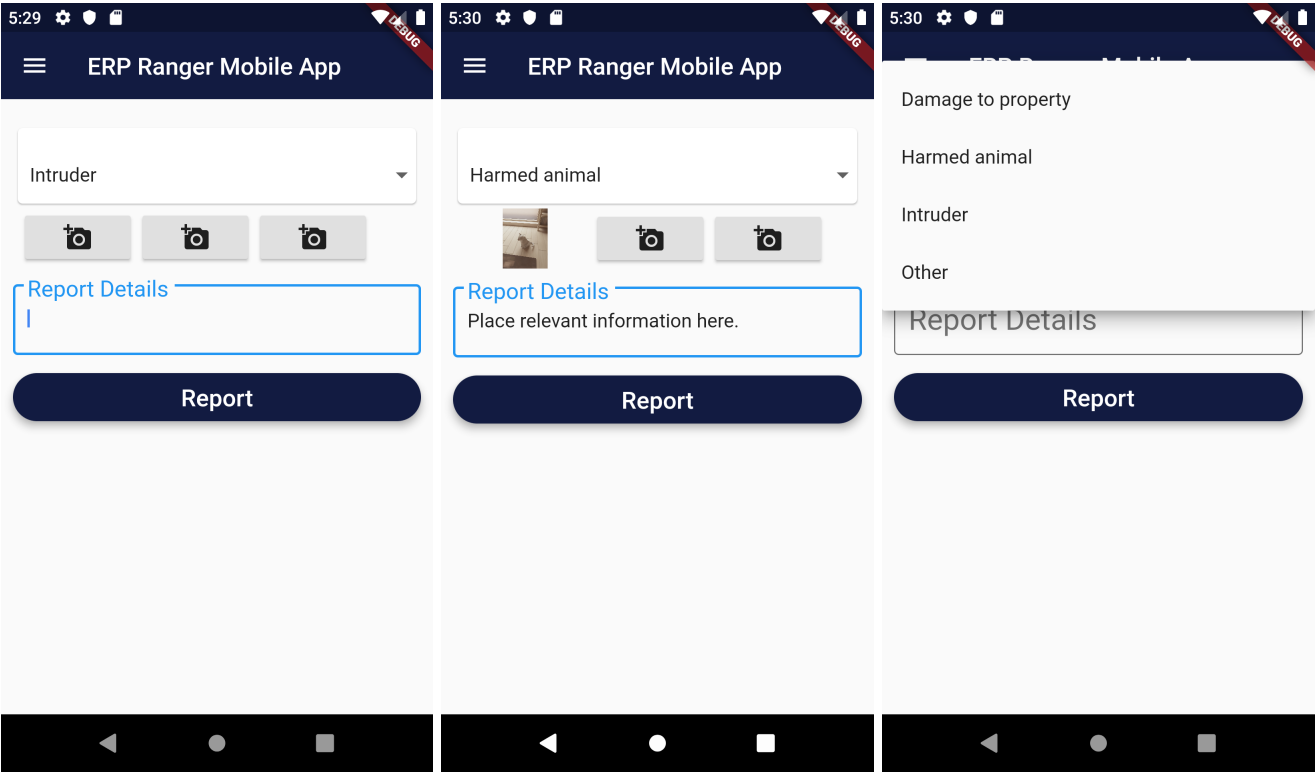
In order to book a shift navigate to the book shift screen by tapping the shifts tile on the dashboard. First select a date by tapping on the box that says Date and selecting the date which you would like to book a shift. Next select a starting time on that date by tapping on the now available box that says start time. Finally specify an ending time by tapping on the now

available box that says end time. The maximum length of a shift is 8 hours. When all the relevant information has been entered the shift can be booked by tapping the book shift button.



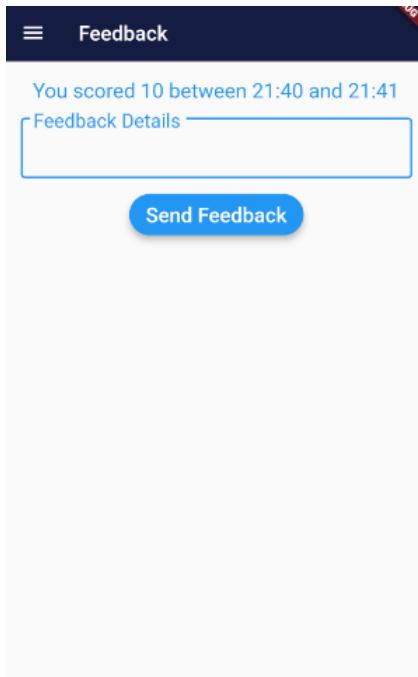
7.4 Submitting a report

In order to report an incident navigate to the report screen by tapping the reports tile on the dashboard. First the type of incident must be selected. An optional short description with additional information can be added in the text box provided by tapping on it. Up to 3 pictures can be added of the incident by tapping the relevant camera icons above the optional description box. When the incident report is ready to be sent, the send report button can be tapped.



## 7.5 Providing Feedback to a patrol

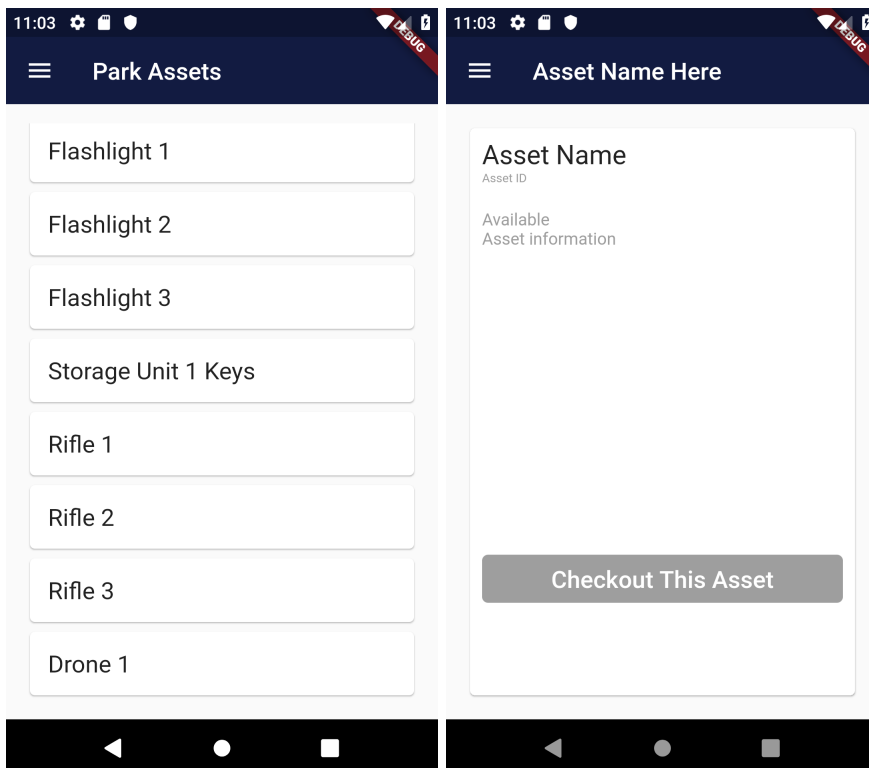
In order to log feedback on a patrol navigate to the feedback screen by tapping the feedback tile on the dashboard. This screen will show the current points scored and the length of your patrol. Enter the feedback details in the provided text box and click the Send Feedback button to submit your feedback.



The Feedback screen features a dark blue header with a hamburger menu icon and the title "Feedback". Below the header, a message states "You scored 10 between 21:40 and 21:41". Underneath this message is a text input field with the placeholder "Feedback Details". At the bottom of the screen is a blue button labeled "Send Feedback".

## 7.6 View Assets

In order to view and check out assets, navigate to the View Assets screen by tapping on the view assets tile on the dashboard. Rangers currently on patrol will have the ability to view and check out assist currently available at their selected park while on patrol by making use of this screen.

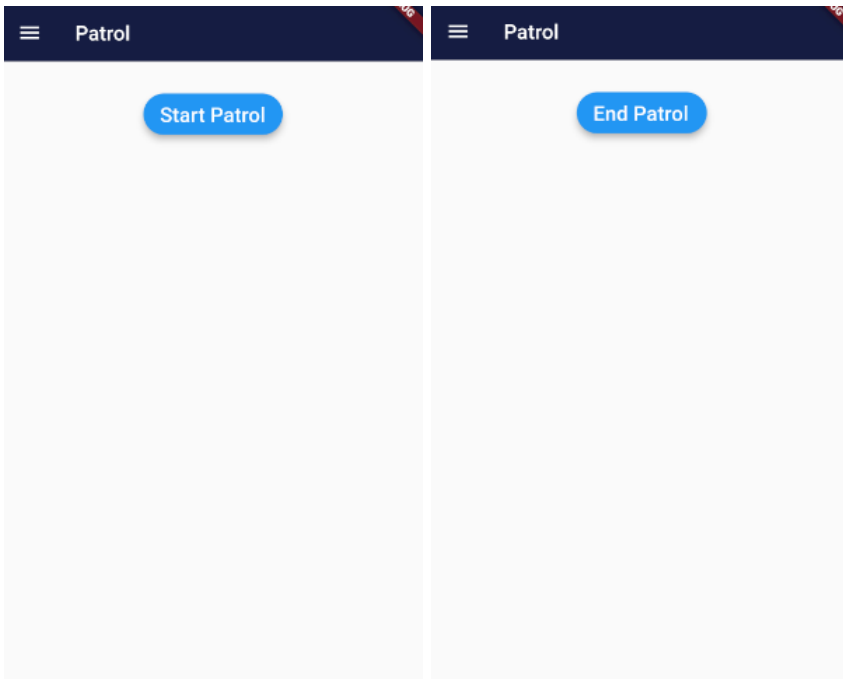


The View Assets screen is split into two panels. The left panel, titled "Park Assets", lists various assets: Flashlight 1, Flashlight 2, Flashlight 3, Storage Unit 1 Keys, Rifle 1, Rifle 2, Rifle 3, and Drone 1. The right panel, titled "Asset Name Here", displays details for a selected asset, including "Asset ID" and "Available Asset information". At the bottom of the right panel is a grey button labeled "Checkout This Asset". Both panels have a dark blue header with a hamburger menu icon and a status bar at the top showing the time as 11:03.



## 7.7 Perform a patrol

In order to start a patrol navigate to the patrol screen by tapping the patrol tile on the dashboard. Click the Start Patrol button to begin the patrol. After this the button will change to an End Patrol button, clicking this will open the feedback screen.



## 7.8 Activate a marker

In order to activate a marker navigate to the marker screen by tapping the marker tile on the dashboard. Find and select the desired marker. Click on the marker's description to open the Activate Marker popup and then click Yes. The marker description provides the marker name and the points it is worth. Clicking No on the Activate Marker popup will close the popup.

