

Chapter 7

TEST CASES

Fig 7.1 Home page of the mobile application. It contains a map view of the depots and fields to select the origin and destination

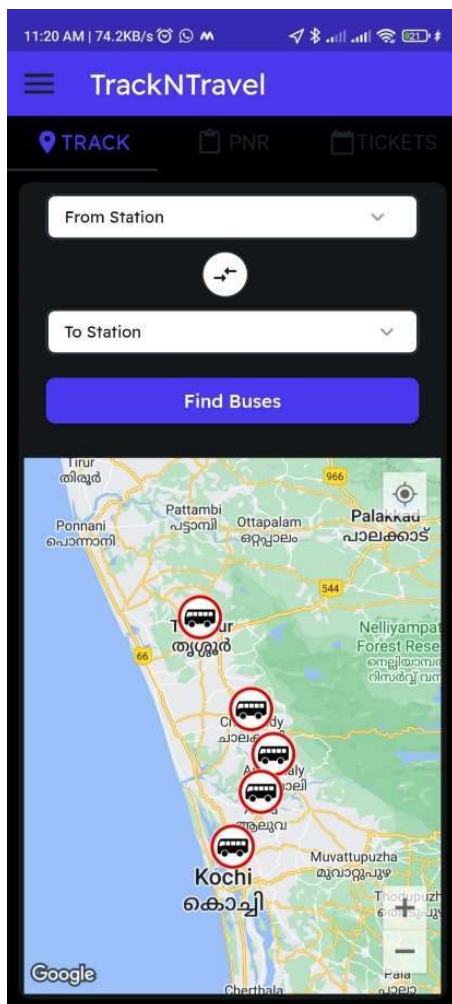


Fig 7.2 Selecting a marker gives a prompt to open the location in the default map of the device

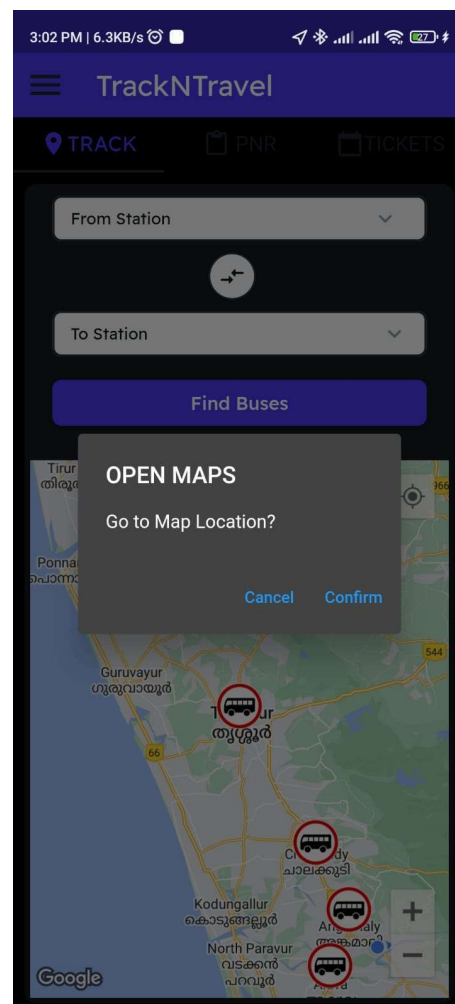


Fig 7.3 List of available depots

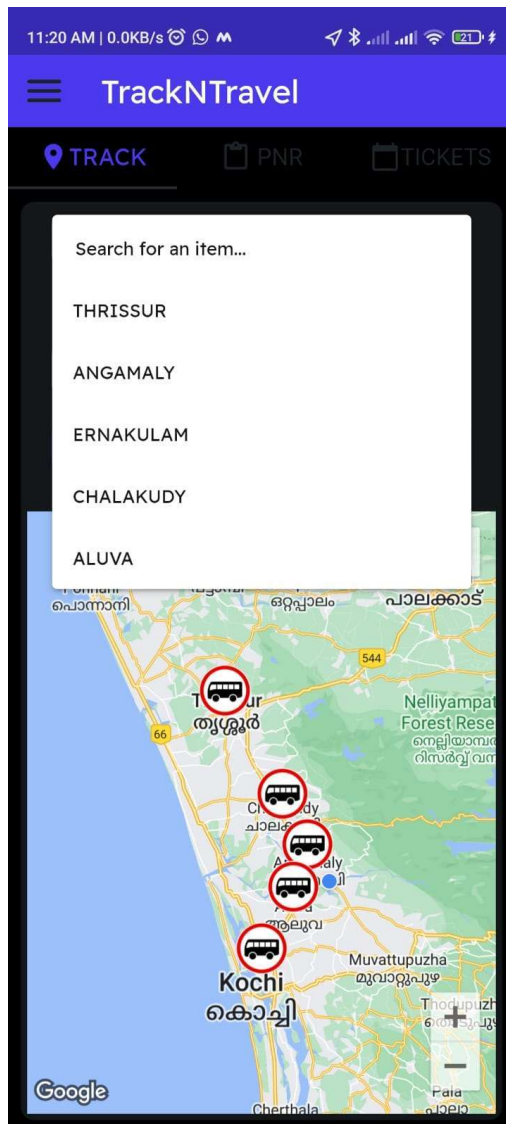


Fig 7.4 Origin and Destination selected

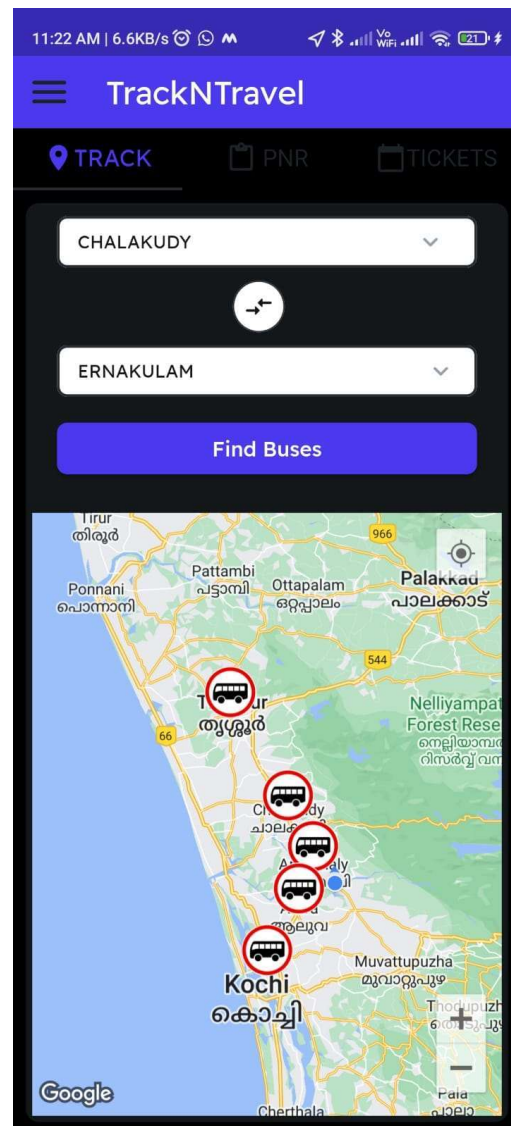


Fig 7.5 Find Buses shows the list of buses available in the selected routes

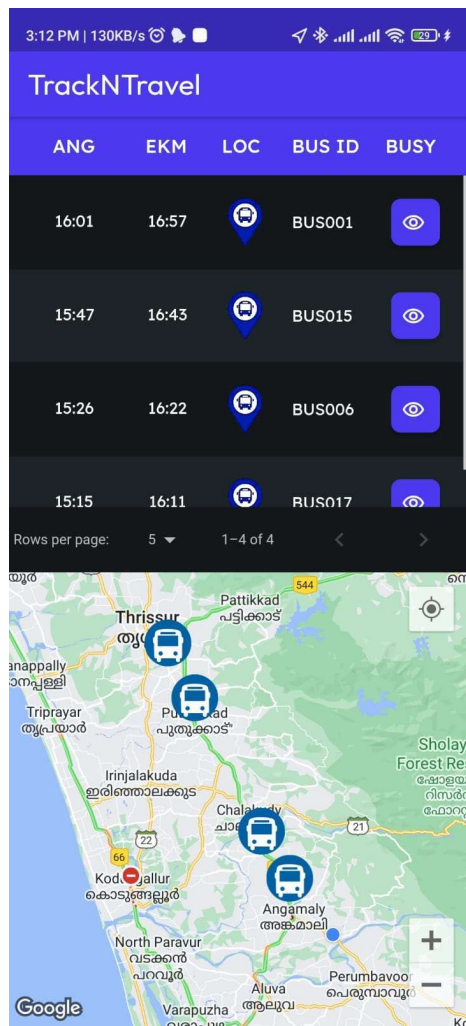


Fig 7.6 Selecting a marker gives a prompt to open the location in the default map of the device

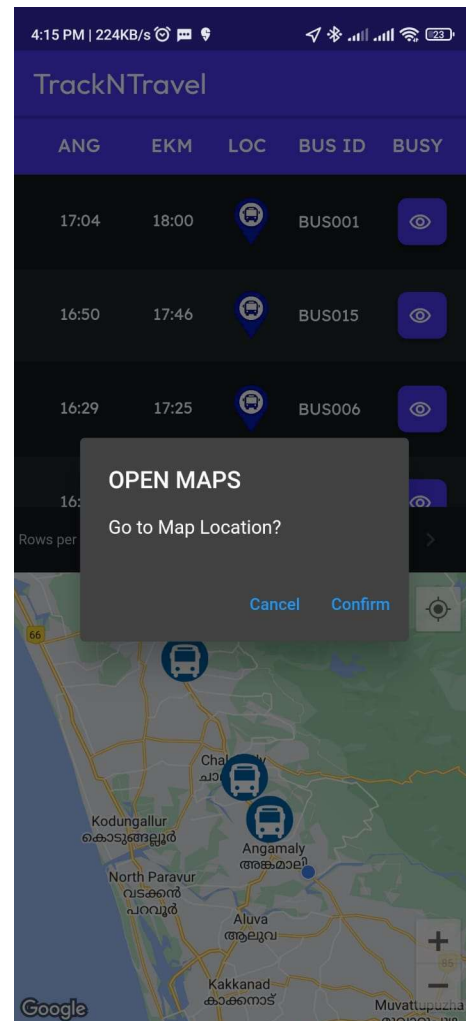


Fig 7.7 Activating a bus camera device, here a windows system is acting as a proxy device:

```
Microsoft Windows [Version 10.0.22631.3447]
(c) Microsoft Corporation. All rights reserved.

C:\Users\CLEETO ITTIACHAN>cd downloads

C:\Users\CLEETO ITTIACHAN\Downloads>python
WARNING ⚠ Unable to automatically guess model
'task=detect', 'segment', 'classify', 'pose'
Enter bus id: |
```

Fig 7.8 Activating a bus with busid BUS001:

```
Microsoft Windows [Version 10.0.22631.3447]
(c) Microsoft Corporation. All rights reserved.

C:\Users\CLEETO ITTIACHAN>cd downloads

C:\Users\CLEETO ITTIACHAN\Downloads>python device
WARNING ⚠ Unable to automatically guess model
'task=detect', 'segment', 'classify', 'pose' or
Enter bus id: BUS001
C:\Users\CLEETO ITTIACHAN\AppData\Local\Program
ction.py:302: UserWarning: Detected filter using
d.
    return query.where(field_path, op_string, val
Set to True
Loading best.torchscript for TorchScript inference
image 1/1 C:\Users\CLEETO ITTIACHAN\Downloads\c
Speed: 15.6ms preprocess, 517.4ms inference, 16
Total number of heads: 2
Existing blob deleted successfully.
C:\Users\CLEETO ITTIACHAN\AppData\Local\Program
ction.py:302: UserWarning: Detected filter using
d.
    return query.where(field_path, op_string, val
Data updated successfully
|
```

The device begins to capture an image using the connected camera and gets the head count in the image using the YOLO model and updates the dataset accordingly. This happens for every one minute interval the device is activated.

```
image 1/1 C:\Users\CLEETO ITTIACHAN\Downloads\captured_image.jpg: 64
Speed: 0.0ms preprocess, 282.5ms inference, 15.6ms postprocess per i
Total number of heads: 2
photos/BUS001/
Existing folder detected.
Existing folder deleted successfully.
Data updated successfully

image 1/1 C:\Users\CLEETO ITTIACHAN\Downloads\captured_image.jpg: 64
Speed: 0.0ms preprocess, 172.8ms inference, 63.1ms postprocess per i
Total number of heads: 19
photos/BUS001/
Existing folder detected.
Existing folder deleted successfully.
Data updated successfully

image 1/1 C:\Users\CLEETO ITTIACHAN\Downloads\captured_image.jpg: 64
Speed: 0.0ms preprocess, 156.7ms inference, 15.6ms postprocess per i
Total number of heads: 1
photos/BUS001/
Existing folder detected.
Existing folder deleted successfully.
Data updated successfully
```

Fig 7.9

The device begins to capture an image using the connected camera and gets the head count in the image using the YOLO model and updates the dataset accordingly. This happens for every one minute interval the device is activated.

```
image 1/1 C:\Users\CLEETO ITTIACHAN\Downloads\
Speed: 0.0ms preprocess, 159.6ms inference, 0.
Total number of heads: 1
photos/BUS001/
Existing folder detected.
Existing folder deleted successfully.
Data updated successfully

Exiting program.
Set to False

C:\Users\CLEETO ITTIACHAN\Downloads>|
```

Fig 7.10

Fig 7.11 Entering login details

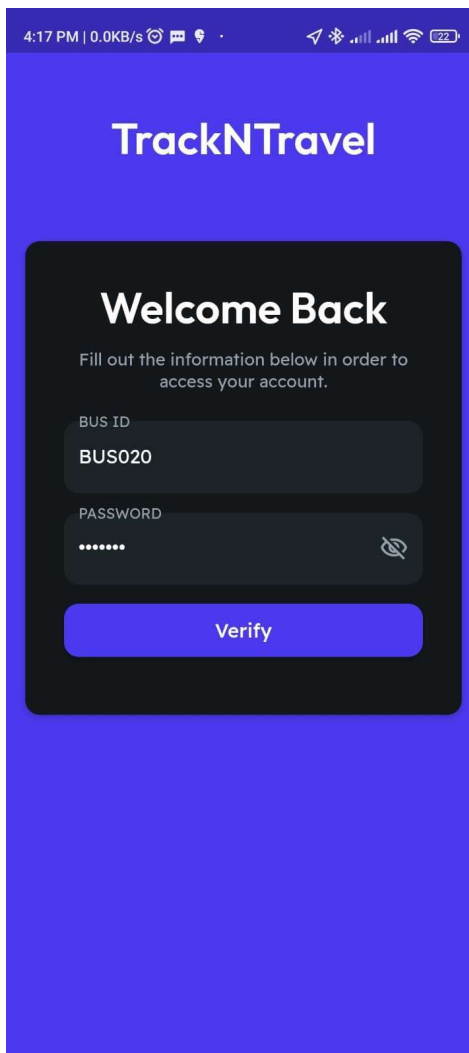
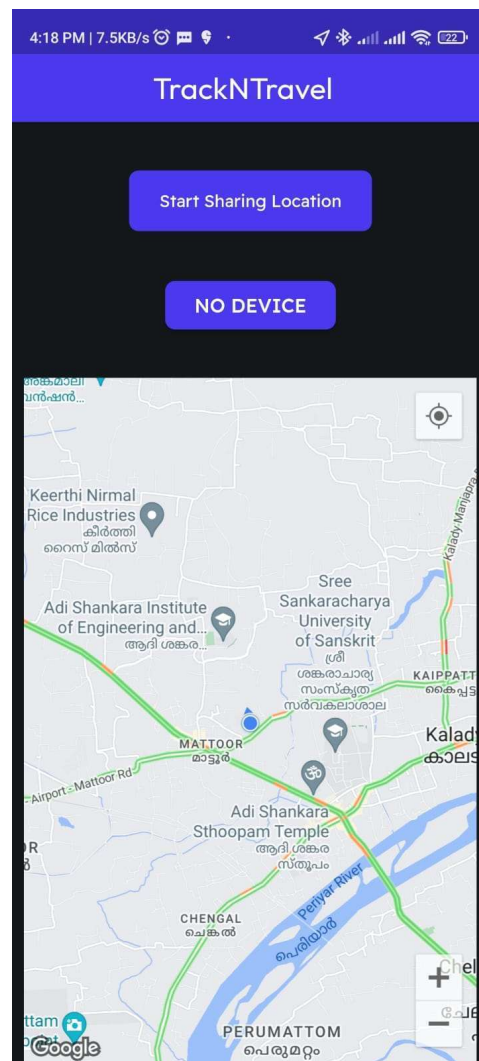
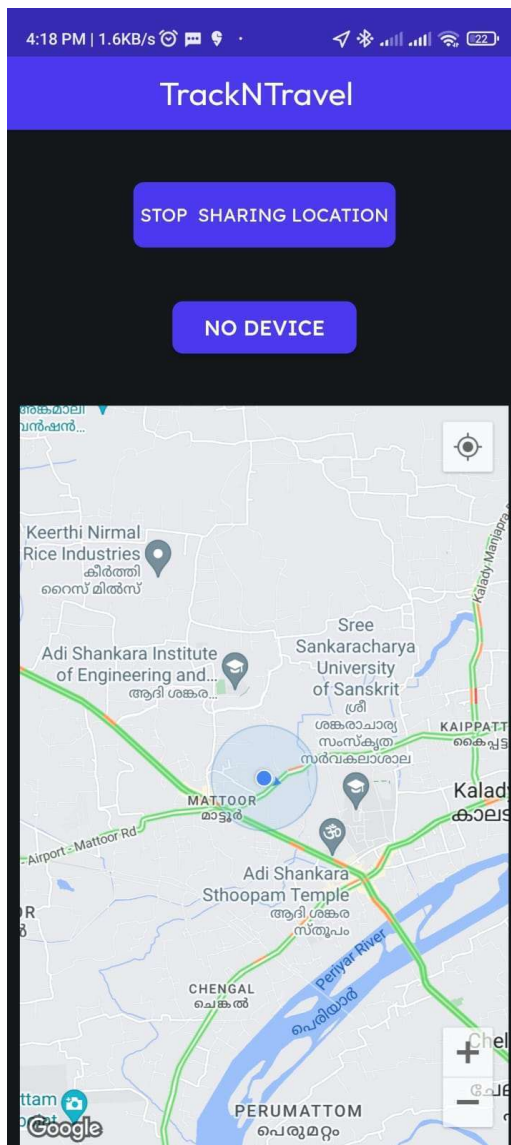


Fig7.12 Logged in page.



7.13 Logged in page after user starts to share location



7.14 Logged in page after bus device enabled

