

POTHOLE CHALLENGE

TEAM NAME: WHIZ-KIDS

MINISTRY : Government Of Goa

CATEGORY : Software

TECHNOLOGY BUCKET: Mobile App Development

PROBLEM STATEMENT: The state of Goa is facing one of the biggest problem of potholes. Biggest problem in solving the problem of pothole is lack of coordination between concerned departments. The aim is to build mobile based dynamic reporting system which will facilitate into flow of information among all concerned stakeholders. The aim is also to provide better Governance by more involvement of public.

TEAM MEMBERS: Ameesha Jain , Aishwarya Verma ,Ayushi Dixit ,Anukriti Sharma ,
Abhitansh Gupta , Bhagya Singh Purba



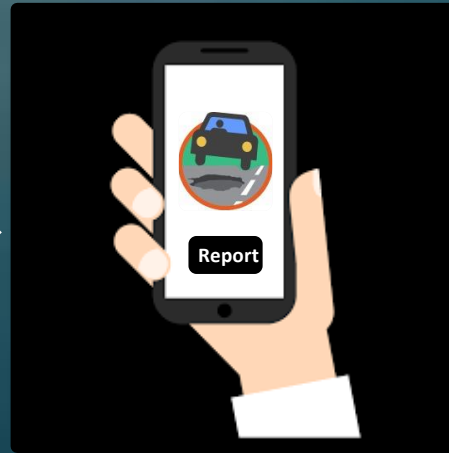
PROTOTYPE

1



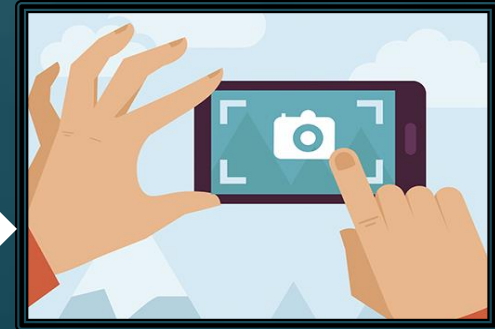
1. POTHOLE SPOTTED

2



2. LOGIN AND REPORT INTO
OUR MOBILE APP

3



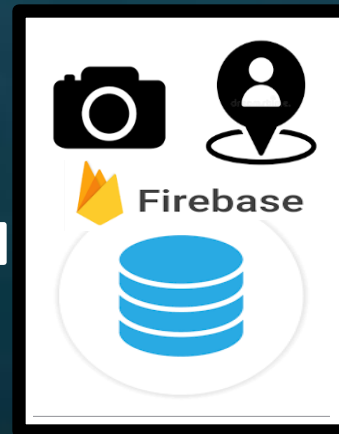
3. CLICK THE PHOTO OF
THE POTHOLE BY USING
OUR APP

6



6. PROVIDING STORED INFO TO
MUNICIPAL CORPORATION

5



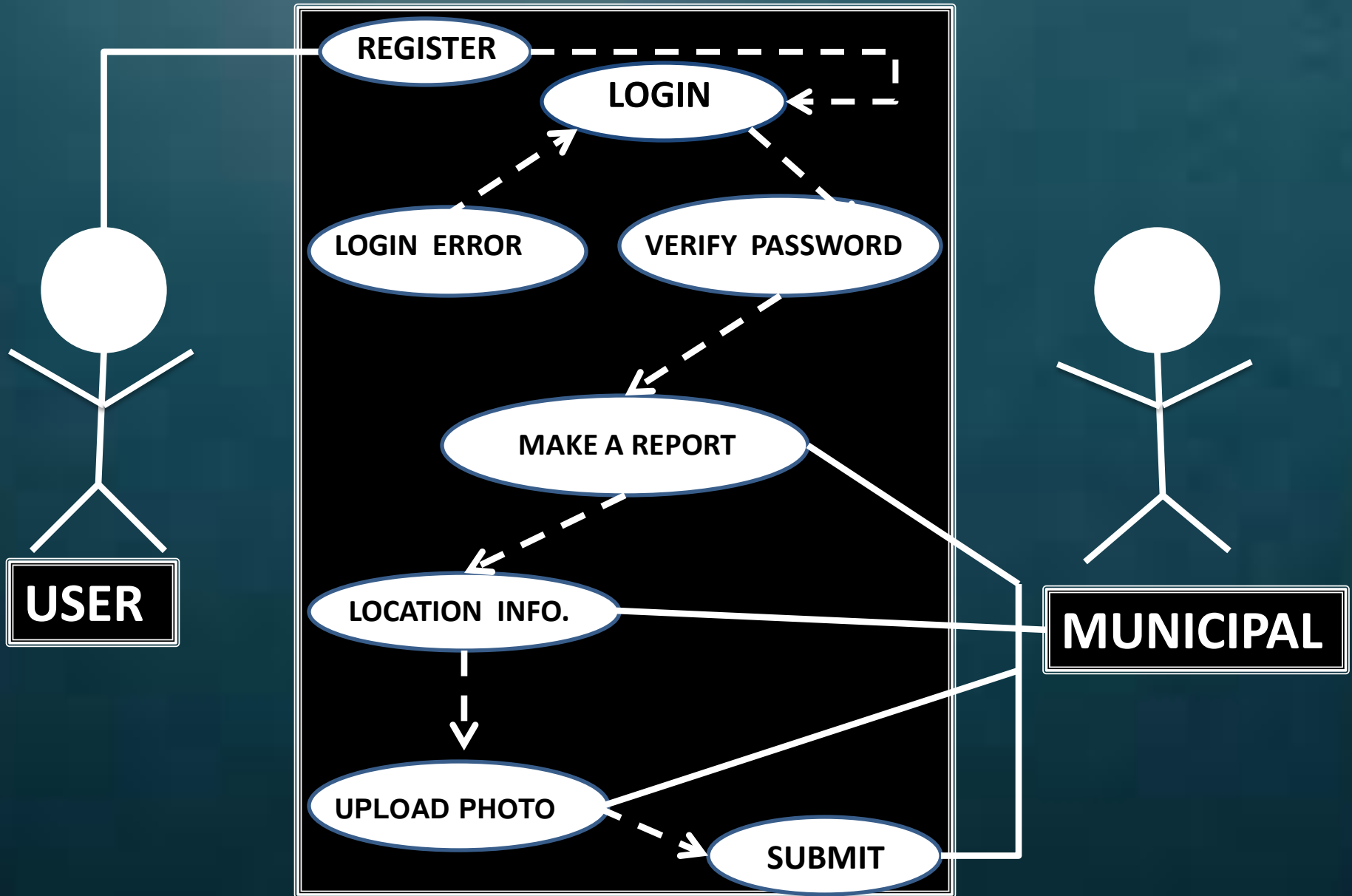
5. STORING INFO. GIVEN
BY USER

4



4. GIVING THE LOCATION
OF POTHOLE BY USING
GPS.


USE CASE DIAGRAM





WORKING OF OUR APP

1. LOGIN INTO OUR APP IF REGISTERED

SpotPot



 Enter Email


 Enter Password


LOGIN


Don't have an account? Sign up

2. IF NOT THEN REGISTER YOURSELF HERE

SpotPot



 misha2000@gmail.com




REGISTER

Already have an account? Sign in

3. AFTER LOGIN CLICK ON "MAKE A REPORT"

SpotPot



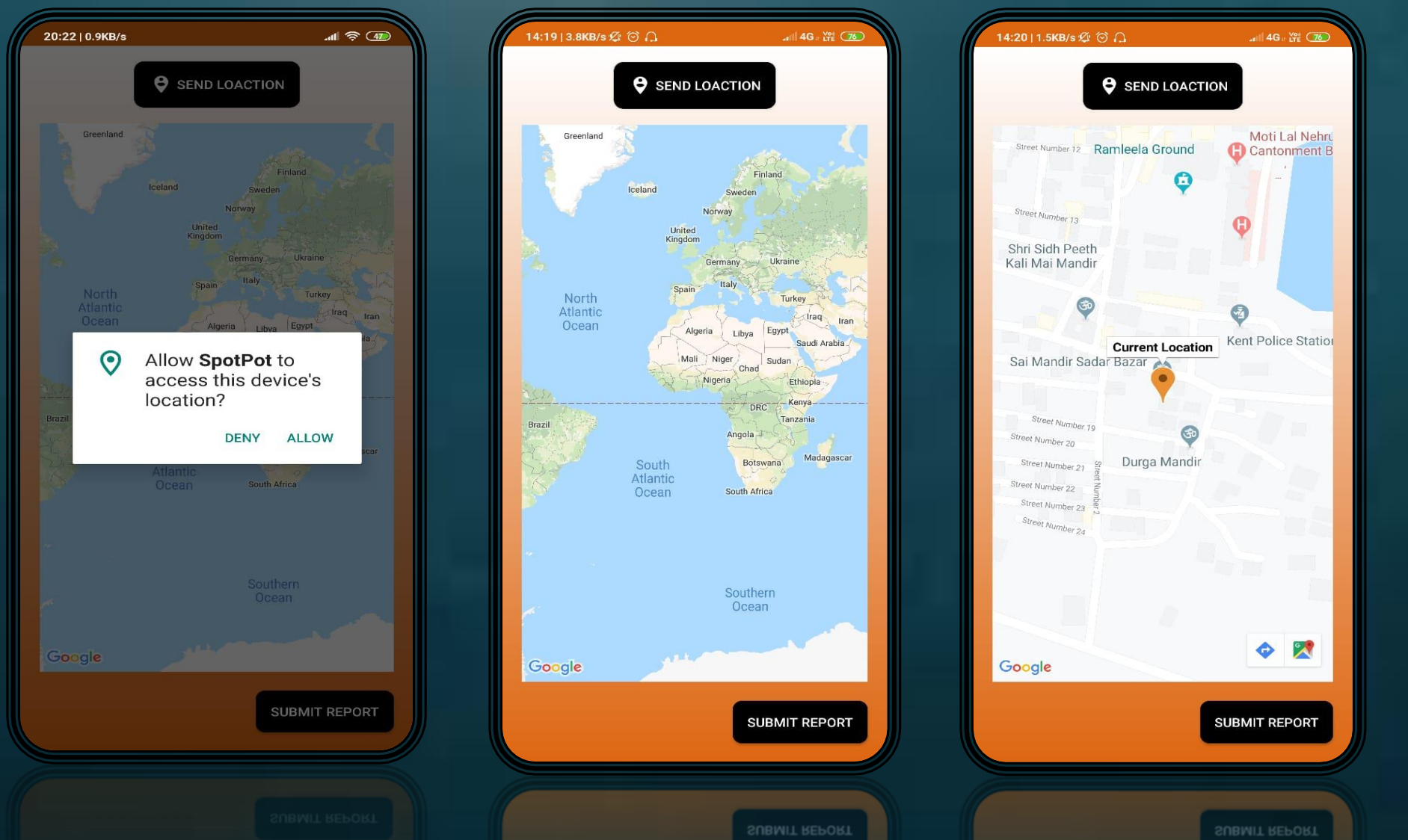
MAKE A REPORT

VIEW PAST REPORTS

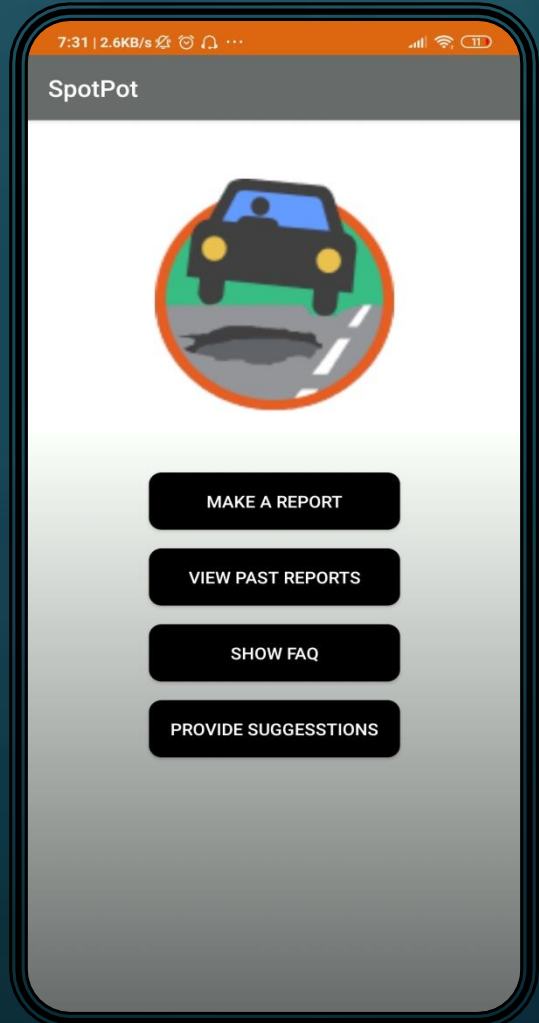
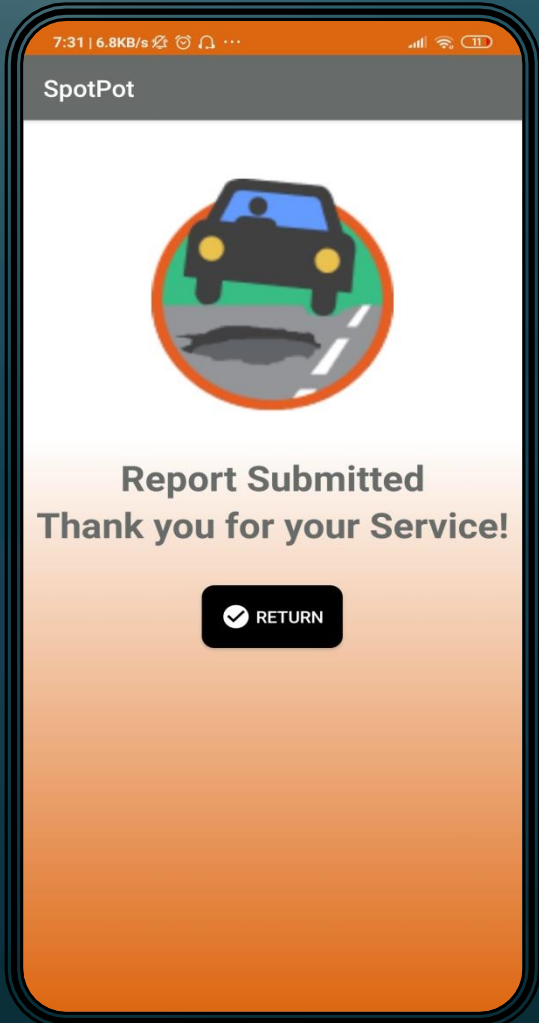
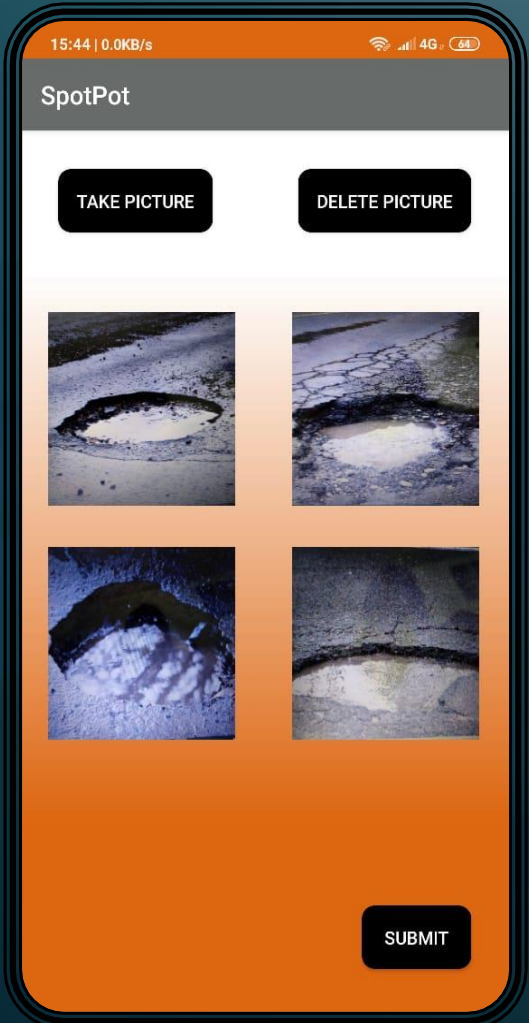
SHOW FAQ

PROVIDE SUGGESTIONS

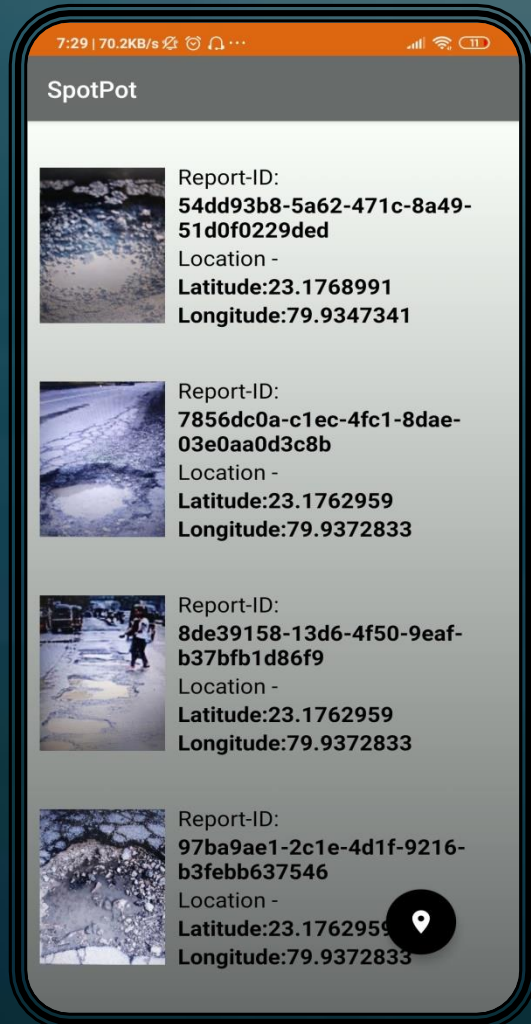
4. AFTER CLICKING ON“MAKE
A REPORT” LOCATION
ACTIVITY OPENS
5. WHEN USER CLICK ON
“SEND LOCATION” IT
SEARCH FOR CURRENT
LOCATION
6. WHEN CURRENT LOCATION
IS FOUND USER WILL CLICK
ON “SUBMIT”



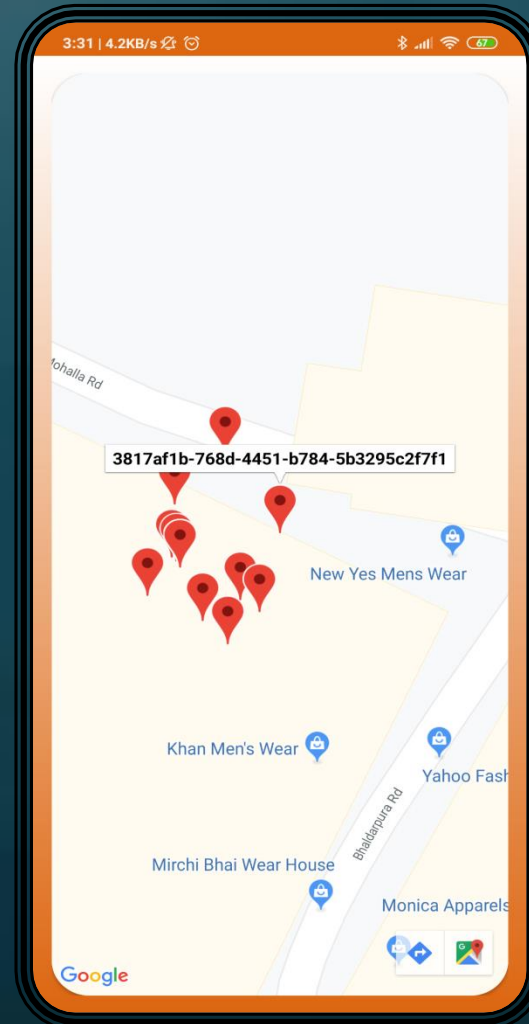
7. AFTER SUBMITTING LOCATION CAMERA ACTIVITY OPENS AND USER TAKE PHOTO AND CLICK “SUBMIT”
8. WHEN REPORT IS SUBMITTED A ACTIVITY IS SHOWN OF SUCCESSFUL SUBMISSION
9. IF A PERSON CLICKS “RETURN” THEY WILL COME TO MAIN MENU



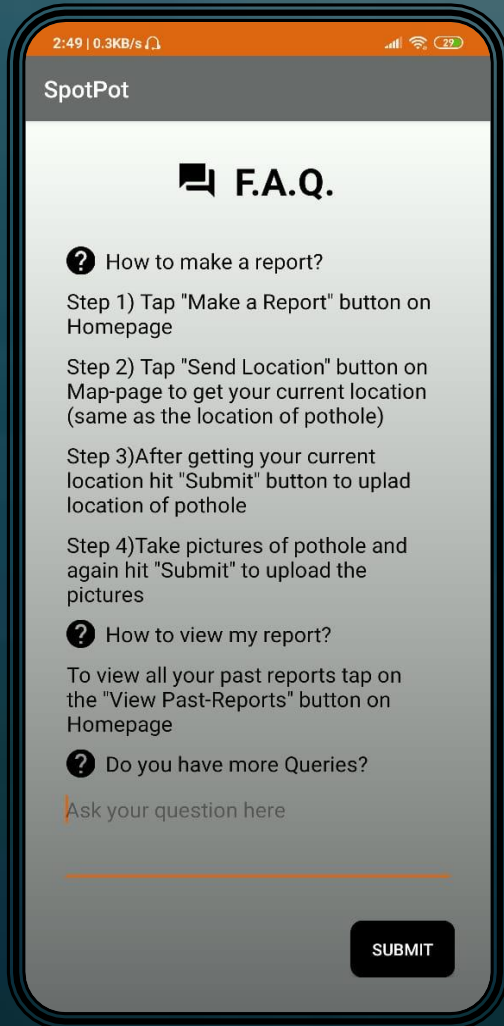
10. WHEN USER CLICK “VIEW PAST REPORTS” , ACTIVITY SHOWN BELOW OPENS



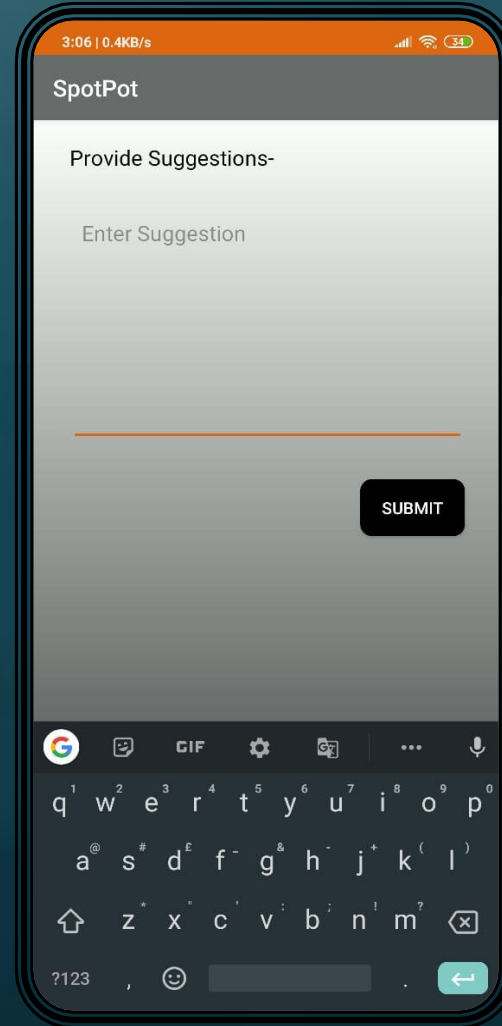
Location of all potholes can be seen on a map using the pin button.



11. WHEN A USER CLICK ON "SHOW FAQ" AN ACTIVITY DISPLAYING FAQ IS OPENED

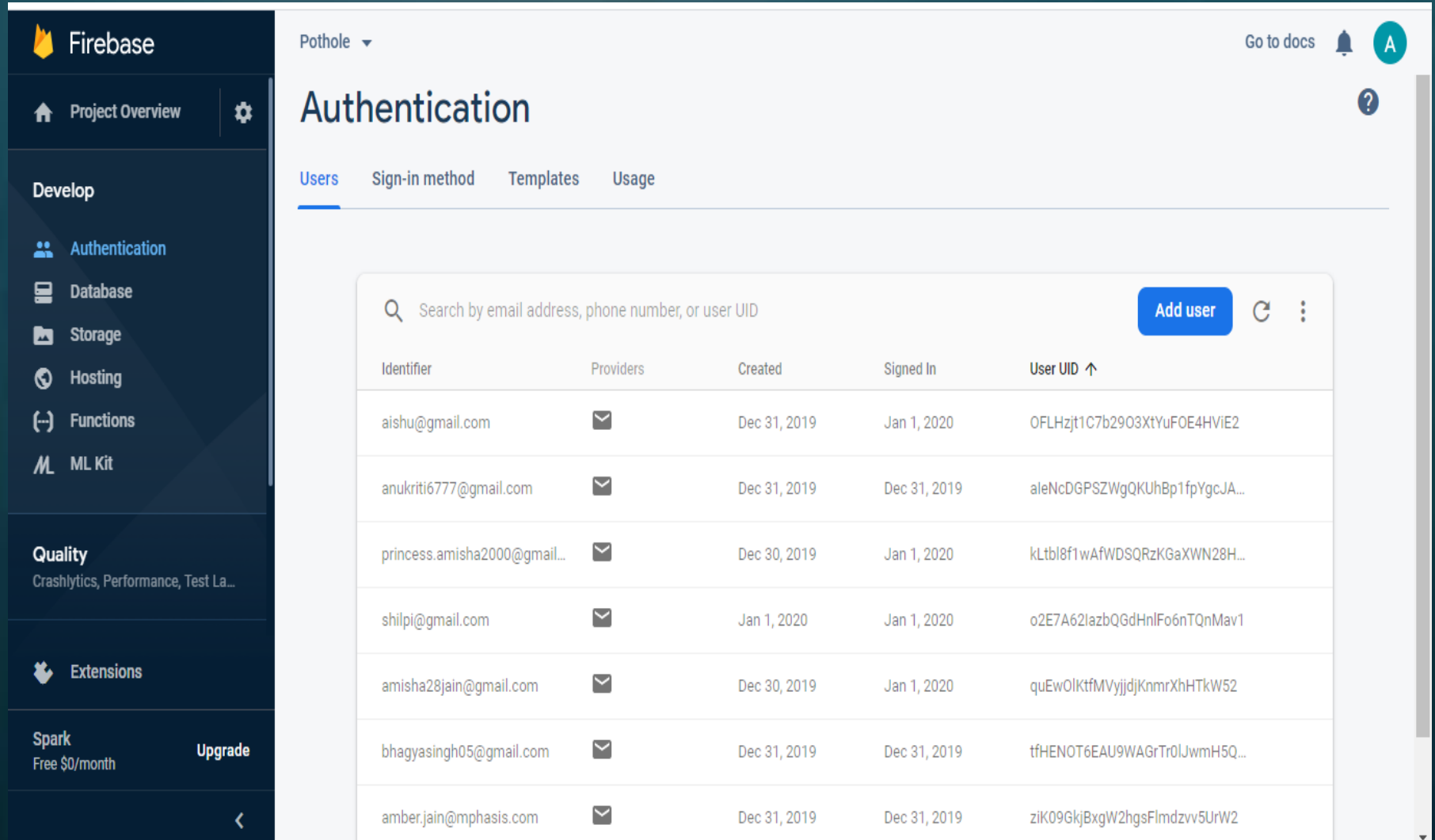


12. WHEN USER CLICK "PROVIDE SUGGESTIONS" AN ACTIVITY OPENS WHERE USER SUBMIT SUGGESTIONS.



DATABASE CONNECTIVITY OF OUR APP

1. WHEN A USER LOGIN INTO OUR APP THEN THERE LOGIN INFO. IS STORED OUR DATABASE AND EACH USER IS ASSIGNED A UNIQUE USER UID.



The screenshot displays the Firebase Authentication console for a project named 'Pothole'. The left sidebar contains navigation links for Project Overview, Develop (Authentication, Database, Storage, Hosting, Functions, ML Kit), Quality, Extensions, and Spark. The main content area is titled 'Authentication' and includes tabs for Users, Sign-in method, Templates, and Usage. A search bar at the top of the Users tab allows searching by email address, phone number, or user UID. Below the search bar is a table listing users with columns for Identifier, Providers, Created, Signed In, and User UID. The table contains seven entries, each with an email address, a provider icon, creation and sign-in dates, and a unique User UID.

Identifier	Providers	Created	Signed In	User UID ↑
aishu@gmail.com	✉	Dec 31, 2019	Jan 1, 2020	OFLHzjt1C7b29O3XtYuFOE4HVIE2
anukriti6777@gmail.com	✉	Dec 31, 2019	Dec 31, 2019	aleNcDGPSZWgQKUhp1fpYgcJA...
princess.amisha2000@gmail...	✉	Dec 30, 2019	Jan 1, 2020	kLtbl8f1wAfWDSQRzKGaXWN28H...
shilpi@gmail.com	✉	Jan 1, 2020	Jan 1, 2020	o2E7A62lazzbQGdHnlfFo6nTQnMav1
amisha28jain@gmail.com	✉	Dec 30, 2019	Jan 1, 2020	quEwOlKtfMVyjjdJKnmrXhHTkW52
bhagyasingh05@gmail.com	✉	Dec 31, 2019	Dec 31, 2019	tfHENOT6EAU9WAGrTr0lJwmH5Q...
amber.jain@mphasis.com	✉	Dec 31, 2019	Dec 31, 2019	ziK09GkjBxgW2hgsFlmdzv5UrW2

2. WHEN A USER SUBMIT THE LOCATION AND IMAGE OF POTHOLE THE DETAILS ARE STORED IN THE DATABASE AND UNIQUE REPORT ID IS GENERATED

The screenshot displays the Firebase console interface. On the left, the sidebar shows the project name 'Pothole' and the 'Database' tab selected. The main area shows the database structure for the project 'fluted-dynamo-262421'. A document with the key 'OFLHzjt1C7b2903XtYuFOE4HViE2' is expanded, revealing its contents: an 'Email' field with the value 'aishu@gmail.com' and a 'Reports' array. The array contains several report objects, each with a unique ID, 'Latitude', and 'Longitude' values. One report also includes an 'Images' object with an 'image_0' field containing a URL to a Firebase Storage image.

```
fluted-dynamo-262421
├── OFLHzjt1C7b2903XtYuFOE4HViE2
│   ├── Email: "aishu@gmail.com"
│   └── Reports
│       ├── 038319cd-f69a-43ee-83ba-653f28238e46
│       ├── 2bf84918-51e4-4433-bcfb-043c0fe9cb99
│       ├── 376ae07c-43a5-462a-9756-da6eee3cc508
│       ├── a6c7b689-4b02-48e5-a505-d98ad669c5e3
│       │   ├── Latitude: 23.159522
│       │   └── Longitude: 79.930051
│       ├── c2f8fd75-ee01-4b46-8194-b5c404b80ad6
│       │   ├── Latitude: 23.159522
│       │   └── Longitude: 79.930051
│       ├── f34733a3-6181-4816-88d5-ea7e66471562
│       │   ├── Images
│       │   │   └── image_0: "https://firebasestorage.googleapis.com/v0/b/fl..."
│       │   ├── Latitude: 23.152441
│       │   └── Longitude: 79.904052
│       └── f4fe3bec-2899-4f77-ad0d-ccb418ddf605
│           ├── Latitude: 23.159522
│           └── Longitude: 79.930051
```

3. THE IMAGES SUBMITTED BY EACH USER IS STORED IN STORAGE SECTION OF DATABASE AND CAN BE ACCESSED WITH THE HELP OF UNIQUE USER UID AND REPORT ID

Project Overview

Develop

Authentication

Database

Storage

Hosting

Functions

ML Kit

Quality

Crashlytics, Performance, Test La...

Extensions

Spark

Free \$0/month

Upgrade

Pothole

Storage

Go to docs

Upload file

Name	Size	Type	Last modified
image_0	47.02 KB	image/jpeg	Jan 1, 2020
image_1	48.62 KB	image/jpeg	Jan 1, 2020
image_2	45.96 KB	image/jpeg	Jan 1, 2020
image_3	44.73 KB	image/jpeg	Jan 1, 2020

image_0

Name

[image_0](#)

Size

48,148 bytes

Type

image/jpeg

Created

Jan 1, 2020, 3:44:58 PM

Updated

Jan 1, 2020, 3:44:58 PM

File location

TECHNOLOGY STACK



FRONT END:

**ANDROID
STUDIO**



BACK END:

**FIREBASE
DATABASE**

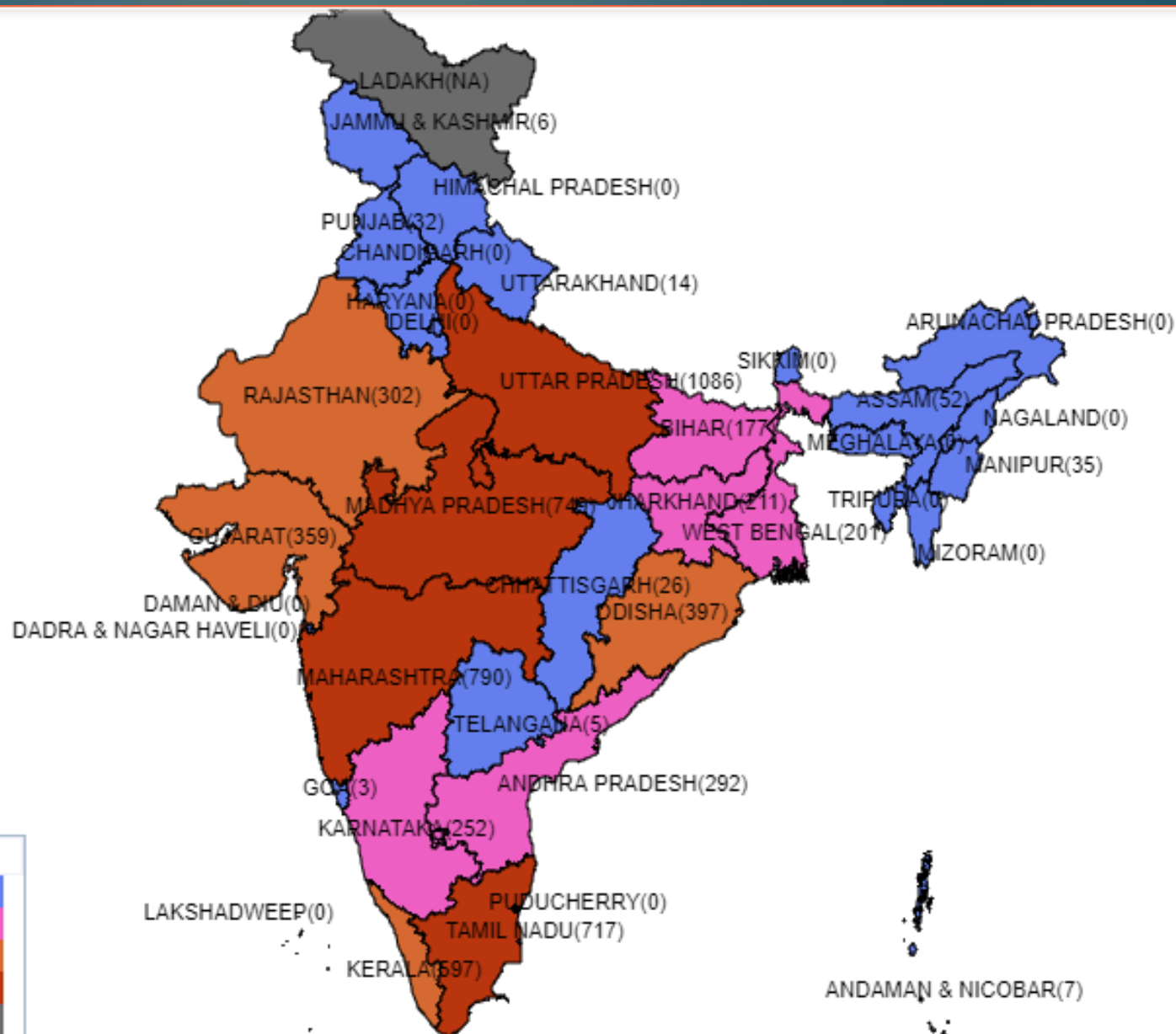


LANGUAGE:

JAVA



NO. OF PEOPLE INJURED DUE TO POTHOLE IN 2015-17



DEPENDENCIES

1. THROUGH THIS APP TILL NOW WE CANNOT TELL THE EXCAT SIZE OF THE POTHOLE ABOUT WHICH THE USER REPORTS .
2. AFTER THE USER REPORTS ABOUT THE POTHOLE THROUGH OUR APP WE CANNOT SHOW OUR USERS THAT WHAT ACTIONS ARE TAKEN BY THE MUNICIPAL CORPORATION REGARDING THE REPORT.

THESE DEPENDENCIES CAN BE SOLVED IN FUTURE BY ENHANCING OUR APP.

CONCLUSION

OUR APP CAN BE USED TO PERFORM FUNCTIONS LISTED BELOW :-

1. REPORTING : OUR APP CAN SUCCESSFULLY REPORT THE POTHOLE TO THE MUNICIPAL CORPORATION.
2. DATA GATHERING: THIS APP WILL HELP THE GOVERNMENT TO GATHER THE INFORMATION REGARDING THE POTHOLE AND FREQUENCY OF THERE OCCURENCE.
3. DATA ANALYSIS : THROUGH THE DATA COLLECTED BY OUR APP WE CAN ANALYZE :
 - THE CONDITION OF ROAD
 - NUMBER OF ACCIDENTS CAUSED BY THE POTHOLE