TEAM SELCOUTHS

College Code – 1-3327580600

College Name – Techno India NJR Institute Of Technology

Smart India Hackathon – March 30-31, 2018

Ministry Category – Govt. Of Delhi

Problem Code - #GDL31

Category - Software

Problem Statement

PWD Delhi has employee strength of approx. 3500 employees, which is scattered in different offices located all over Delhi. More than 40% are engineers, who visit site office directly and spent most of the day time in the field/site. A web based and mobile based solution is required by which all the employees can mark their attendance at any place including facility to mark in time and out time at different locations and multiple time in a day.

System will capture their location and timing and information will be transferred to centralised server. Controlling officer will be able to check their staff, which is under their jurisdiction and help in tracking performance of employee.

Solution Track

- With this application employees will be able to mark their attendance from outdoor sites.

- All they have to do is click their picture and upload it .

- Through this picture, employee and location are verified, attendance is marked.

Attendance Assure

- Login if you are an existing user.

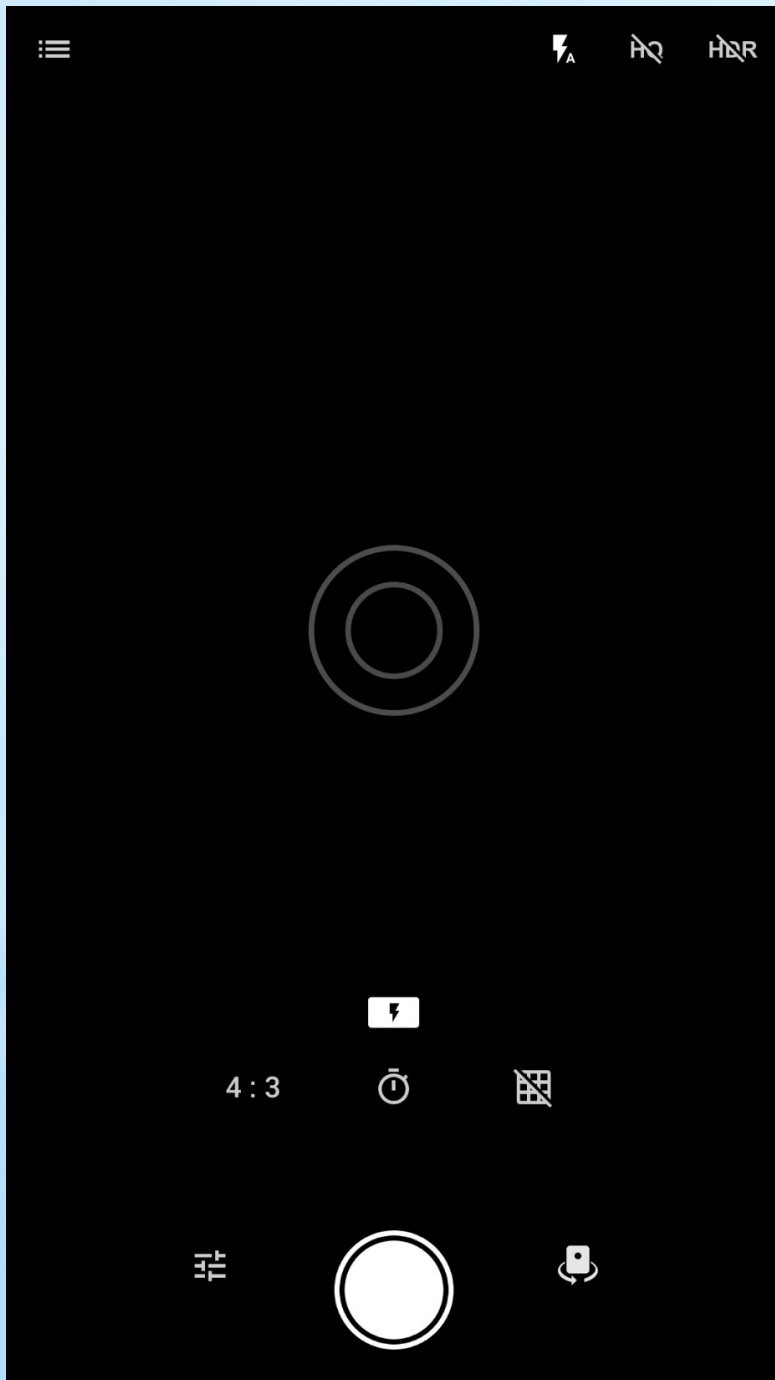- If not, create an account.

Fill all the details and signup.
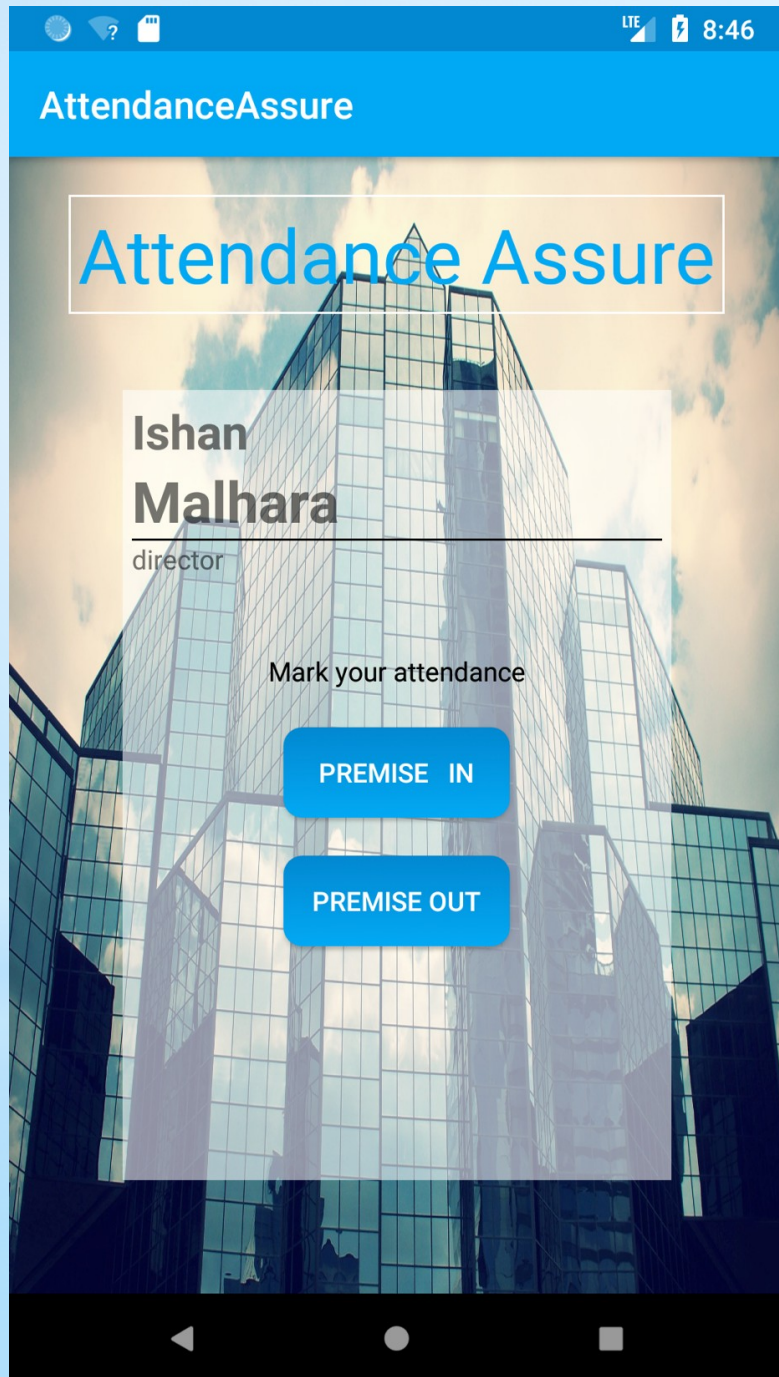
- After login , this window appears.

- Here employee's information is displayed.

- In order to mark the attendance , click on *Premise IN.*

- When leaving the location, click on *Premise OUT.*

- This window requires access to device location and camera.

- Click a picture of yourself and upload it.

- After uploading the picture , the device location along with the meta data of the picture are stored in local database.

- The device location and the picture is then compared with the already allocated location and the stored picture in the main database.

- Once the location and the picture is verified ,attendance is marked.
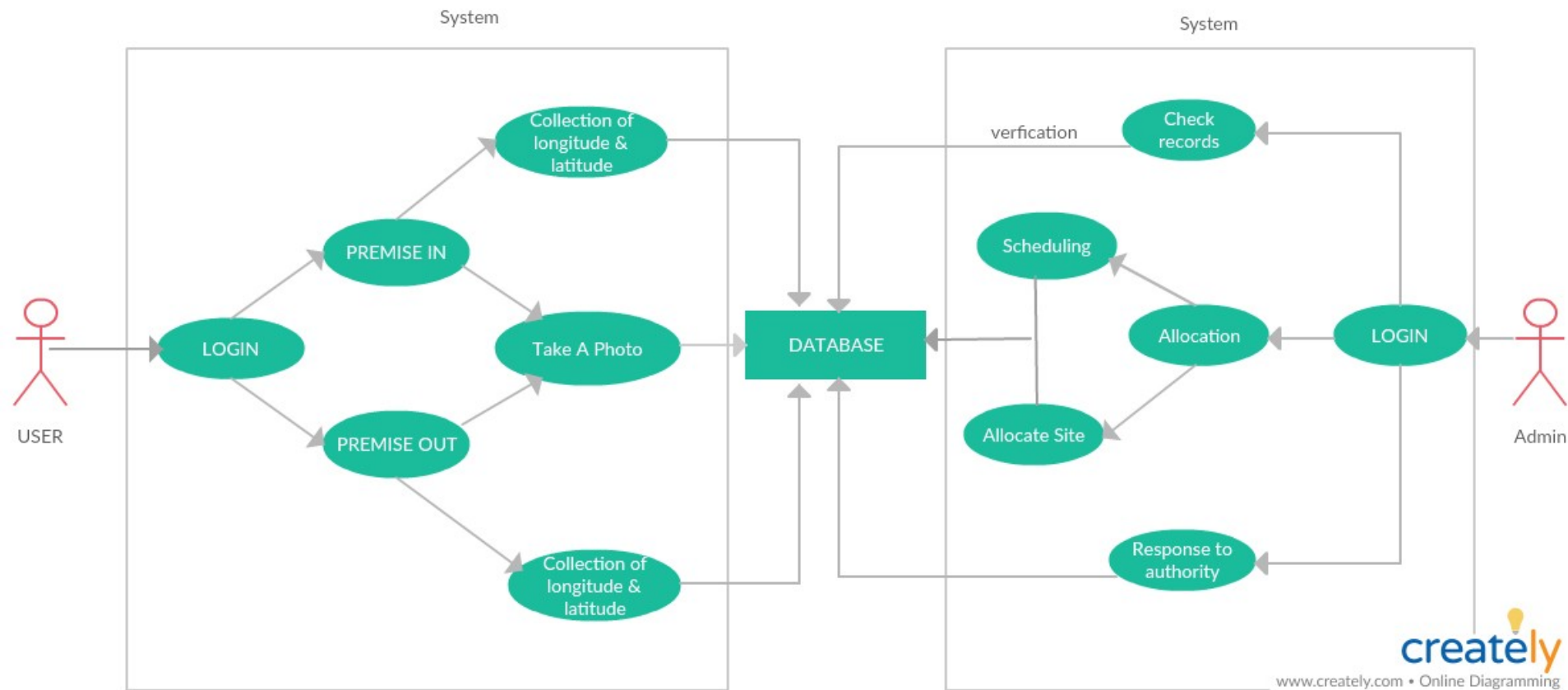
- If the verification fails , retry.

Technology Stack

- Android Studio

- Firebase

- Microsoft Azure

- Microsoft Visual Studio

USE CASE

Dependencies/Show Stopper

- All the features of mobile application will be reflected with same graphical attributes, sequencing and dependencies will be there in web application also.

- Attendance of more than one employee can be marked by taking a group picture. More than one face can be detected at a single time.

Thank You