# D.K.T.E. Society'sTextile and Engineering Institute, Ichalkaranji.

**(An Autonomous Institute)**


DEPARTMENT OF INFORMATION TECHNOLOGY

2019-2020

Project report on

## Virtual Tourist Guide

**Under the guidance of**
***Prof.S.D.Rane***

**Group Members:**

| | |
|---|---|
| 1.Omkar Pradip Mali | 17UIT12031XX |
| 2.Srushti Dhanyakumar Mandape | 17UIT11033XX |
| 3.Vivek Atul Koparde | 17UIT12021XX |
| 4.Prathamesh Laxman Davande | 18UIT72002XX |
| 5.Prashant Mahadev Aoutade | 18UIT72001XX |
| 6.Ajay Vijaykumar Saravade | 18UIT72012XX |

# D.K.T.E. Society's Textile and Engineering Institute, Ichalkaranji.

**(An Autonomous Institute)**

Department of Information Technology

# CERTIFICATE

This is to certify that **Group Members:**

| | |
|---|---|
| 1. Omkar Pradip Mali | 17UIT12031XX |
| 2. Srushti Dhanyakumar Mandape | 17UIT11033XX |
| 3. Vivek Atul Koparde | 17UIT12021XX |
| 4. Prathamesh Laxman Davande | 18UIT72002XX |
| 5. Prashant Mahadev Aoutade | 18UIT72001XX |
| 6. Ajay Vijaykumar Saravade | 18UIT72012XX |

Have successfully completed the mini project work, entitled "Virtual Tourist Guide"

In partial fulfillment for the award of degree of Bachelor of Technology in Information Technology. This is the record of their work carried out during the academic year 2019-2020.

Date: Place: Ichalkaranji

Prof.S.D.Rane Prof.(Dr.) D.V.Kodvade

[Project Guide] [HeadofDepartment]

Prof.(Dr.) P.V.Kadole

**[Director/Principal]**

# DECLARATION

We the undersigned students of T.Y. B.Tech I.T. declare that the field work report entitled written and submitted under the guidance of ***Prof S.D.Rane*** is our original work. The empirical findings in this report are based on the data collected by us. The matter assimilated in this report is not reproduction from any readymade report.

Date: Place: Ichalkaranji.

Name

Signature

# INDEX

**CONTENTS** **PAGE**

10. Snapshots

11. Conclusion

12. Reference

# 1.ABSTRACT

In the application which renders information about the monument or landmark just by taking their live pictures as inputs .In other word the application should allow the user to click a photograph and based on the picture it should display information about the monument /landmark.The user should add the complaint regarding landmark. The application should also be able to keep statistics about the number of users referencing monuments/ landmarks .

## 2.PROBLEM STATEMENT

Due to lack of manpower to guide tourists, develop a mobile application which can guide tourists virtually.

## 3.INTRODUCTION

- Purpose:

  Users get detailed information about any monument/landmark by just clicking its picture.

- Scope of the project:

  The application will work as a tourist guide, it is proposed due to lack of manpower to guide the tourists.

## 4.PROBLEM DESCRIPTION

• We are proposing a mobile application ‘Virtual Tourist Guide’ built on teachable machine with the help of mobile net model.

• Users get detailed information about any monument/landmark by just clicking its picture.

• We have added an extra feature using text-to-speech API in which users can listen the available information instead of reading it.

• We are giving features such as activities, services where the user/tourist visit those places and enjoys the moments.

• Admin can see visitors' counts and their ratings about specific places.

• Admin can verify the complaints added by users and take action against complaints.

## 5.REQUIREMENT SPECIFICATION

1.We require this application to collect the appropriate images of landmarks/monuments.

2.Then we are required to train the images by using a teachable machine.

3.We have to collect the information of monuments in goa to display it on the application.

4.We collect the information of activities and services that we provide in our application.

5.We store all this information regarding landmarks and we require the firebase.

## 6.REQUIREMENT ANALYSIS

Functional requirement:

1.We require Images to display on application with their respective information.

2.The data which is the user count of who visited the particular place multiple times .

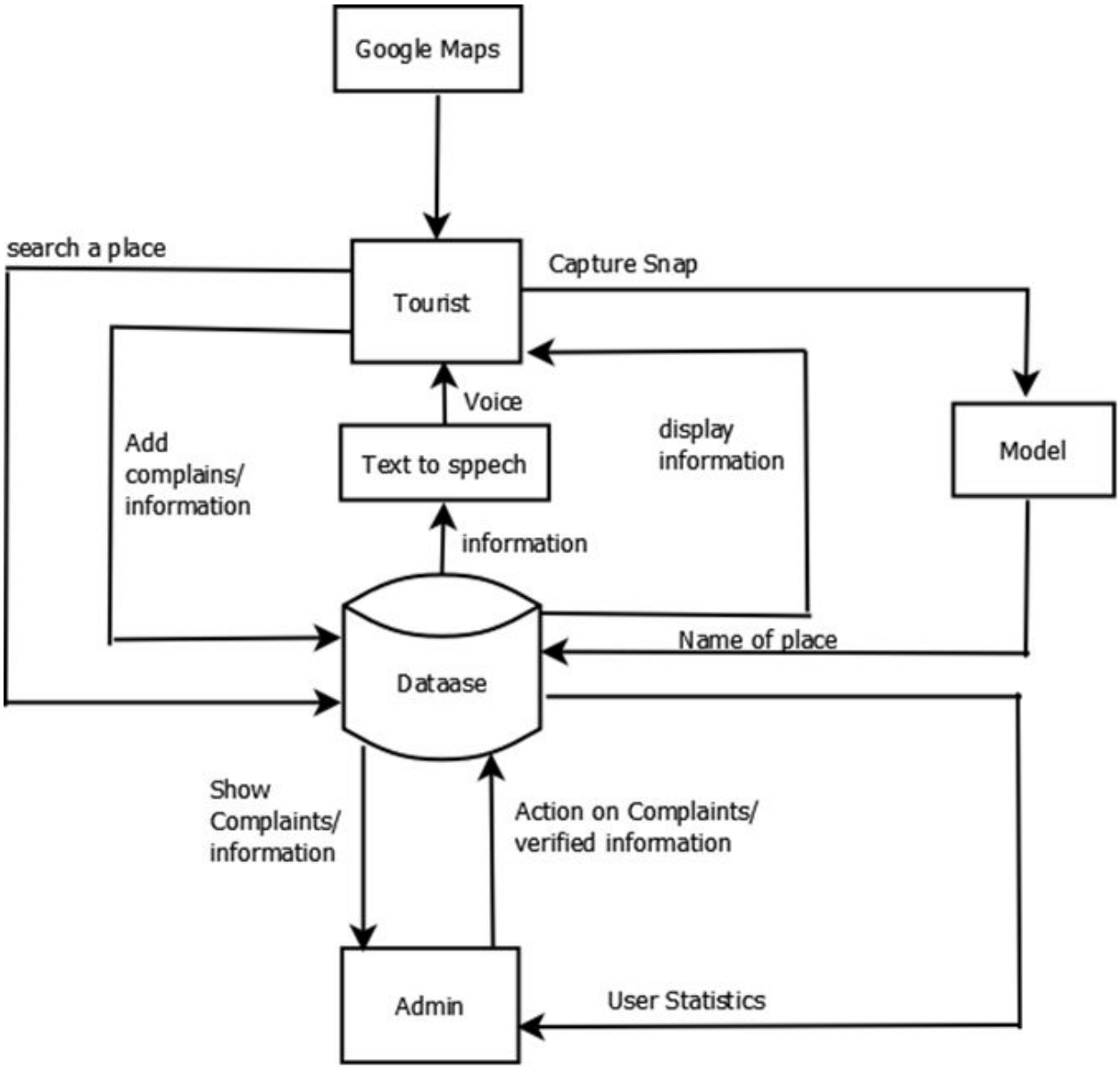
3.The information about activities/services done in goa .

4.The information of churches, temples,beaches,waterfalls etc.

5. The data of the user at the time of he/she register.

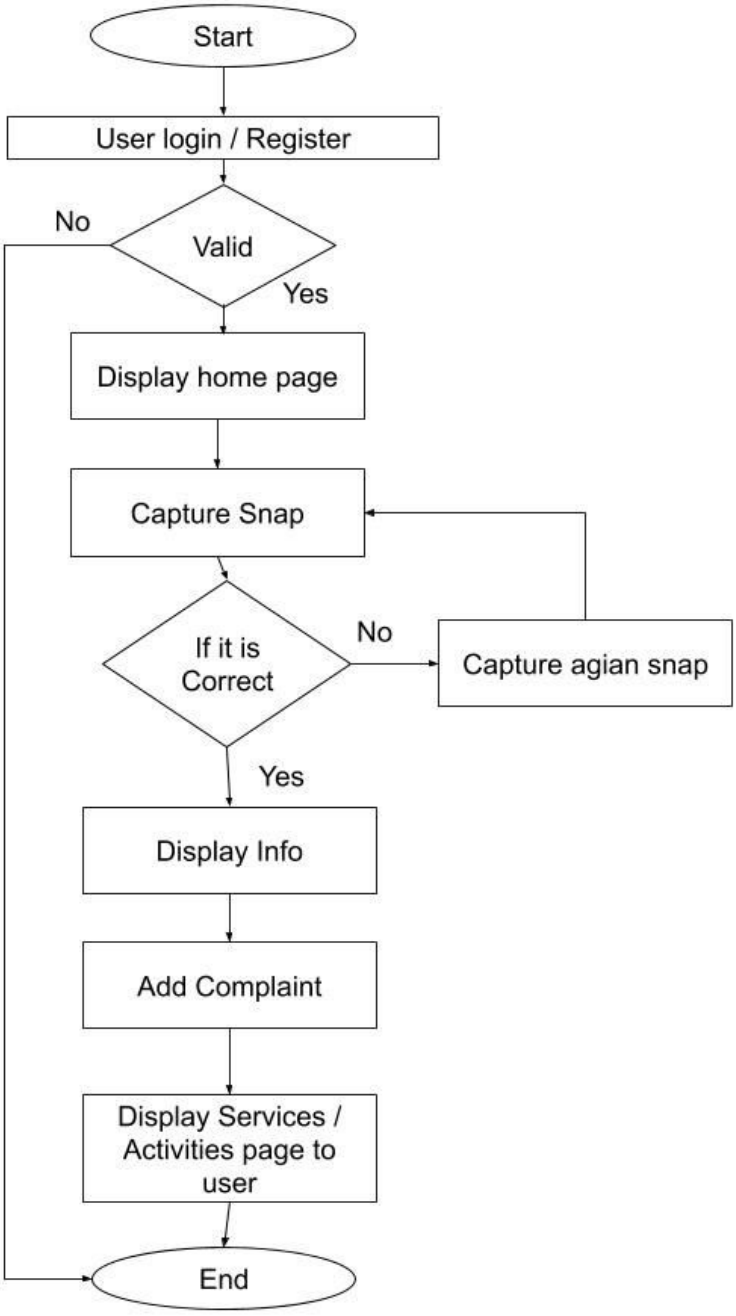
# 7.SYSTEM DESIGN

## 7.1 ARCHITECTURE DIAGRAM:

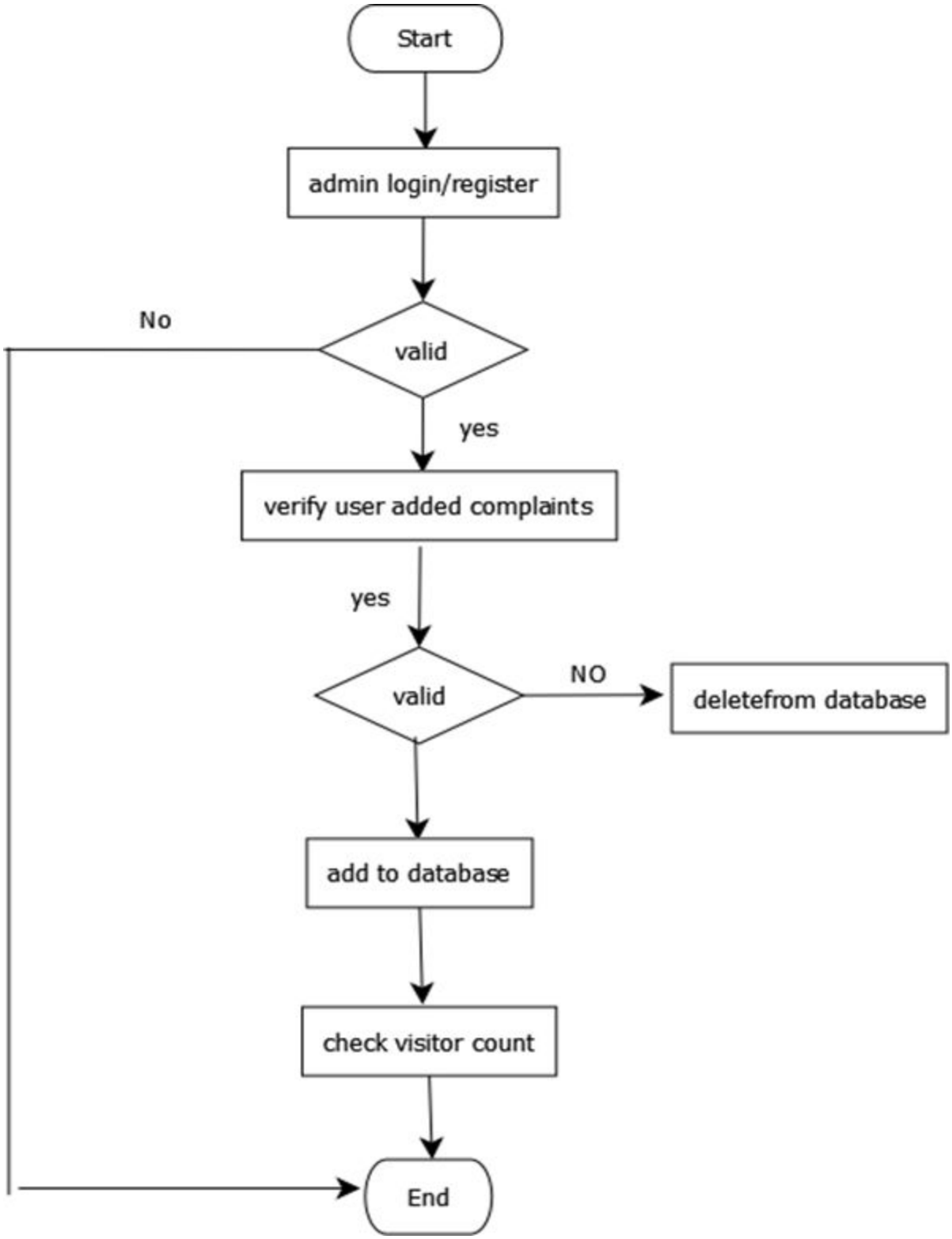


## 7.3 FLOW CHART:

User:

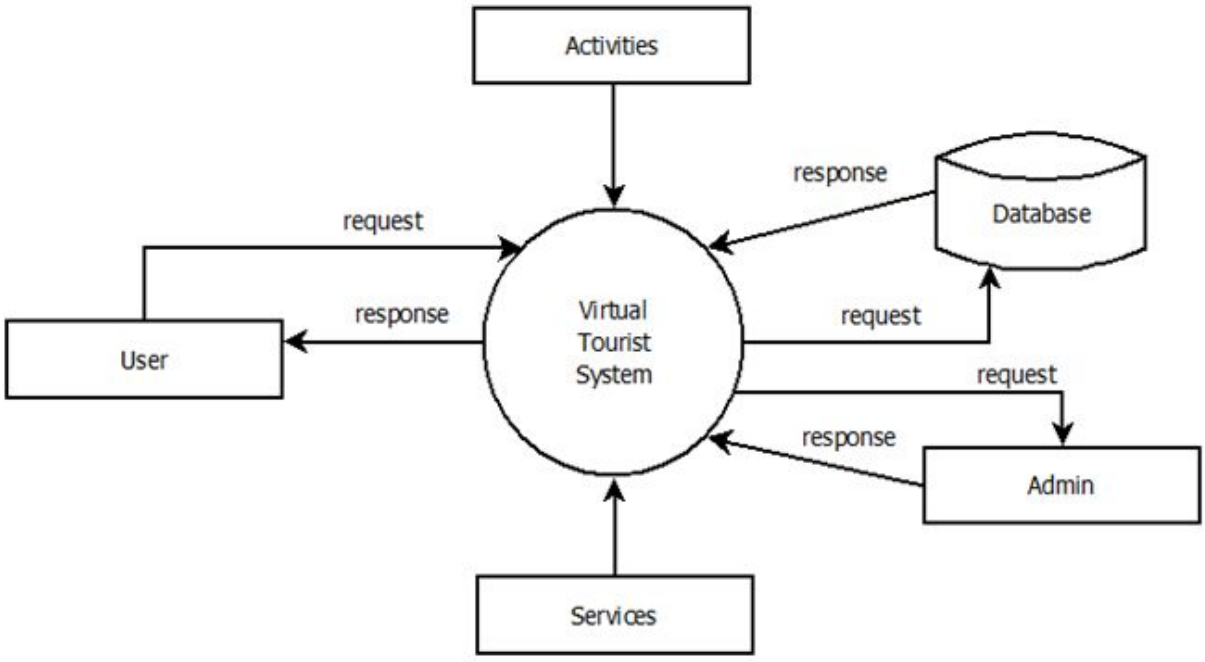


Admin:

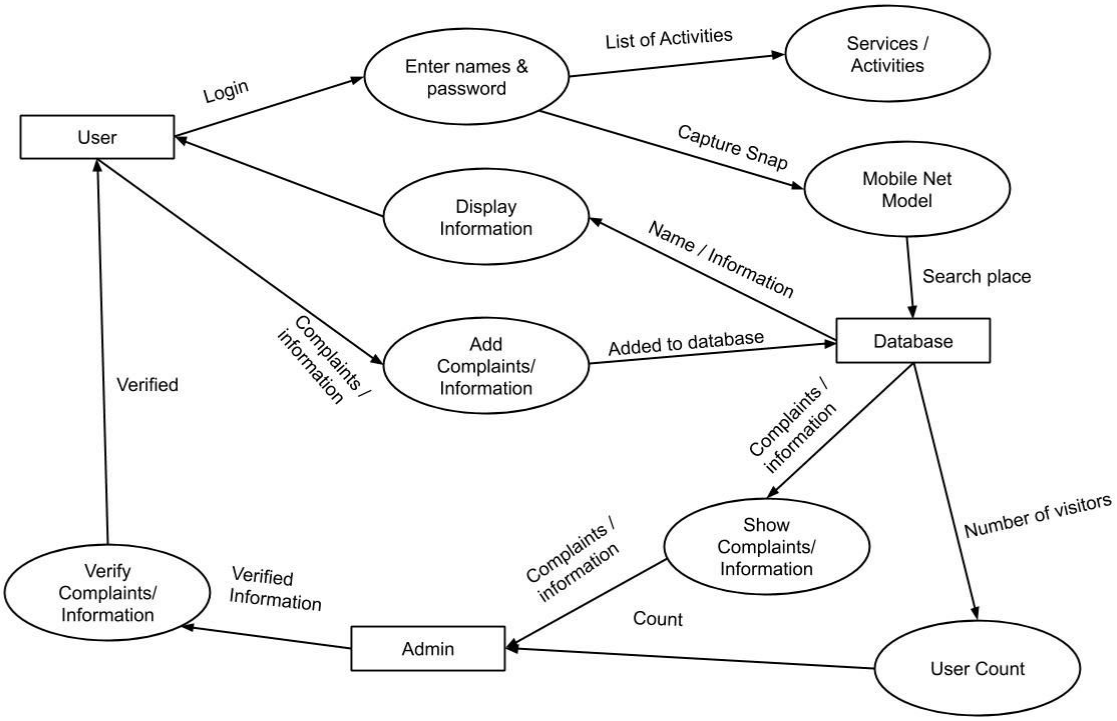

Start
admin login/register
No
valid
yes
verify user added complaints
yes
valid
NO
deletefrom database
add to database
check visitor count
End

## 7.3 DATA FLOW DIAGRAM

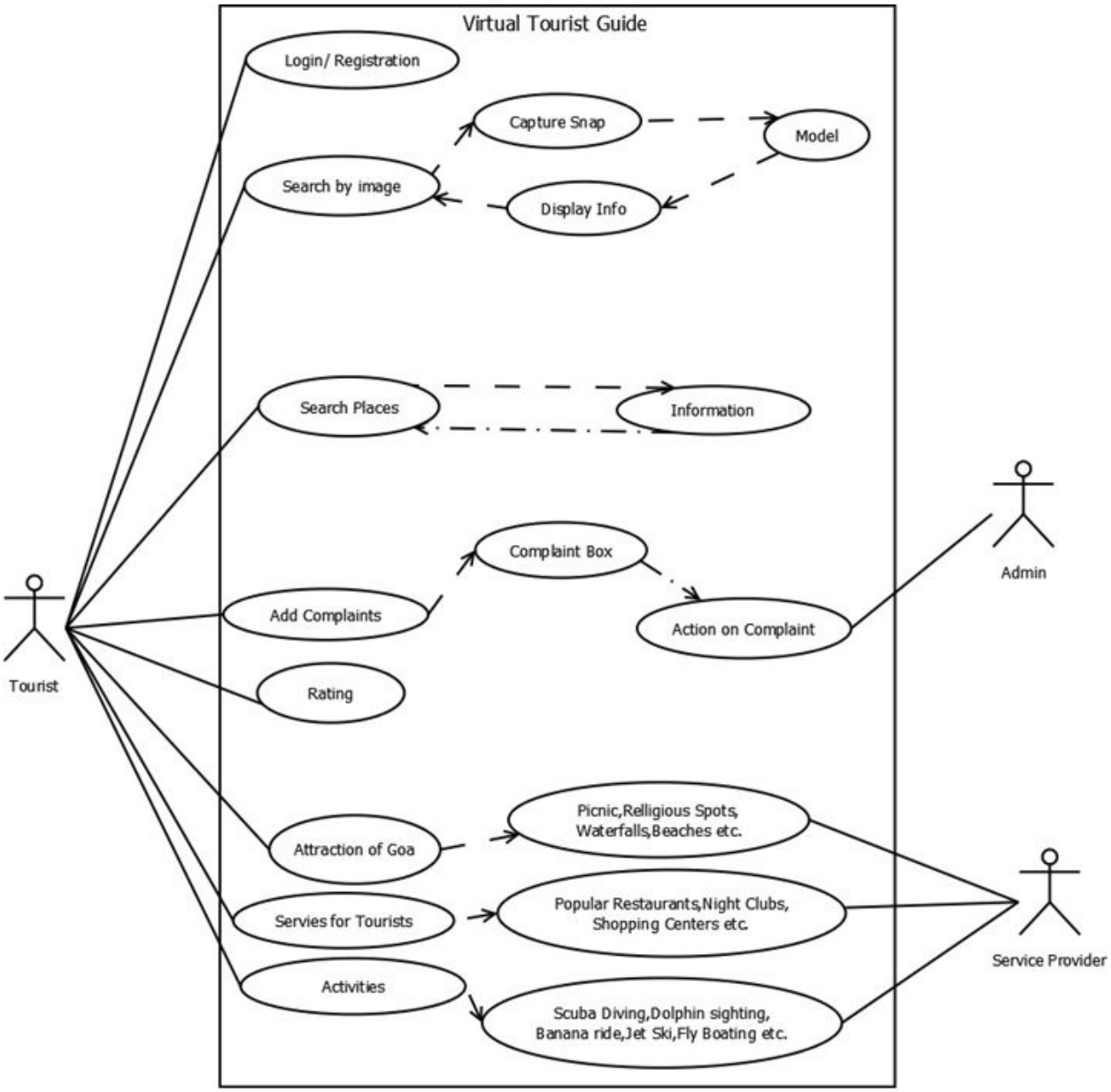
Level 0:



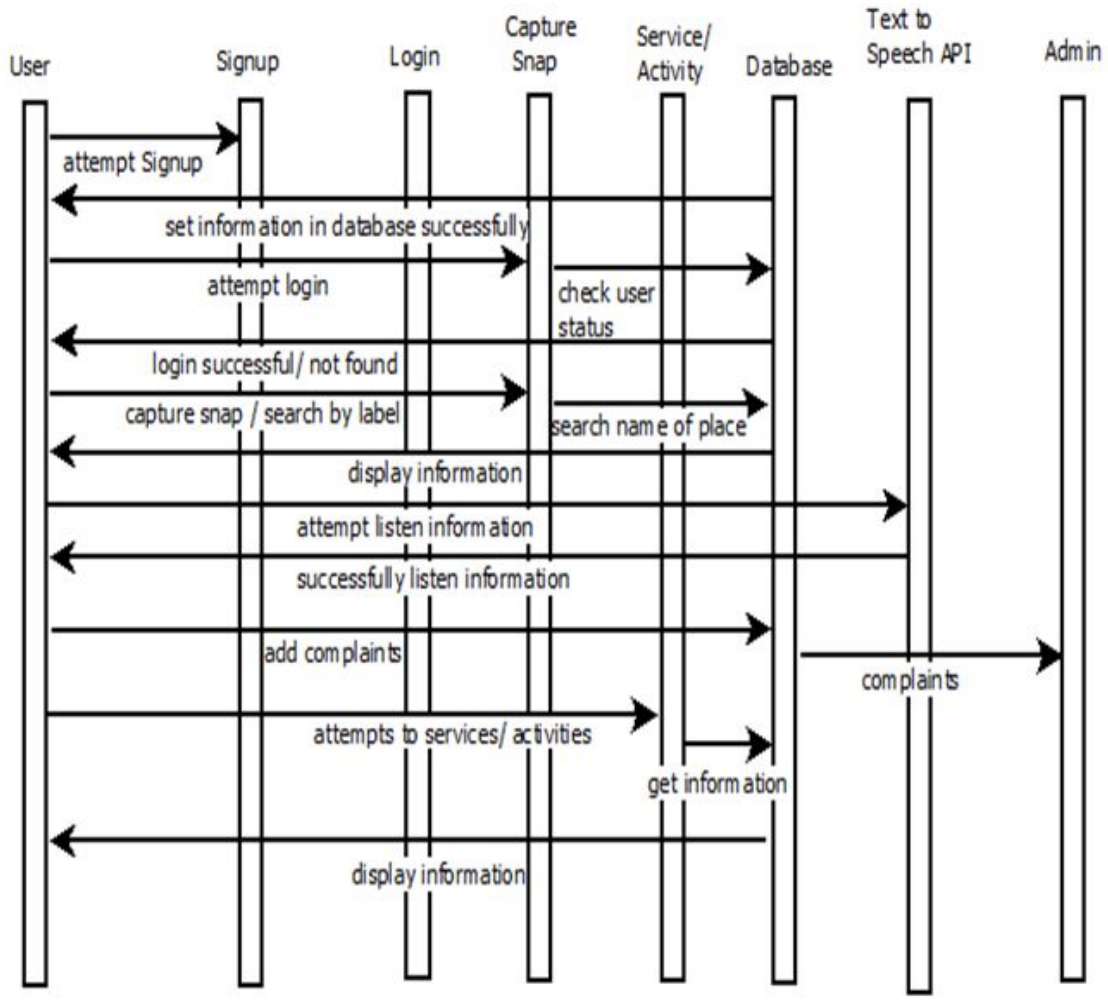
Level 1:


User
Login
Enter names & password
List of Activities
Services / Activities
Capture Snap
Mobile Net Model
Search place
Database
Name / Information
Display Information
Complaints / information
Add Complaints/ Information
Added to database
Verified
Complaints / information
Show Complaints/ Information
Number of visitors
Verify Complaints/ Information
Verified Information
Complaints / information
Count
Admin
User Count

## 7.4 USE CASE DIAGRAM:



## 7.4 SEQUENCE DIAGRAM :



## 8.IMPLEMENTATION:

User:

user Login

1. Enter gmail and Password
2. Check if gmail and Password is valid
3. If yes then start the HomeActivity
4. If no then show error for gmail and Password

Create Account

1. Enter gmail and Password
2. If gmail and Password is valid then create account successfully
3. If no then show error for valid username also for password

capture snap:

1.capture snap from camera

2.If model recognize it correctly then create query and fire on database and display information to the user

3.if model can't recognize it the recapture image

Admin:

Admin login:

1.enter valid gmail and password

2.Check if gmail and Password is valid

3.If yes then enter into system

4.If no then show error

monitor user information:

1.Monitor visitor count

2.check user added complaints

3.If it is valid the take action on it

4.If not then discard it

# 9.TESTING:

| Test case ID | Test Scenario | Expected Results | Actual results | Pass/Fail |
|---|---|---|---|---|
| 1 | Register user | Open registration page | As expected | Pass |
| 2 | Check validation of username | Should accept only valid username | As expected | pass |
| 3 | Register without username | Error message | error | Fail |
| 4 | Login with wrong username and password | Error message | Login page | Fail |
| 5 | Login with correct username and password | open home page | As expected | pass |
| 6 | Open camera to take snap | open camera | As expected | pass |

| | | | | |
|---|---|---|---|---|
| 7 | Search place by label | open place information | As expected | pass |
| 8 | Open List of activities/Services | open activity page/Service page | As expected | pass |
| 9 | Add the complaints/information | add to database | As expected | pass |
| 10 | Admin Login | open login page | As expected | Pass |
| 11 | Admin see Added information | open database page | Not added to database | Fail |
| 12 | Admin see Added information | open database page | added to database | pass |

## 10.SNAPSHOT:

10.1 Snapshots of UI:

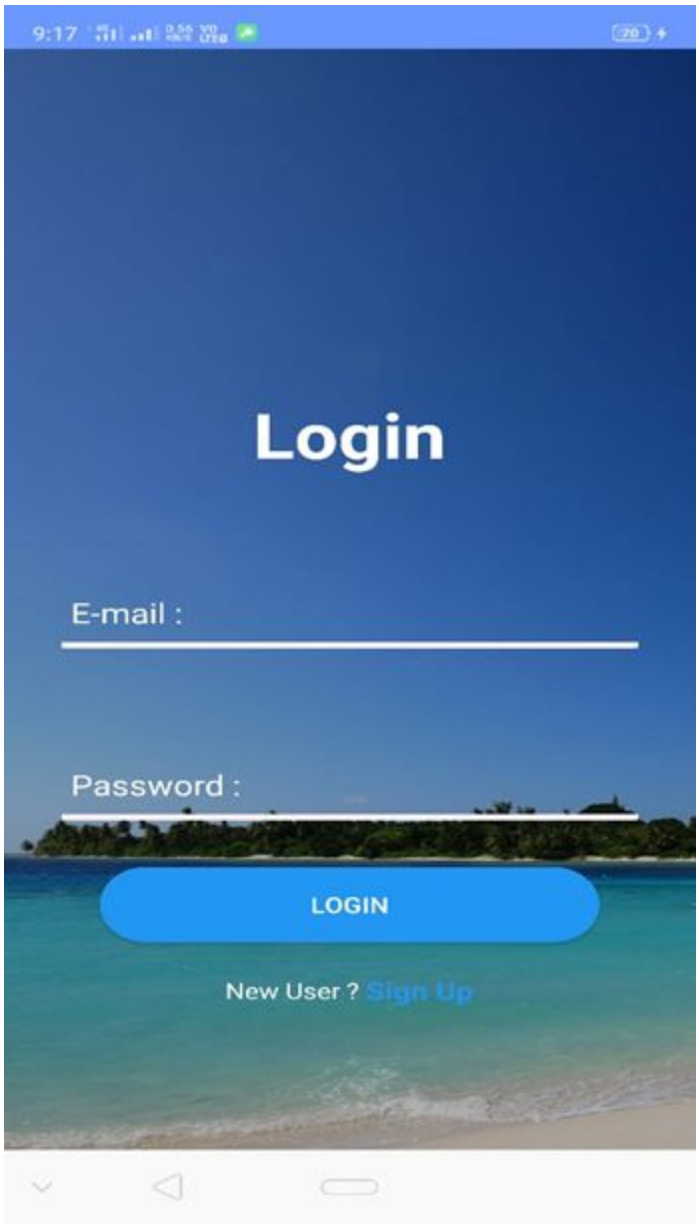



Fig 10.1.1 Login Page


Fig 10.1.2 Sign Up Page

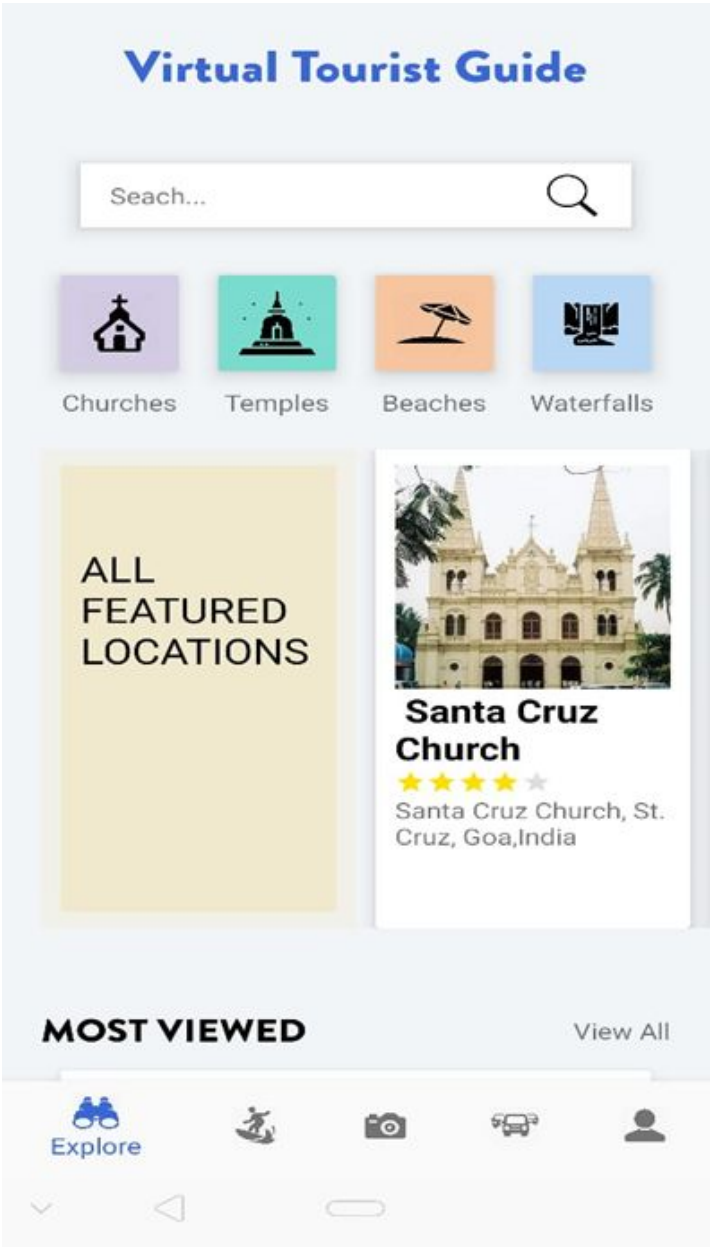



Fig 10.1.3 Home Page

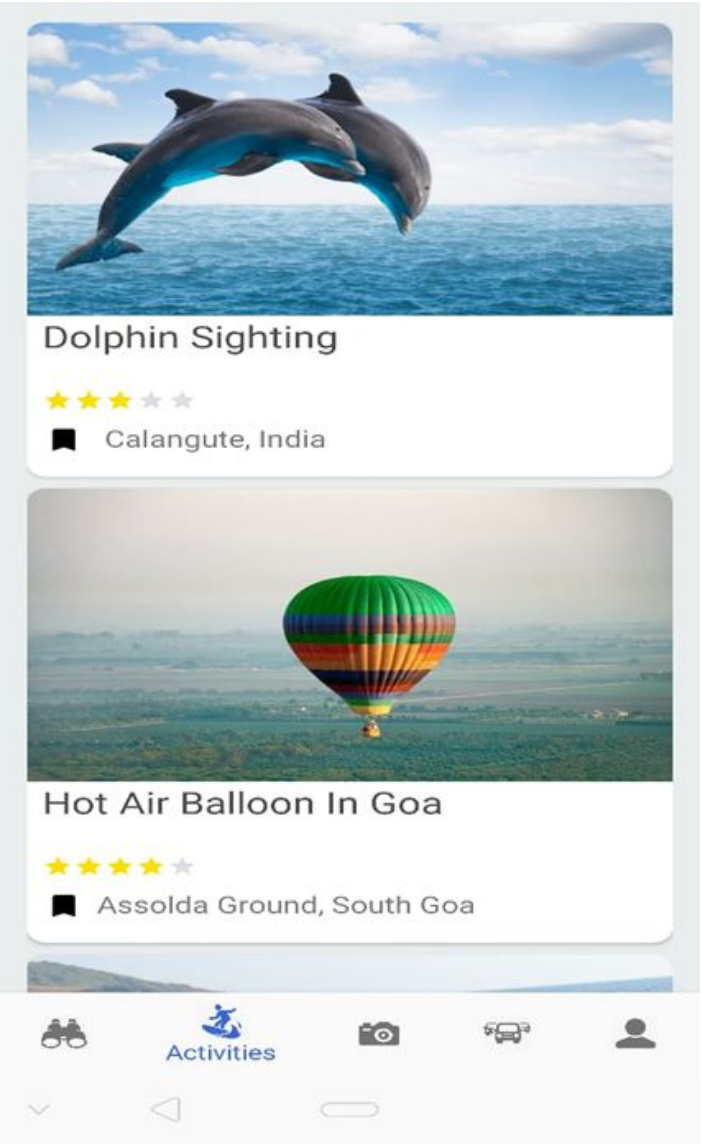



Fig 10.1.4 Activities Page


Fig 10.1.5 Display Activities Information Page

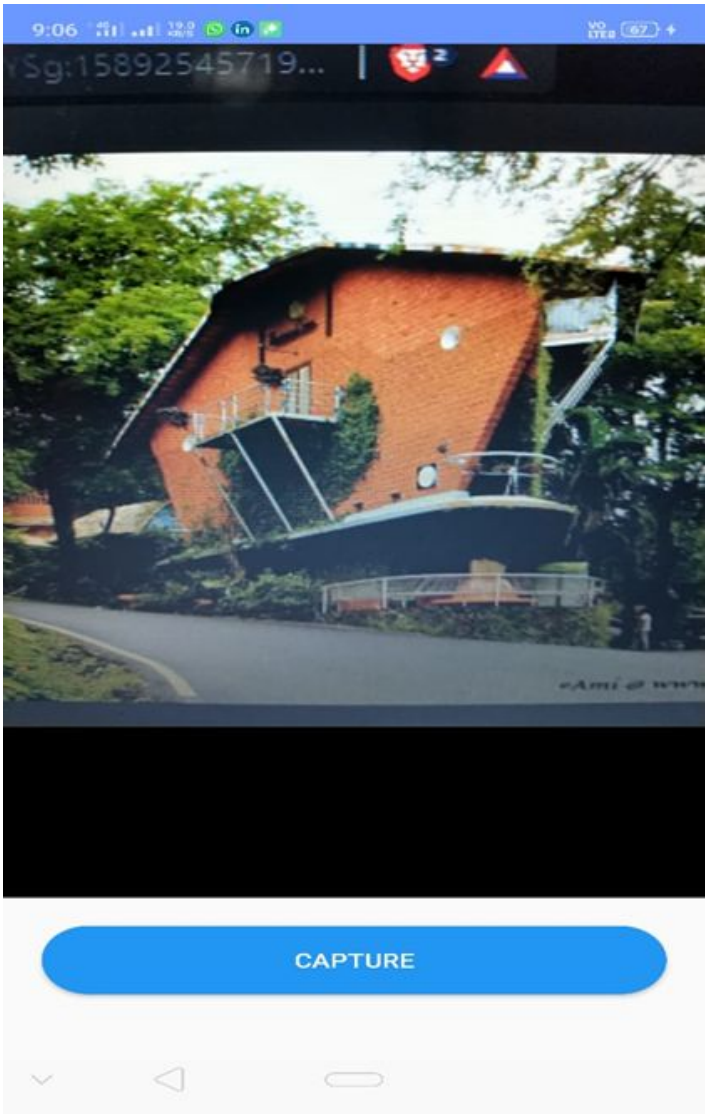



Fig 10.1.6 Capture Snap Through Camera

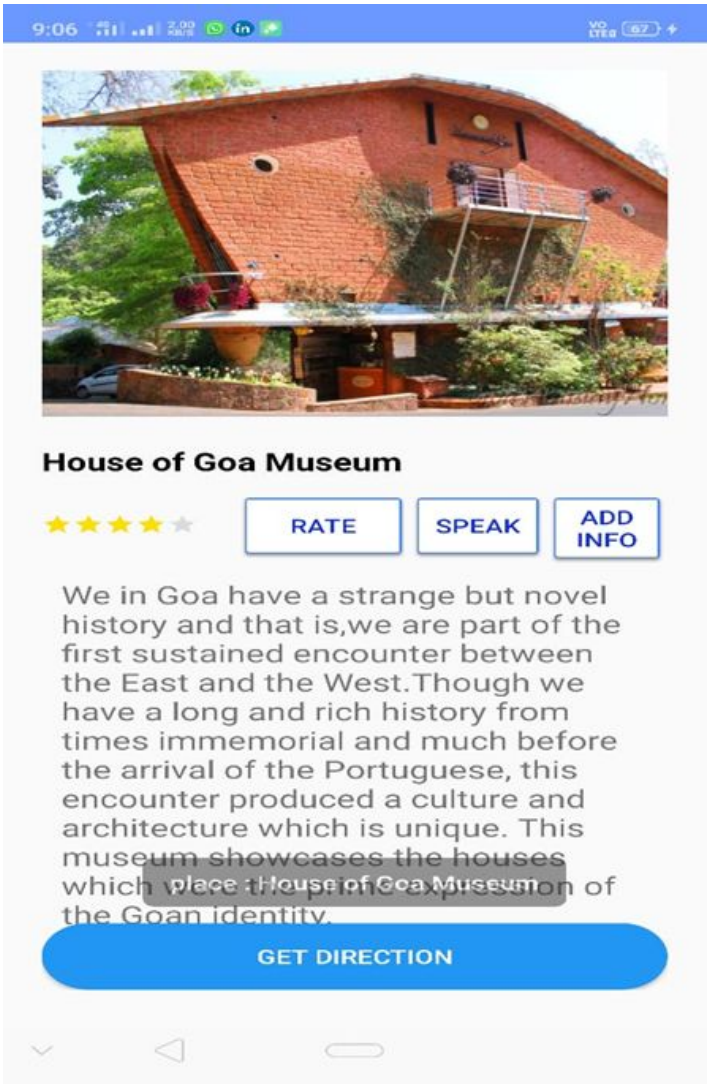



Fig 10.1.7 Display Captured Snap Information Page

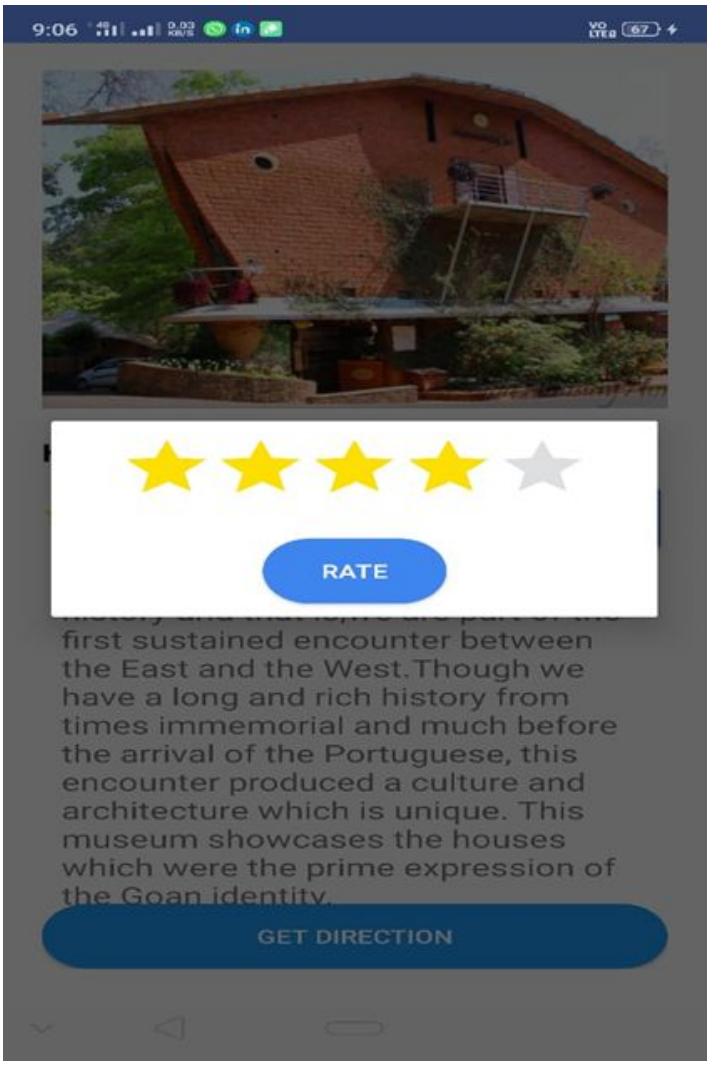



Fig 10.1.8 Give The Rating

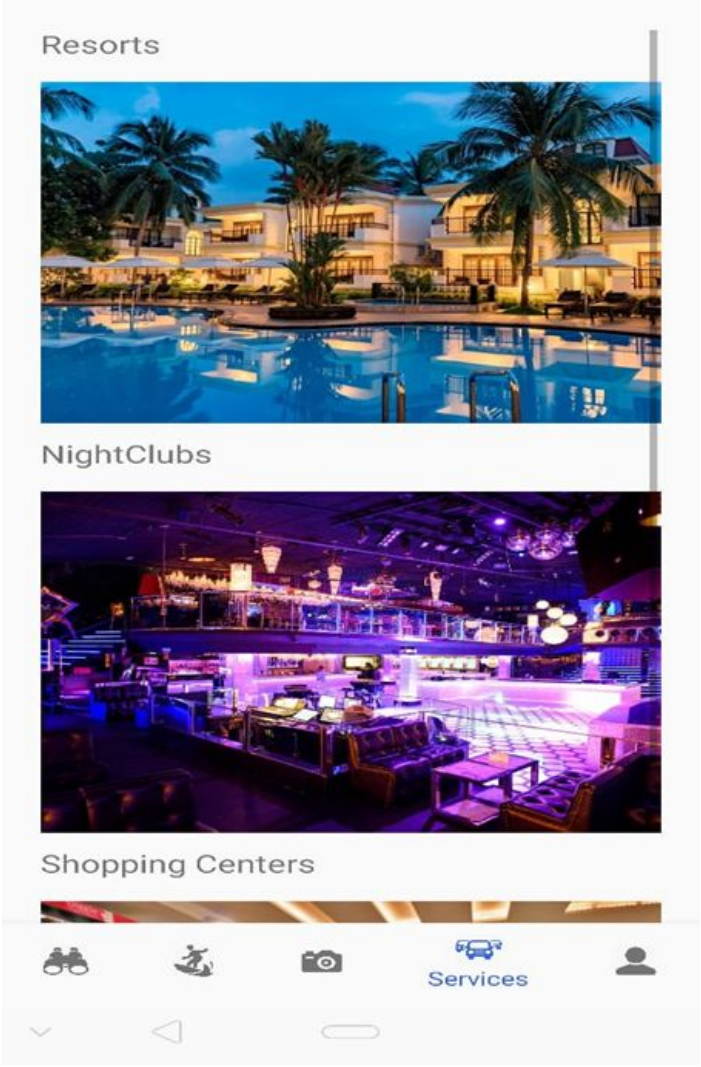



Fig 10.1.9 Services Page

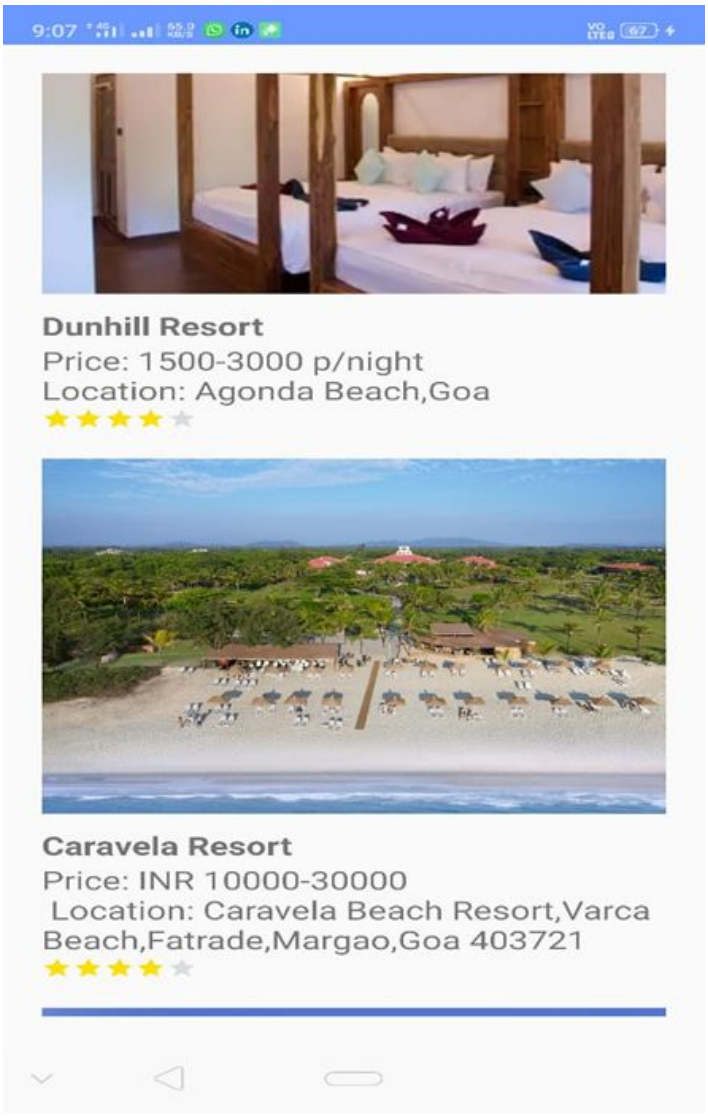



Fig 10.1.10 Display Services Information Page

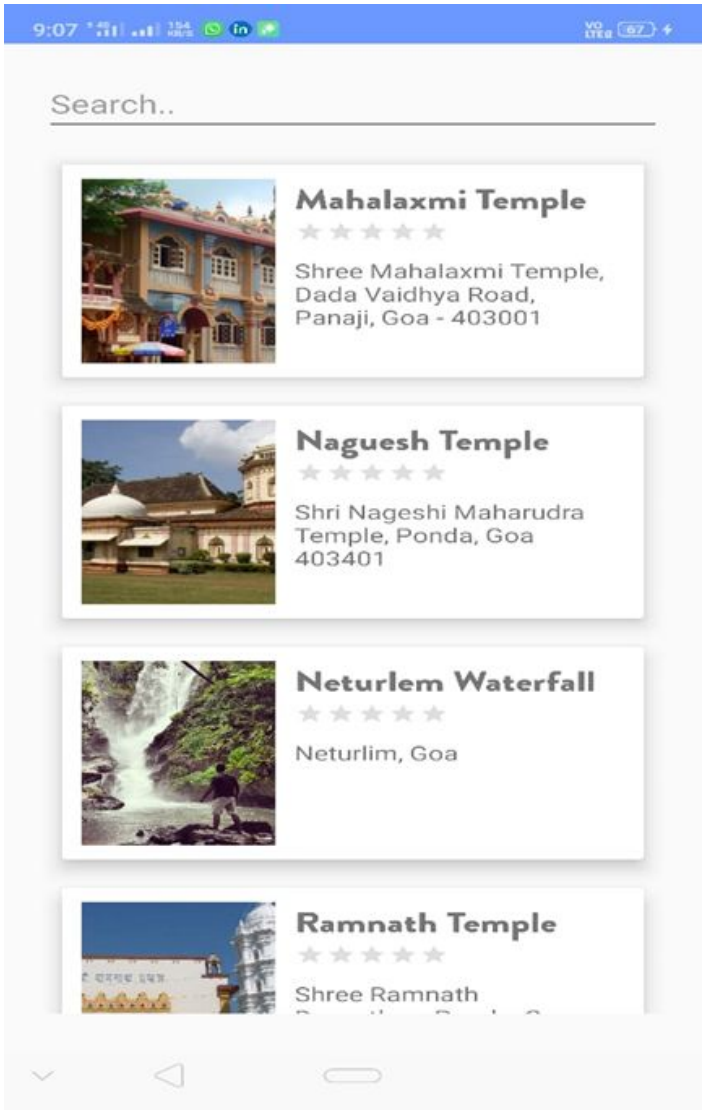



Fig 10.1.11 Search aMonument By its Label Through

Search By Label Facility

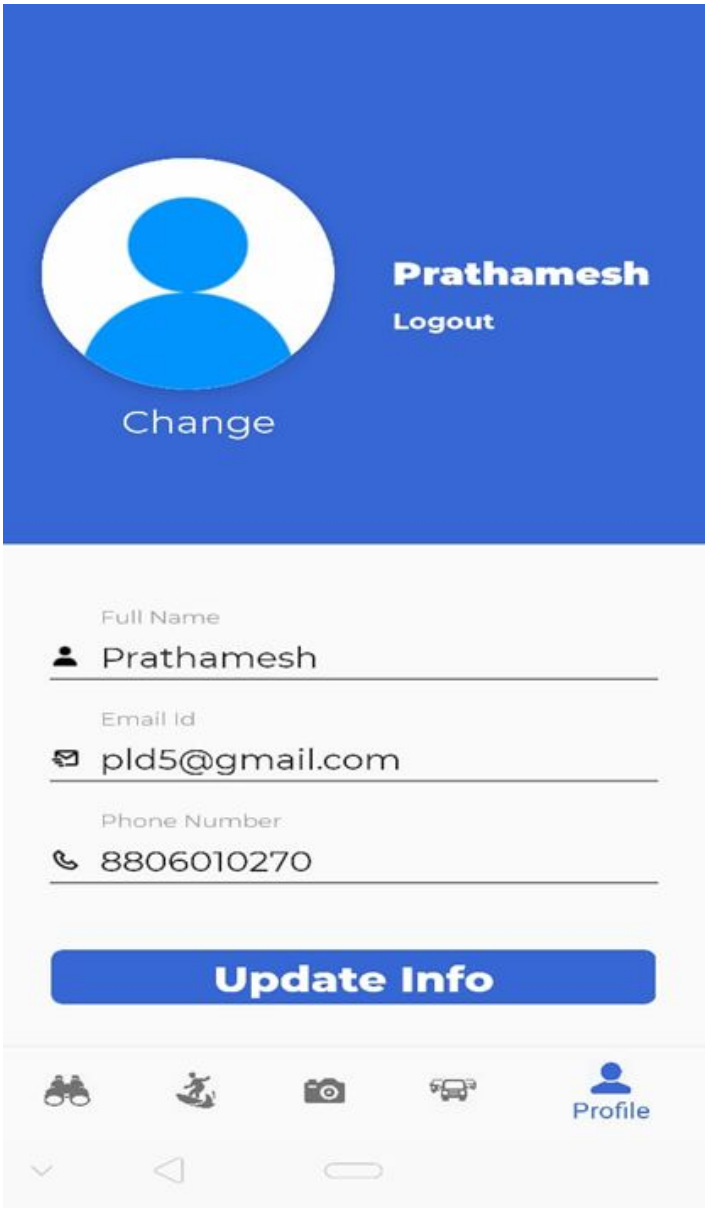



Fig 10.1.12 View User Profile

## 11.CONCLUSION:

Our application successfully identifies different places.With help of application we can plan our journey efficiently without using manpower. We can also add more information about the place that can be further added dynamically. If we found something improper at the place then we can also add complaints regarding that place . If the user is interested in listening to the contents rather than seeing the contents then we also provide extra facility that is text to speech .

# 12.REFERENCES


https:/wikipedia.org/

https://www.wikibooks.org/

https://www.sih.gov.in/sih2020ps