PROBLEM CODE:#RH4

MINISTRY CATEGORY: Ministry of Road Transport and Highways-Mobile Mechanic

PROBLEM STATEMENT: In case of tyre burst /puncture the nearest mechanic with contact details can be found through the app. The mechanics can be registered in the app and they will receive a notification for a nominal charge

TEAM NAME: EDIFY

SOLUTION

- The app uses google maps to find the current location of the user and displays the nearby mechanics with the contact number.
- The details of the mechanic is stored in the database. The location of the mechanic is also tracked.
- After the mechanic completes the service, the notification is generated to user about the amount to be paid as per the services provided.
- The payment is done digitally by online transaction.

FUNCTIONALITIES

Mobile Mechanic:

- Enduser with app - Has Internet. Has GPS.
- Enduser with app - No internet. Has GPS - Offline version.
- Enduser with app - No internet. Has GPS - Offline helpline version.
- Enduser without app - Offline SMS version.

Women SoS:

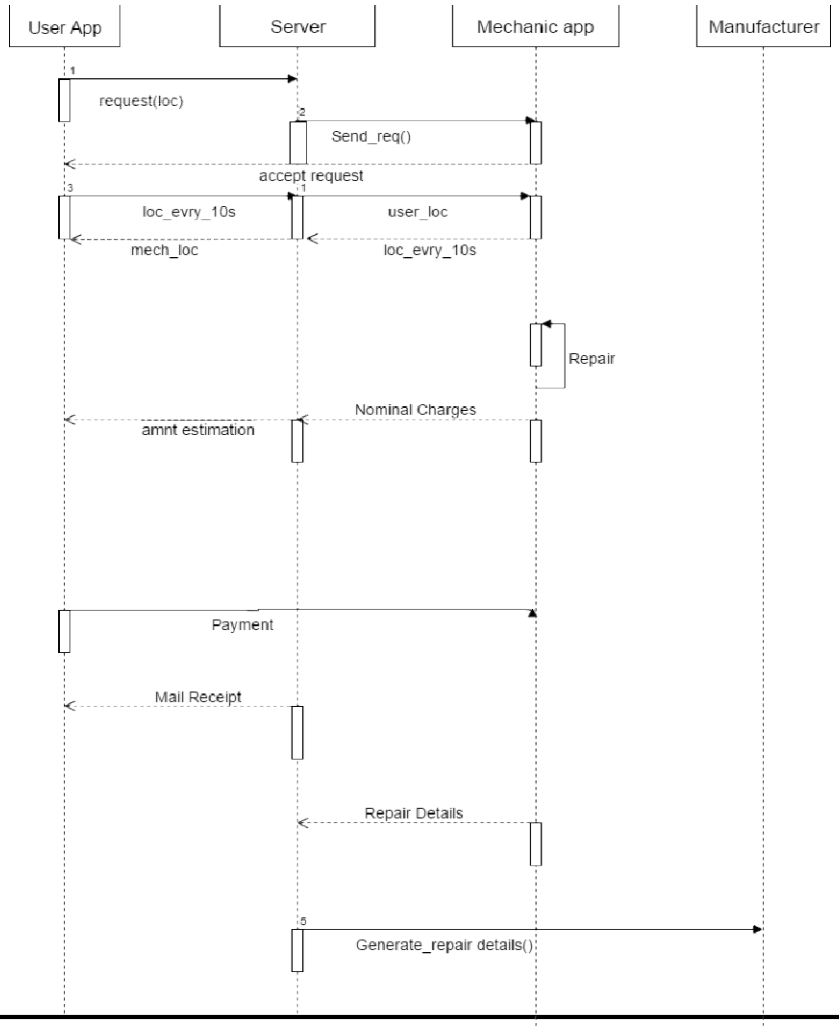
- Enduser with app - Has GPS, Has Internet
- Enduser with app - Has GPS, No Internet- Offline SMS version.
- Enduser with app - Has GPS, No Internet-Offline helpline version.

FUNCTIONALITY 1:

Enduser with app:

Has internet

Has GPS



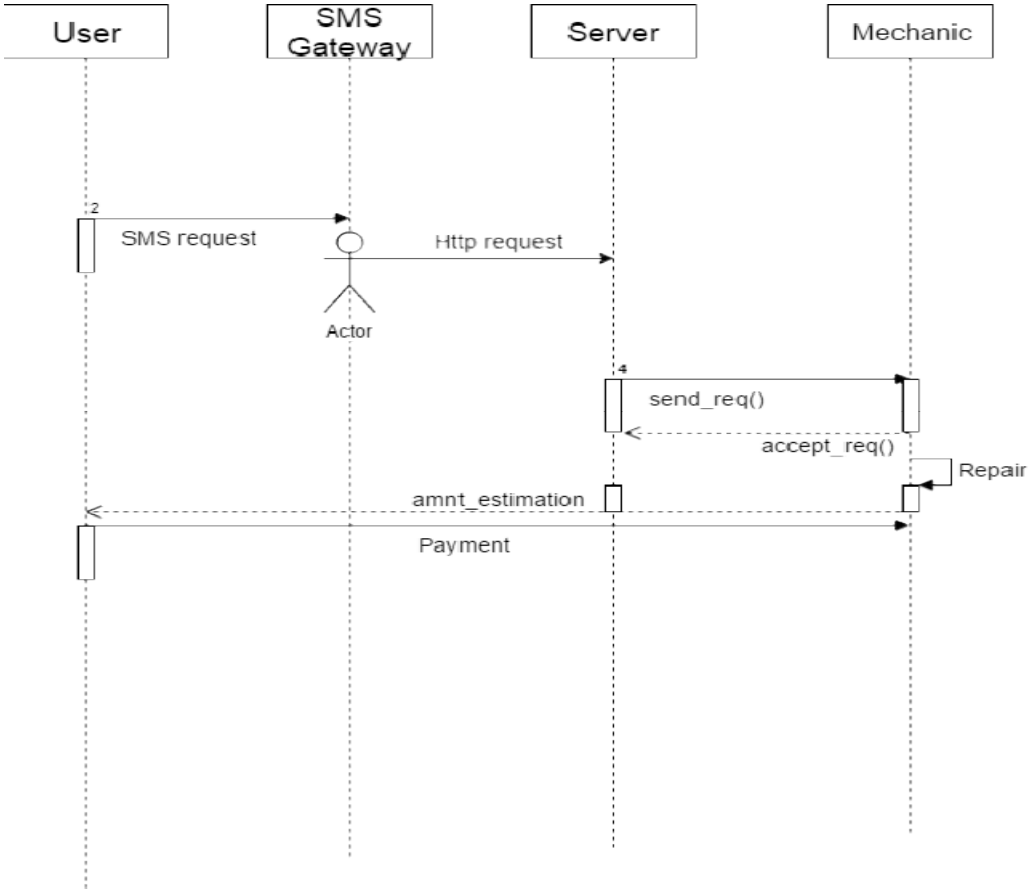
FUNCTIONALITY 2:

Enduser with app:

No internet

Has GPS

(Offline version)



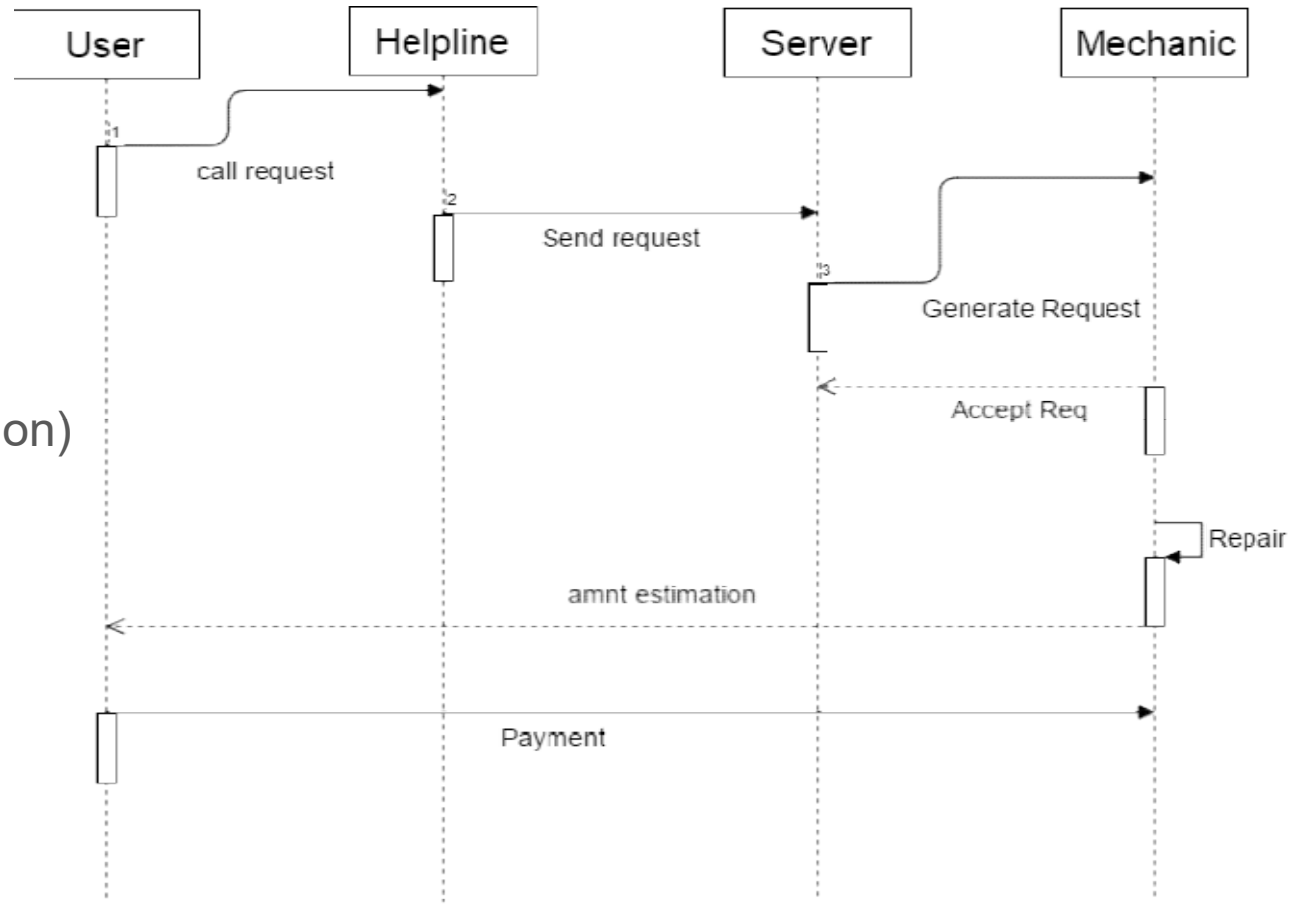
FUNCTIONALITY 3:

Enduser with app:

No internet

Has GPS

(Offline helpline version)

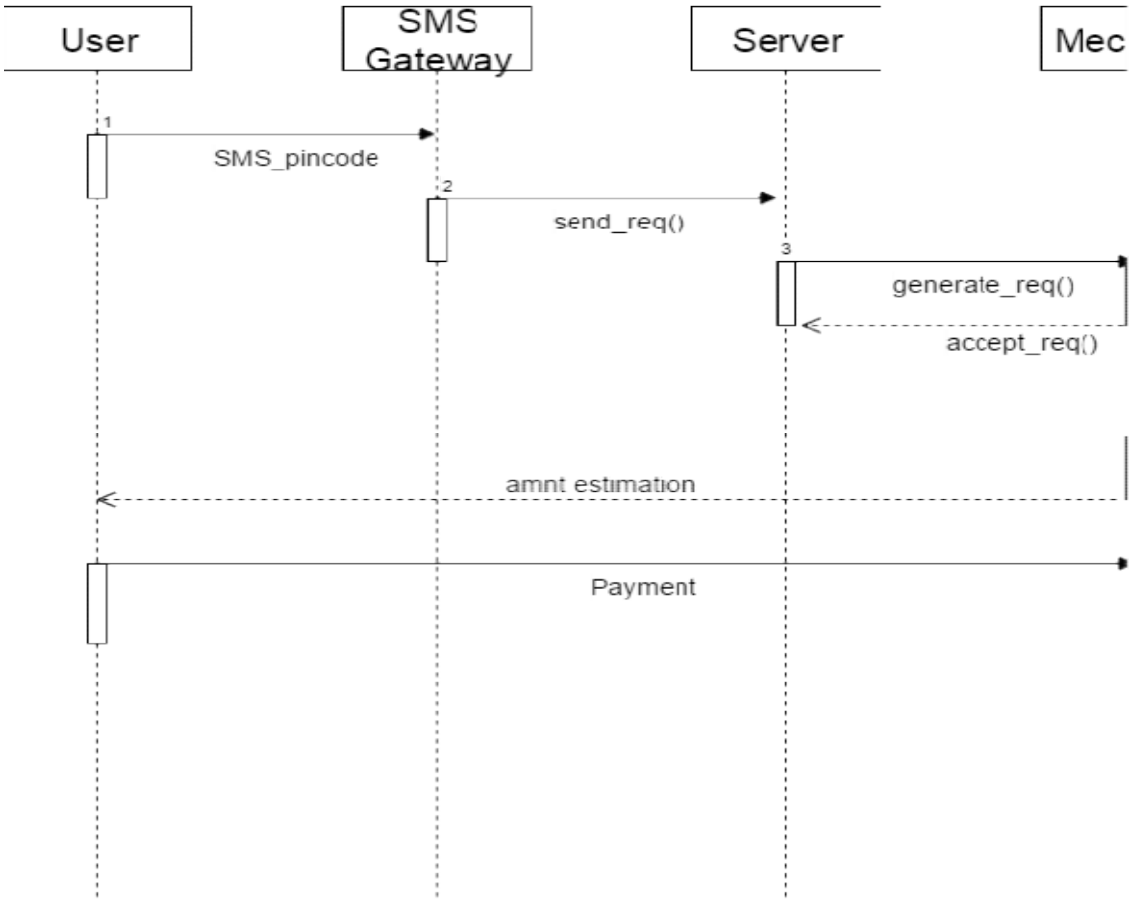


FUNCTIONALITY 4:

Enduser without app:

No internet

(Offline SMS version)

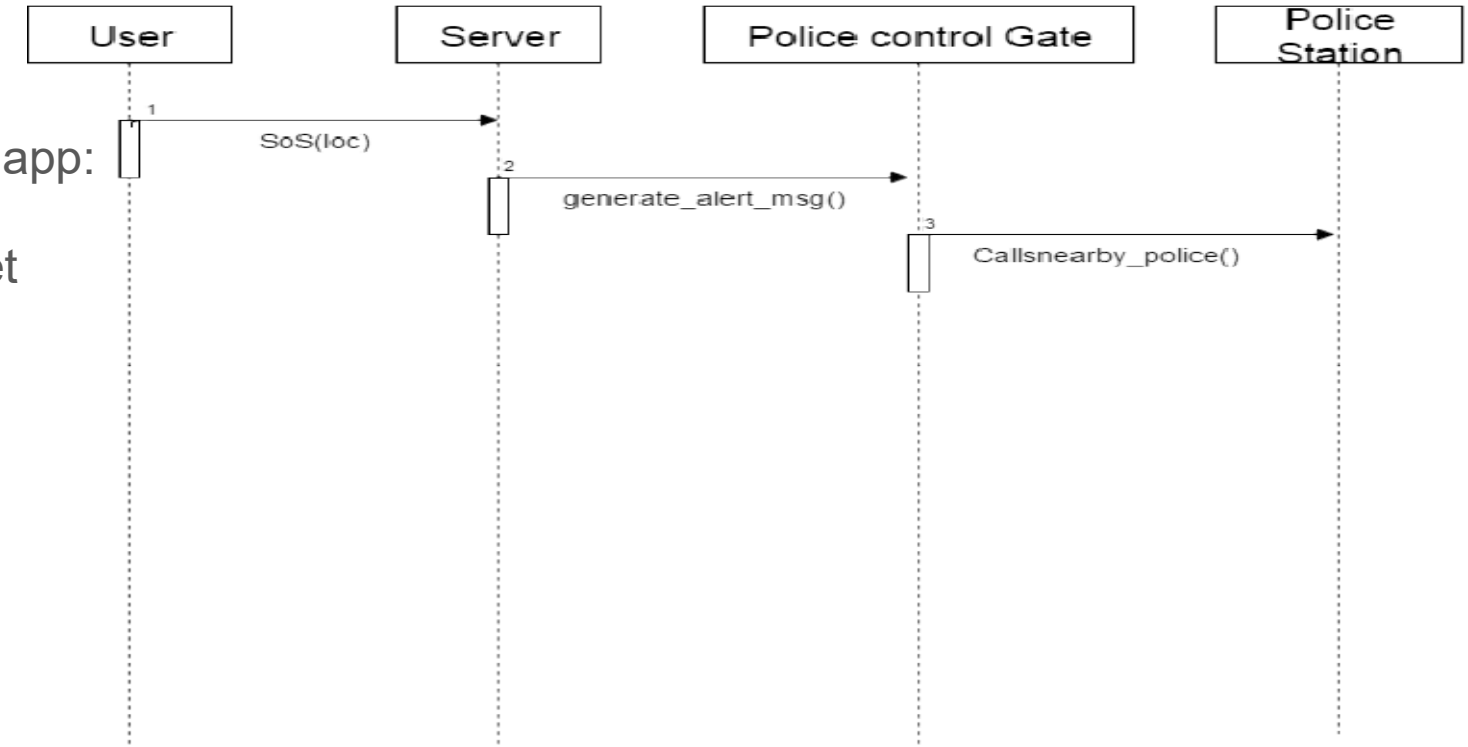


FUNCTIONALITY 5:

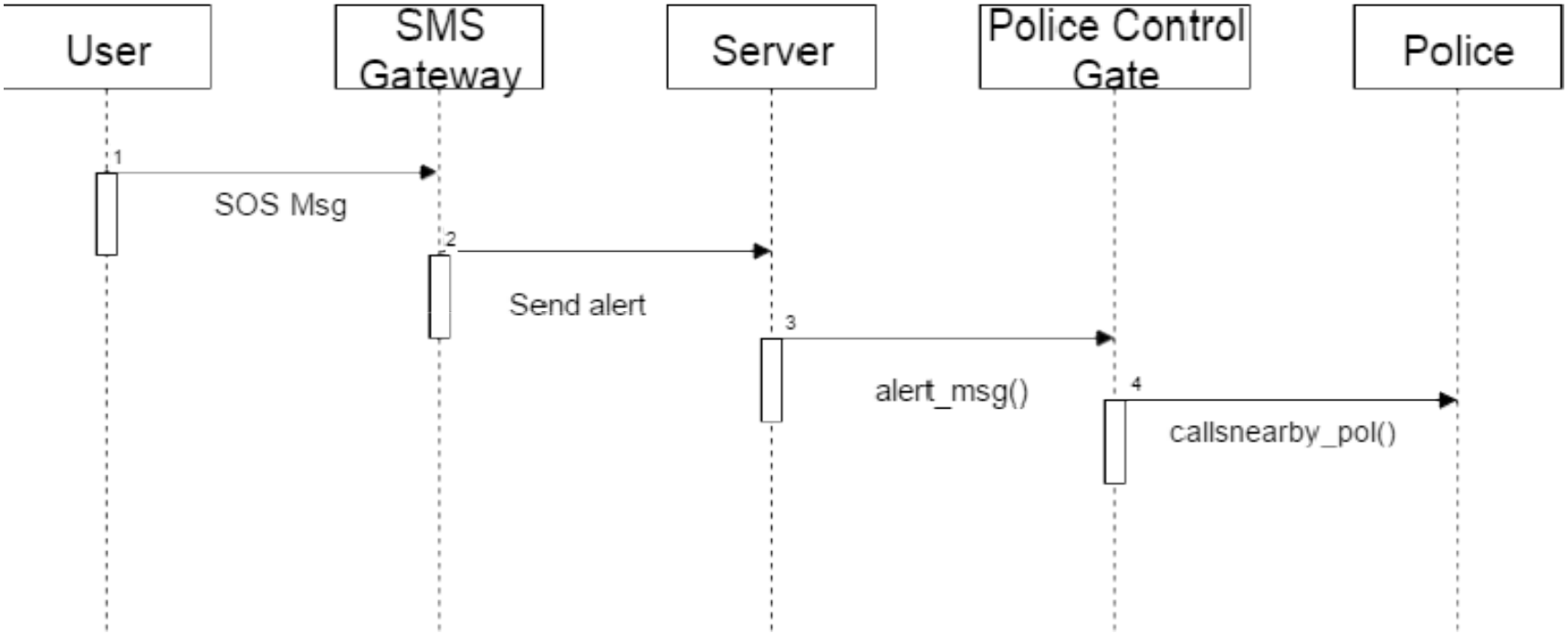
Enduser with app:

Has internet

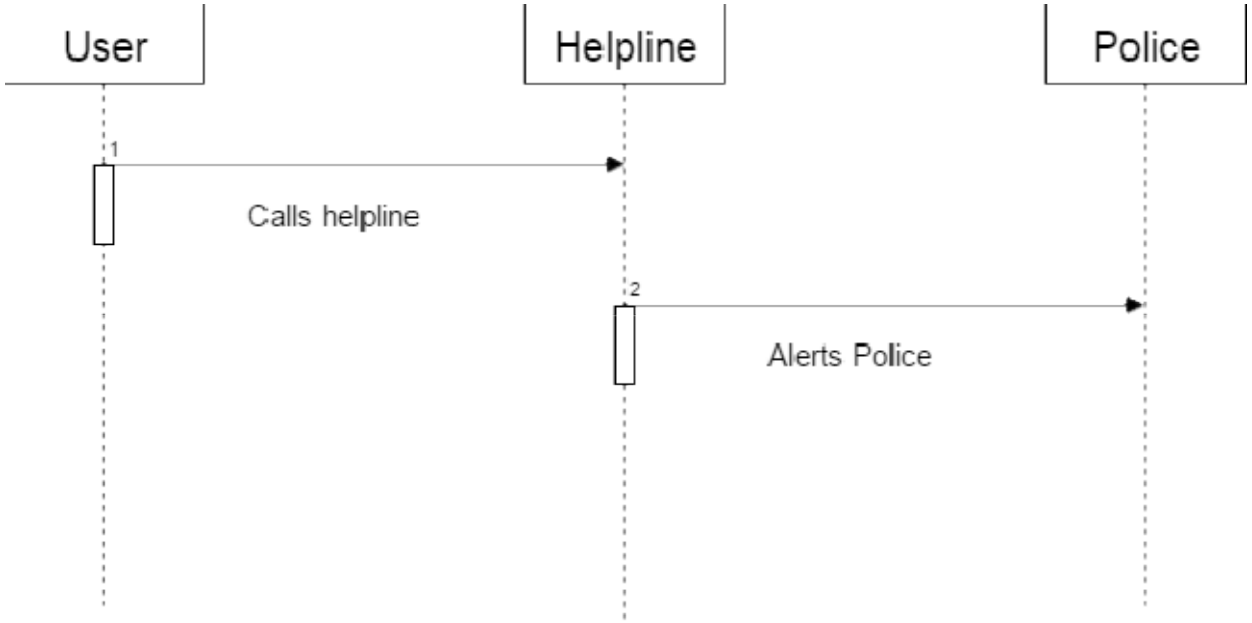
Has GPS



FUNCTIONALITY 6: Enduser with app-No internet ,has GPS (Offline SMS Version)



FUNCTIONALITY 7: Enduser with app- Has GPS,no internet (Offline Helpline)



USER PHASE:

- The user must register before signing into the app.
- Once the user signs into the app, the current location of the user is tracked by the google map.
- All the nearby mechanics will be visible on the map,the user chooses a mechanic.
- If the mechanic accepts the request,he can be tracked by the user.
- The required services will be done by the mechanic.
- The payment is made digitally. After the online transaction,the user receives the verification mail.

MECHANIC PHASE:

- The mechanic must register before signing into the app and must be logged in always so as to receive the notifications.
- Once the mechanic receives the request, the location of the user is identified.
- The mechanic provides an estimation for the service provided.
- The payment is done digitally and finally verification is received by mail.

FUTURE SCOPE:

OPEN STACK:

The app can be made real time by using the OpenStack cloud platform which is an open source database.

OpenStack aims to create abstracted pools of compute, storage, and networking resources that can be used to create virtual machines on top of standard server hardware.

CITRUSPAY GATEWAY:

Citrus Pay is India's fastest growing open source financial technology company - providing payment gateway, one-tap pay.

The back end for the storage of data is openstack. The security for the payment is implemented using RSA algorithm.

ADDED FEATURES IN THIS APP:

UNEDUCATED DRIVERS:

- Language compatibility
- User-friendly

24*7 TOWING SERVICES:

- Nearby vehicle towing services will be displayed on the maps so that the user can easily access the service centre when needed.

INCENTIVE FOR MECHANIC-NOMINAL CHARGE:

Based on the customer rating and the on-time availability of the mechanic, the incentive for the mechanic will be provided.

WOMEN SAFETY:

For the safety of the women an SOS message will be generated in case of emergency.

BENEFITS TO THE GOVERNMENT

Vehicle breakdown repetition in a particular area would require transport ministry inspection of the road.

Repeated Women Sos would require the government to strengthen the police force in the particular area.

Identification of the companies and their products that fake the quality test conducted by the government, if the problem is so often.

Repetition of the issue would help the manufacturer to solve the problem in the manufacturing unit.

TOOLS:

Android Studio

Netbeans

mySQL