

Android Project: Service Novigrad



SEG 2105: Introduction to software engineering

Fall 2020



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Table of Contents

Introduction:	3
Functionalities of Administrator:.....	3
Functionalities of Branch Employee:	3
Functionalities of Customers:	3
Class Diagram:.....	4
Lessons Learned:	5
Screen Shots of the app:	6



Introduction:

Service Novigrad is an android application which implements basic functionality for services offered by an imaginary province called Novigrad to its residents like those provided by Service Ontario or Services Québec which allow citizens to obtain a driver's license, photo ID, or health card.

The app has three different types of users i.e., the administrator, the Service Novigrad branch employee, and the customers. The administrator manages all the possible services that can be offered to customers by different Service Novigrad branches. The branch employee creates a profile for the branch, selects the services offered by that branch, and specifies the working hours. The customers can search for a Service Novigrad branch by address or by type of service provided or by working hours of the branch. They will get notifications on the approval or disapproval of their requests. They can rate the branch on their experience.

Functionalities of Administrator:

- Will be able to log in to the system by using a specific id and password.
- Can manage the services provided by a branch.
- Can specify driver license, Photo ID, Health card of the customers.
- Can delete account of branch and customers.

Functionalities of Branch Employee:

- Will be able to log in to the system
- Can create an account for the branch.
- Will be able to select the services provided by a branch and working hours of the branch.
- Can view the request sent by the customers for driver licenses, Photo ID, and health cards.
- Will be able to approve or disapprove these requests.

Functionalities of Customers:

- Can create account and log in to the system.
- Will be able to search the branches based on their address or services provided by the branch or the working hours of the branch.
- Can select the service they want to purchase.

- Will be able to fill in the required form and submit the documents in image form.
- Will receive notification on approval or disapproval of a request.
- Can rate the branch based on their experience.



Class Diagram:

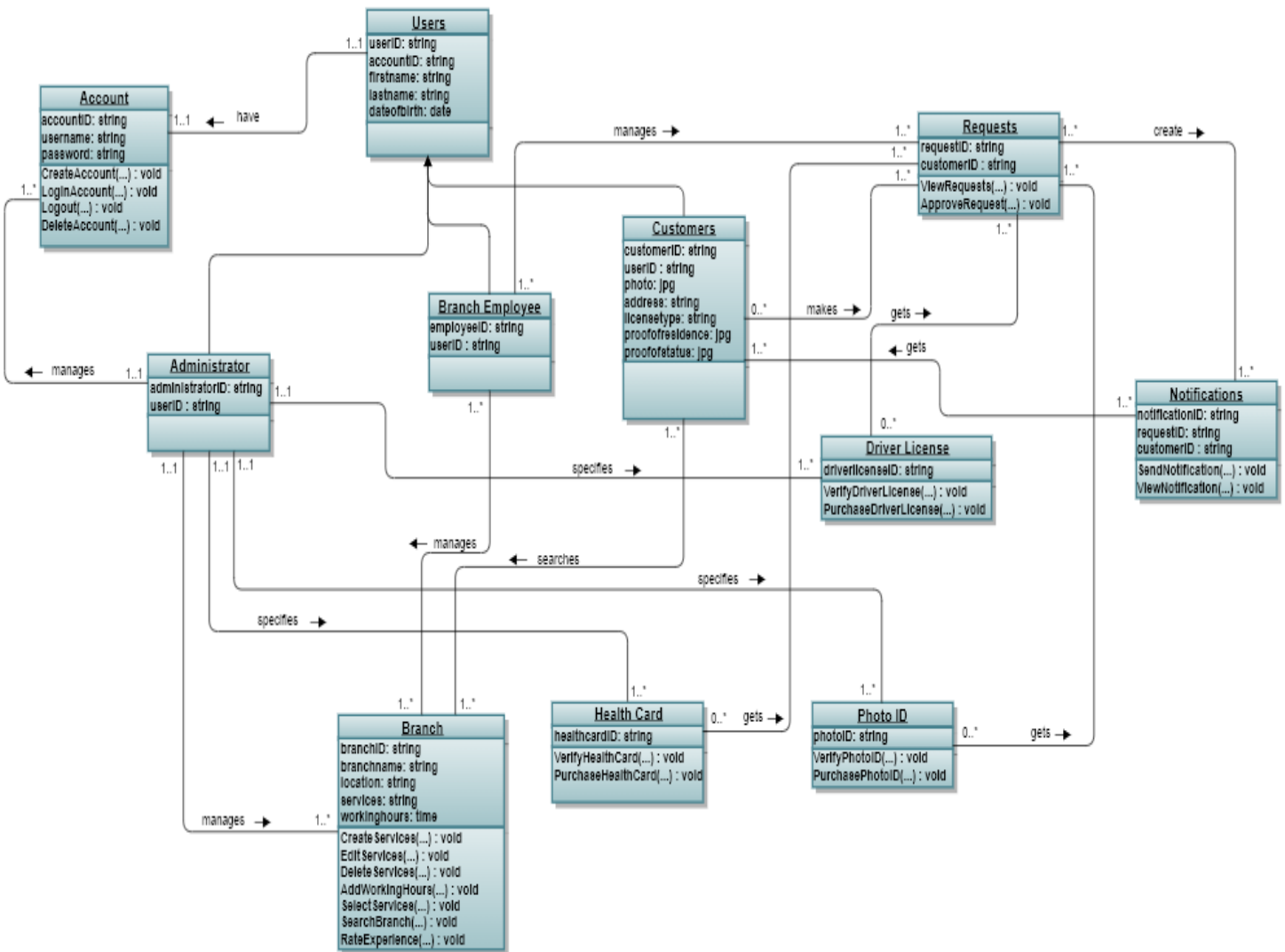


Figure 1: Class Diagram of Service Novigrad

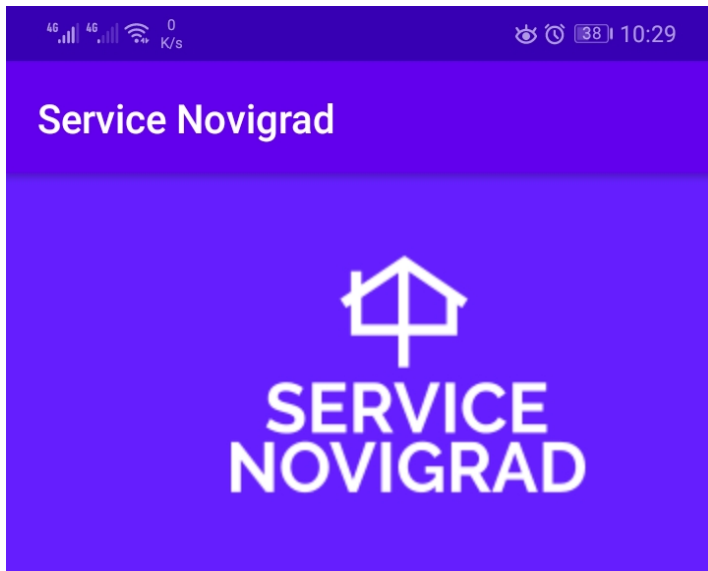


Lessons Learned:

- How to work as a group and it created a great atmosphere for the work.
- Brainstorming for the solutions was easy.
- Work was equally divided among group members, but it was an overall effort of the team.
- We learnt about requirements gathering.
- How to analyze the requirements and then model them using UML Diagrams.
- Implementation of software design life cycles.
- Working on android was quite tough, due with help of every member an internet we were able to achieve the goal.
- We learnt many new features of the android studio.
- We were able to learn many things about storing data and firebase.
- Firebase Realtime database, cloud messaging (FCM).
- Learnt about the application frame works which provide services to create an environment to run an android app.
- Java was used to add the functionalities and xml was used to design the front end of the application.
- Implementation of different views, modules, and object-oriented programming (OOP) concepts.
- Learnt about android SDK to create, test, and debug the app.
- Usage of android emulator.
- Unit Testing.
- Uploading projects on GitHub and Manage GitHub repositories.
- Building APK files.



Screen Shots of the app:



admin123


.....

LOGIN

New Users? [Sign Up](#)

Service Novigrad

Sign Up



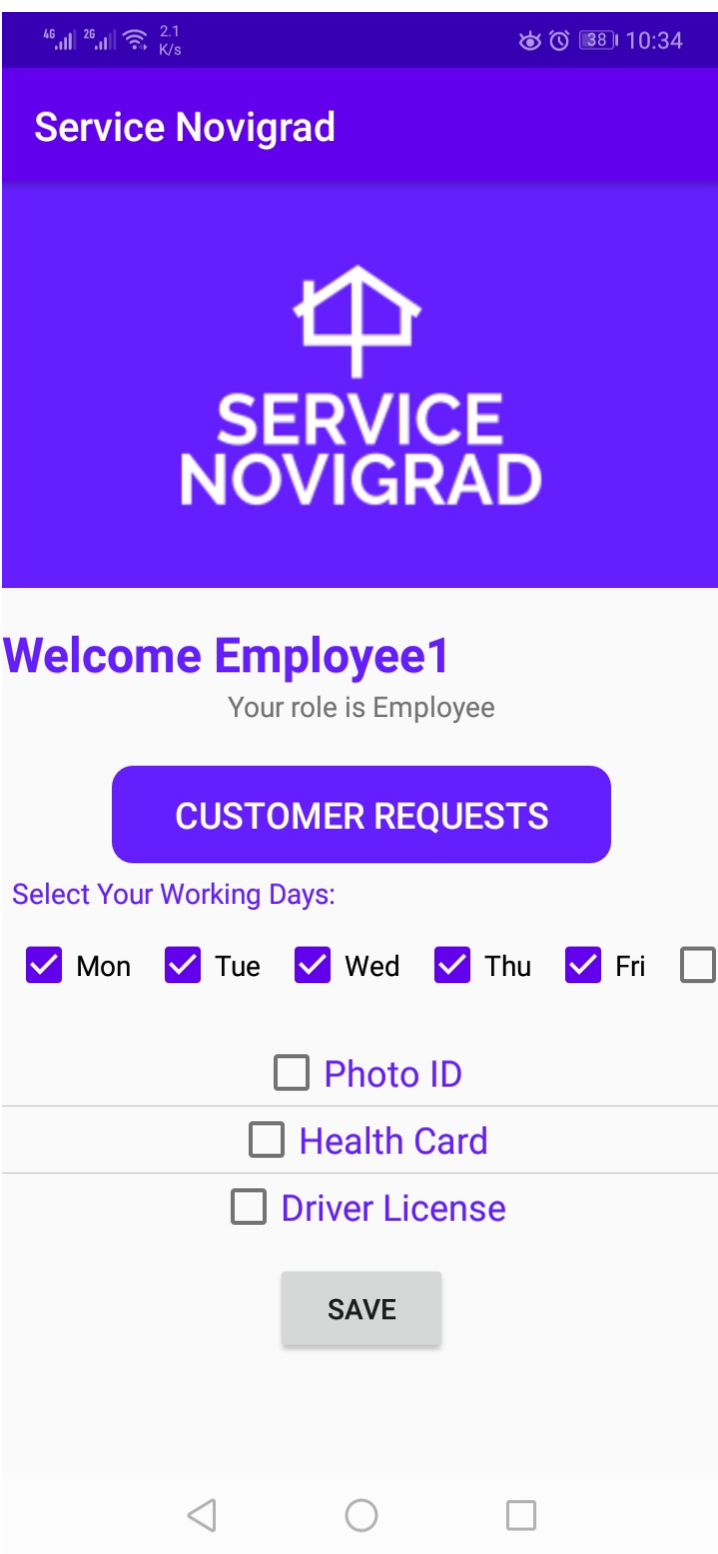
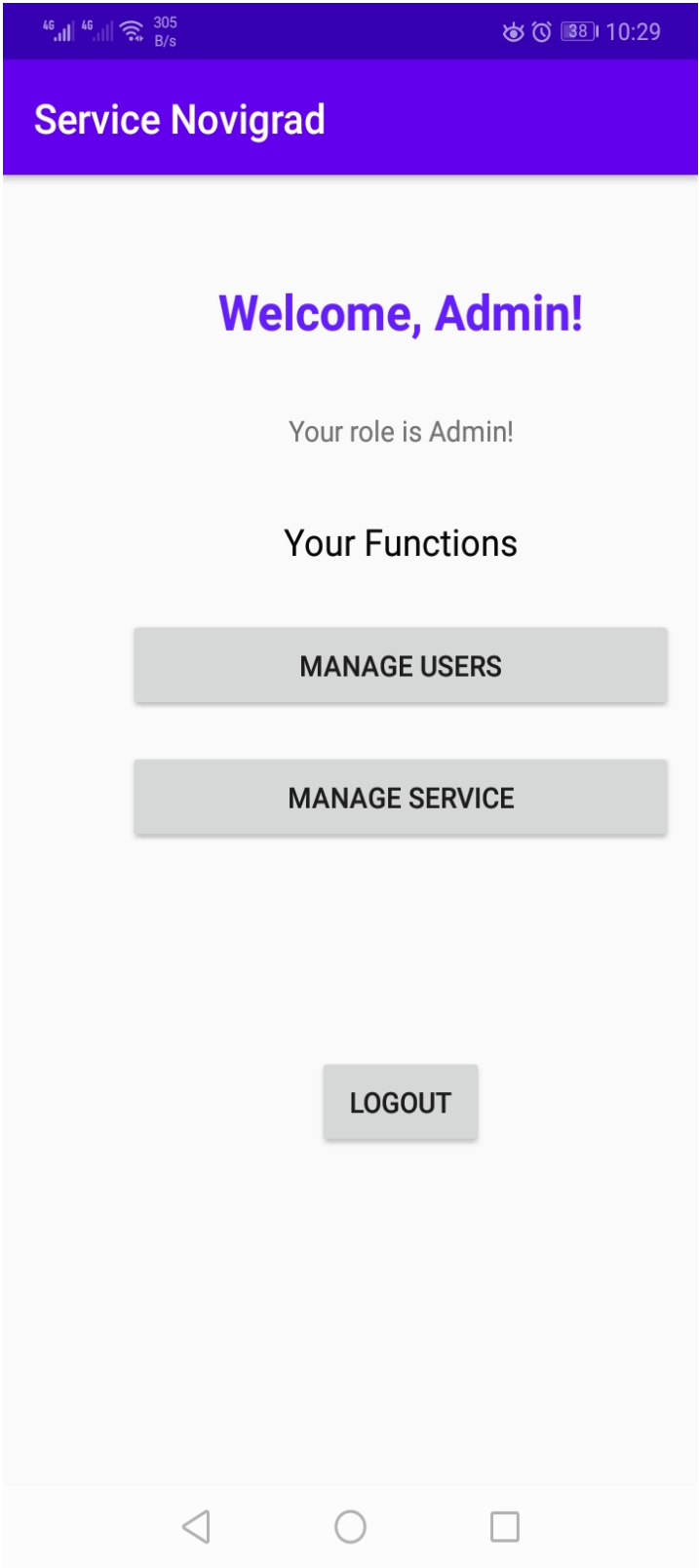
User Name

Password

Email

Employee ☐

SIGN UP





4G 4G 80 B/s 11:20

Service Novigrad

Request for Photo ID

04-Dec-2020 10:00

Ritvik

Status: Rejected

Request for Photo ID

03-Dec-2020 09:00

Ritvik

Status: Approved

Request for Health Card

05-Dec-2020 13:00

Ritvik

Status: Pending

Approve

Reject

4G 2G 0 K/s 10:30

Service Novigrad

Create New Service

Service Name

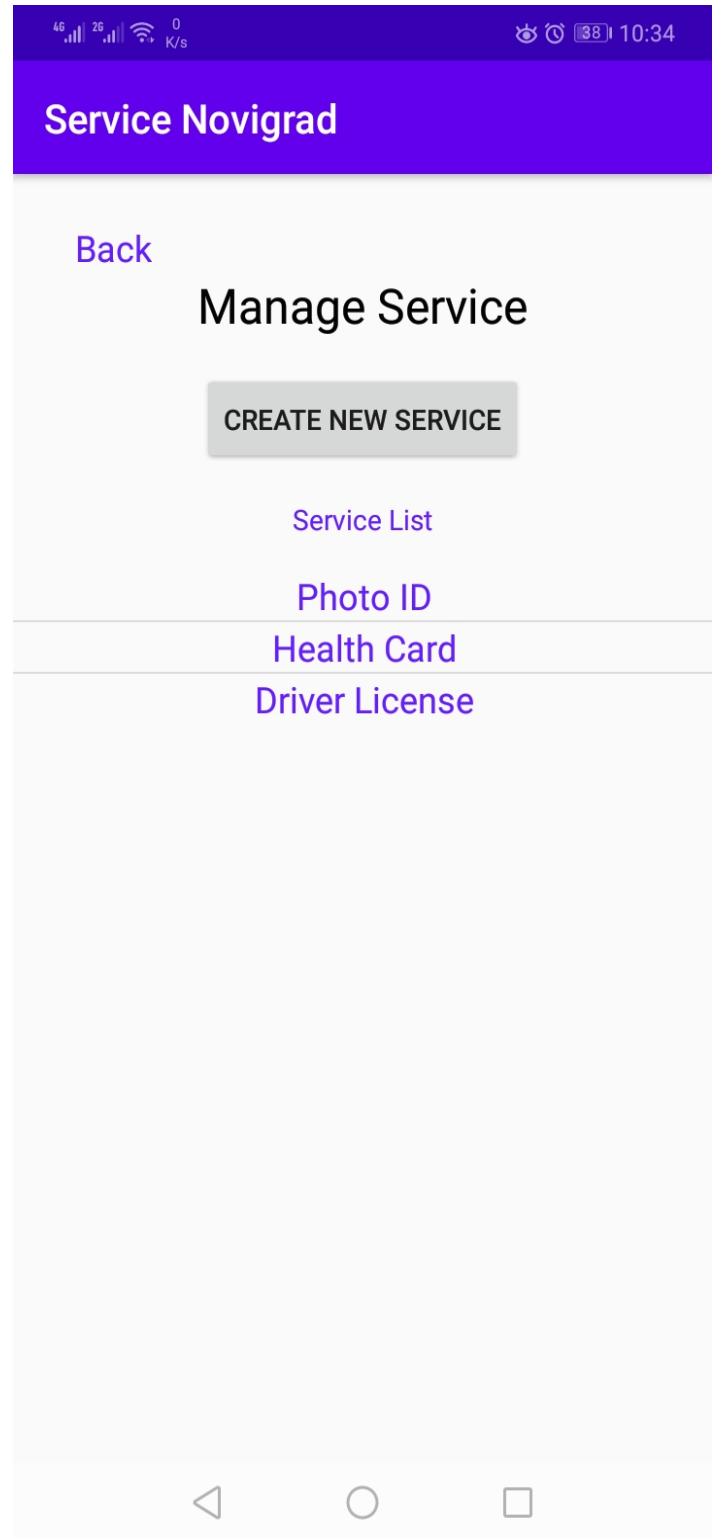
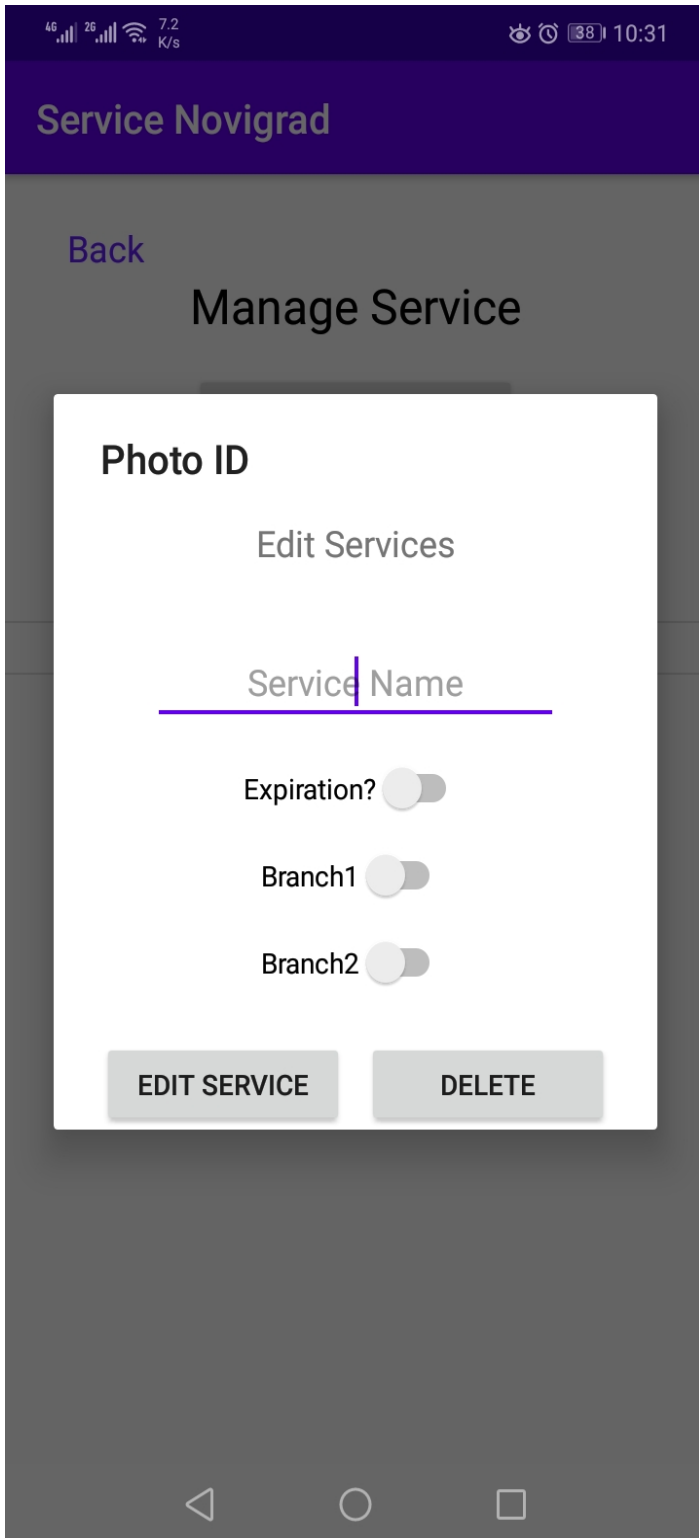
Expiration?

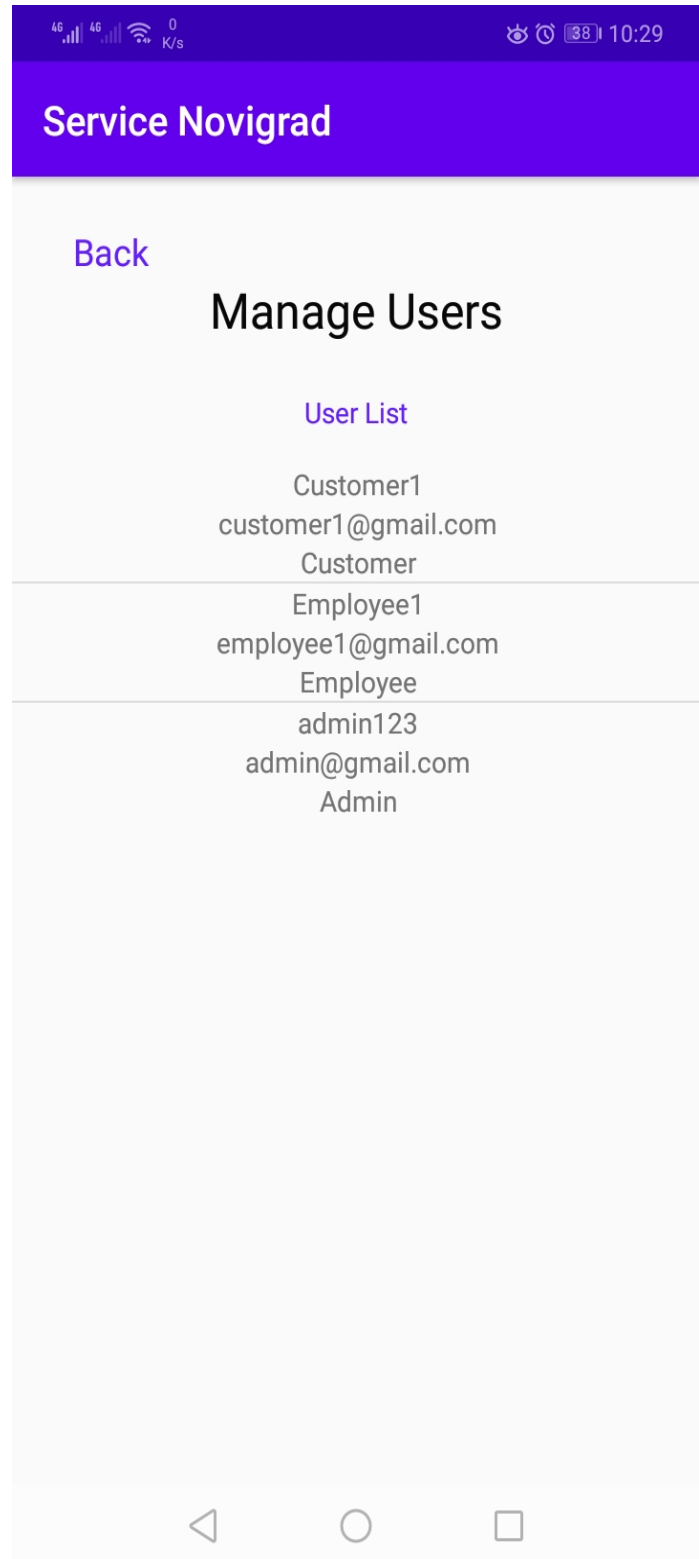
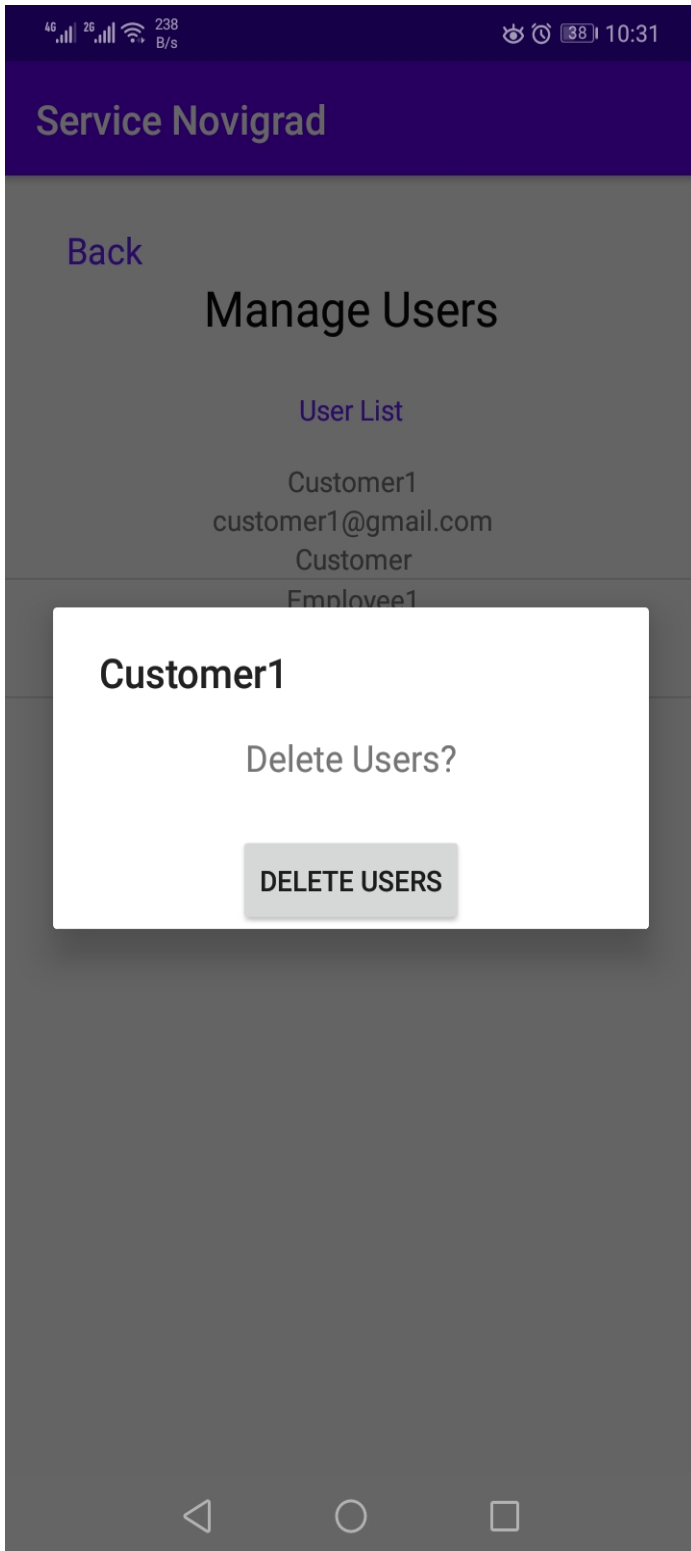
Branch1

Branch2

CREATE SERVICE

8







4G 26 0 K/s 10:35

Service Novigrad

Customer1

Your Role is Customer

Search

Photo ID Rating: 4.50

street 123 Ottawa 255132 street 333 Toronto 123213

Health Card Rating: 5.00

street 123 Ottawa 255132 street 333 Toronto 123213

Driver License Rating: 5.00

street 123 Ottawa 255132 street 333 Toronto 123213

LOGOUT

4G 26 85 B/s 10:36

Service Novigrad

First Name

Last Name

DateOfBirth

Street

Number

Town

Zip Code

Proof of residence (An image of a bank statement or hydro bill that shows the address)
Your Photo

Select Appointment Date & Time

Appointment Date

☒ 09:00

☐ 10:00

☐ 11:00

☐ 12:00

☐ 13:00

☐ 14:00

☐ 15:00

☐ 16:00

☐ 17:00

Submit

