

# **Final Report**

## **Android Project: Service Novigrad**

**SEG2105A: Introduction to Software Engineering**

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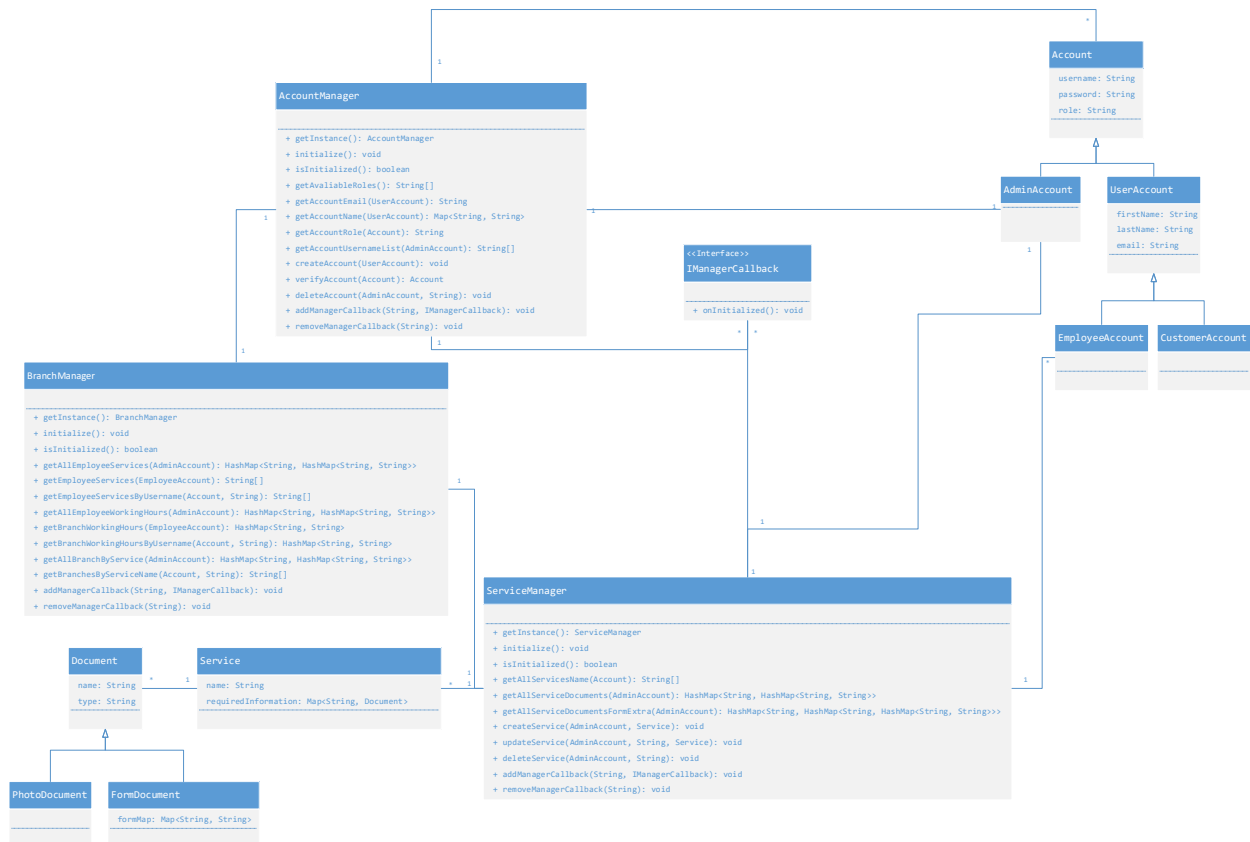
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# 1. Introduction

The Service Novigrad is a mobile application to provide citizens to apply for services, such as a Driver's License, a Photo ID, or a Health Card. There are three roles for users: the administrator, Novigrad branch employees, and customers. Users need to choose their roles during registration. The administrator has the supreme authority to create, edit, or delete services, and delete accounts of employees and customers. Each branch employee can make changes to the working hours of the branch, select services that can be provided in the branch, and handle service requests from customers. Customers can search for a branch by address, type of service provided, or working hours, and select the service they want to process. They also can submit required documents, such as forms and photos, to the selected branch, and rate the branch after the submission.

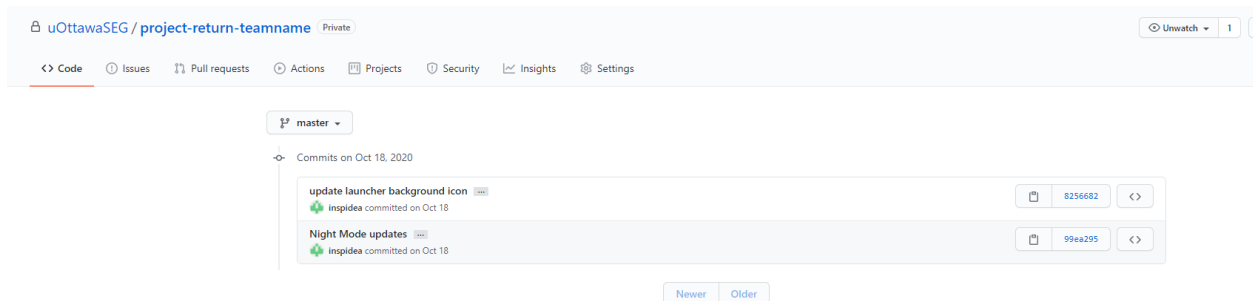
# 2. UML Diagram



### 3. Contribution Distribution

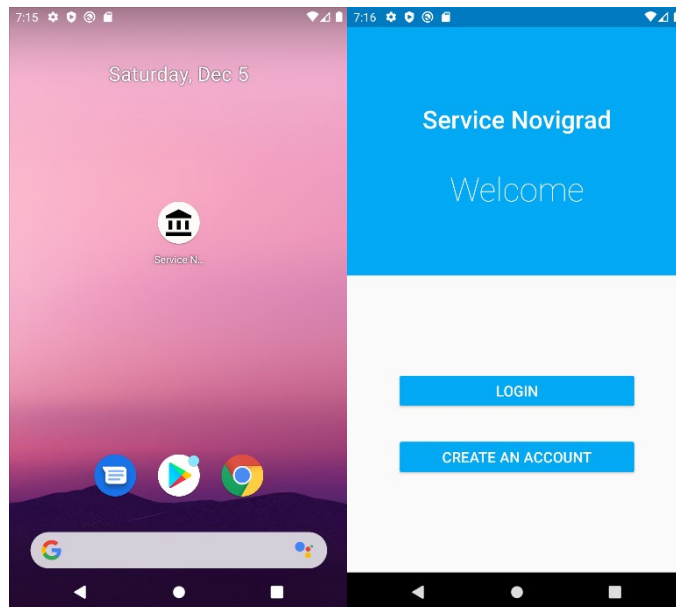
Name	Jinrong Guo	Xiaoxuan Wang 👑	Feier Zhang	Lijianing Zhu
ID	8809970	300133594	8589976	300032265
Deliverable 1	12.5%	75%	12.5%	Less than 1%
Deliverable 2	5%	60%	25%	0%
Deliverable 3	30%	45%	25%	0%
Deliverable 4	34%	30%	36%	0%
Description	Program development. Also, Assistant and cooperate with the team members.	Built project framework. Program development and management. Also, offer major technical assistance to the team.	Program development and management, and communication between the team members.	Not involved.

Explanation: Lijianing Zhu only has two commits in Deliverable 1 during the whole project. One of the two commits is pushing an unused icon, and the other is adding night mode for a layout. His commits in total are illustrated below.



## 4. Screenshots and Usage Demo

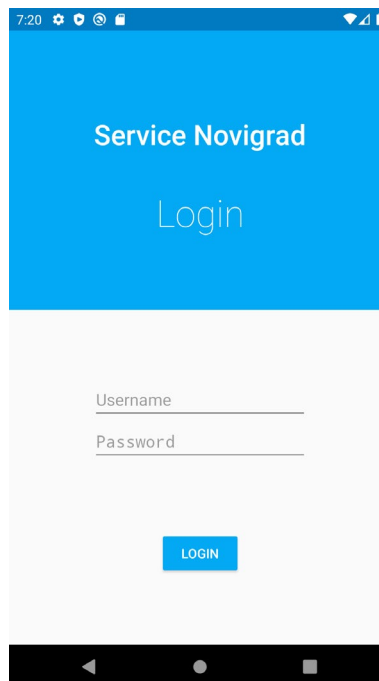
### 4.1 Application Icon and Main Page



*Figure 1 Application Icon and Main Page*

### 4.2 Login Page

After clicking on the icon of the application, the main page with two buttons shows up.



*Figure 2 The Login Page*

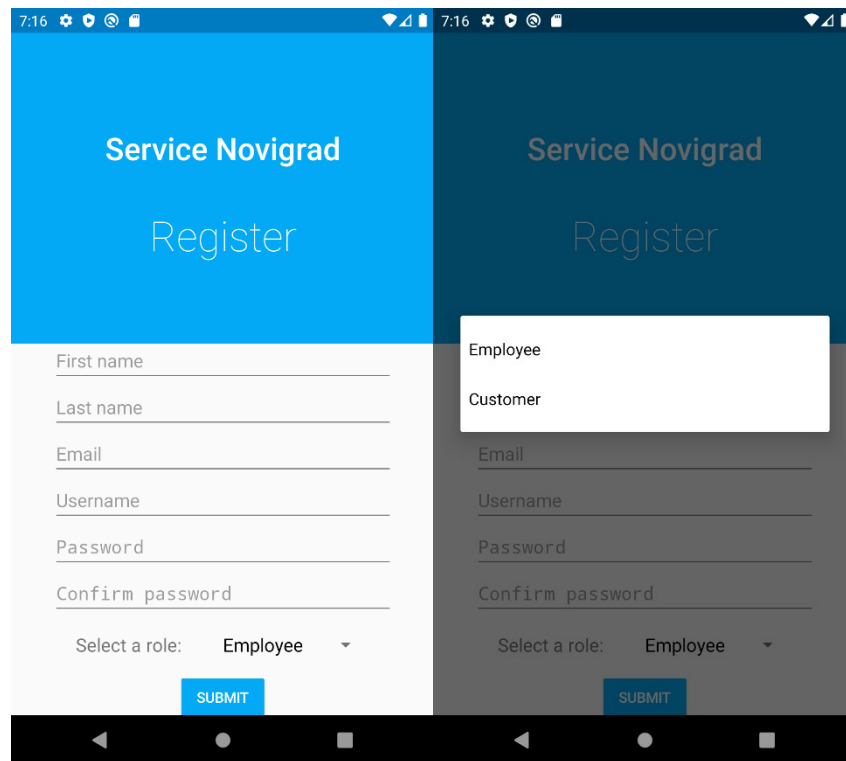
For The Administrator:

- There is a built-in admin account that has full manipulation functionalities. The Administrator may continue without registration.

For Regular Users:

- If the user has an account, you may click the “Login” button to continue.
- Or the user may register a new account as illustrated in the following section.

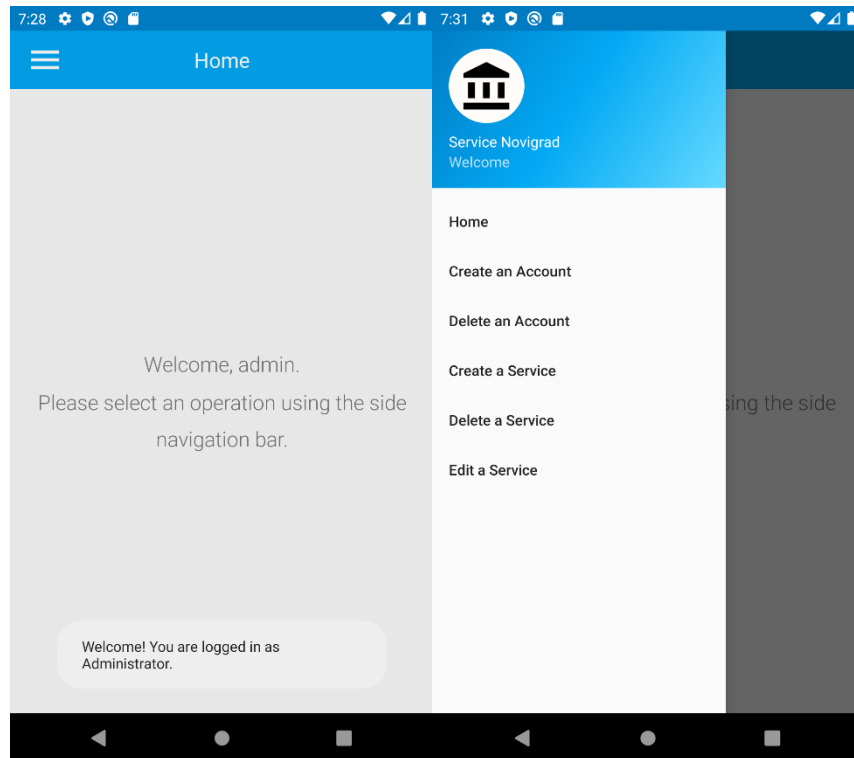
### 4.3 Register Page



*Figure 3 The Register Page*

- A username may not coincide with any other usernames on record, since a username is a global identifier to an account.
- The user may choose the account role either to be “Employee” or “Customer”.

## 4.2 Logged in as Administrator:



*Figure 4 The Welcome Page (Left) And The Navigation Drawer (Right).*

By either:

- clicking on the icon that resides the top-left most,
- or swiping right from the left side of the screen edge,

the navigation drawer will show up, which contains the following options for the Administrator:

- Create an account
- Delete an account
- Create a service
- Delete a service
- Edit a service

### 4.3 Administrator: Function Demo

7:36 7:41

Create an Account

First name

Last name

Email

Username

Password

Confirm password

Select a role: Employee

SUBMIT

TestAccount

Test

TestAccount@gmail.com

TestAccount

\*\*\*\*\*

\*\*\*\*\*

Select a role: Employee

SUBMIT

Success

Figure 5 Create account page: Admin creates an account with username TestAccount

7:41 7:43

Delete an Account

Click or enter a username: DELETE

JinGuo

Feier

wxx9248

Jinemployee

benEmployee

stevezhu

TestAccount

Click or enter a username: DELETE

JinGuo

Feier

wxx9248

Jinemployee

benEmployee

stevezhu

TestAccount

Success

Figure 6 Delete account page: After selecting the username, the account has been deleted



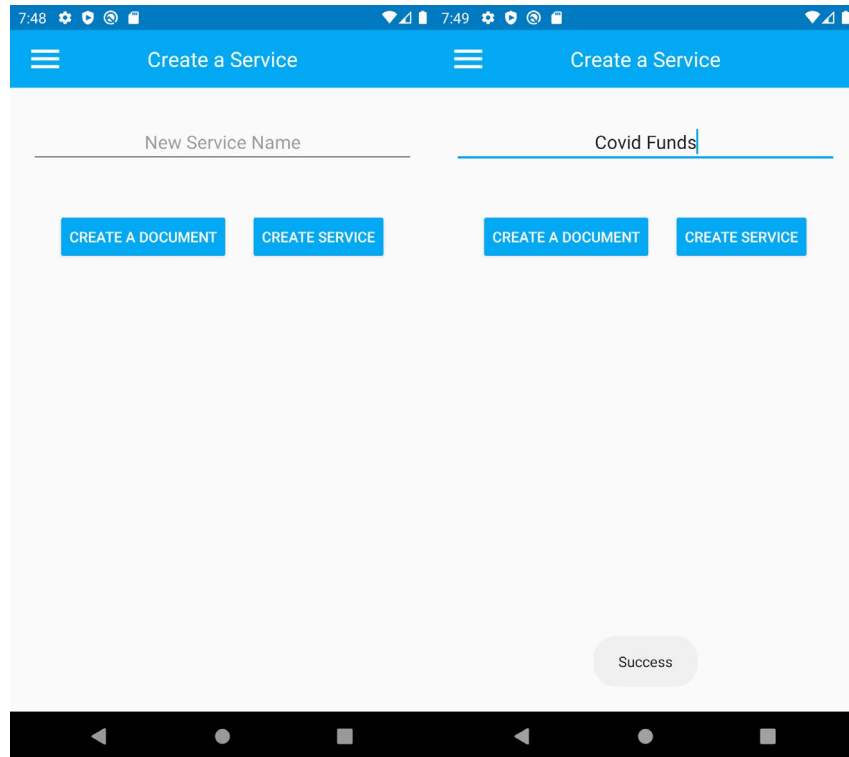


Figure 7 Create a Service Page

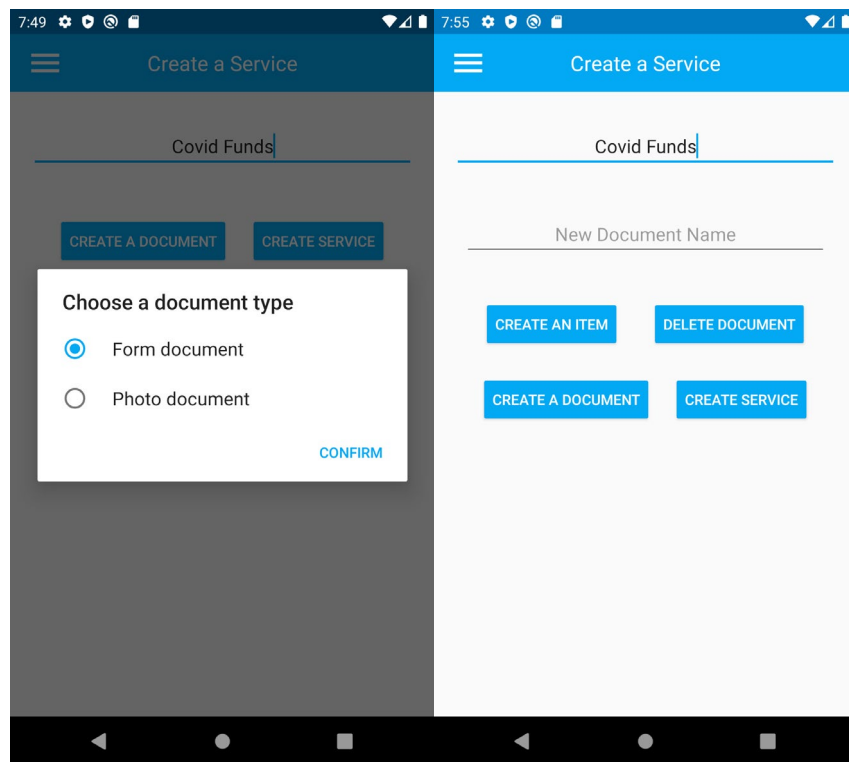


Figure 8 Create a document for the service (Form/Photo)

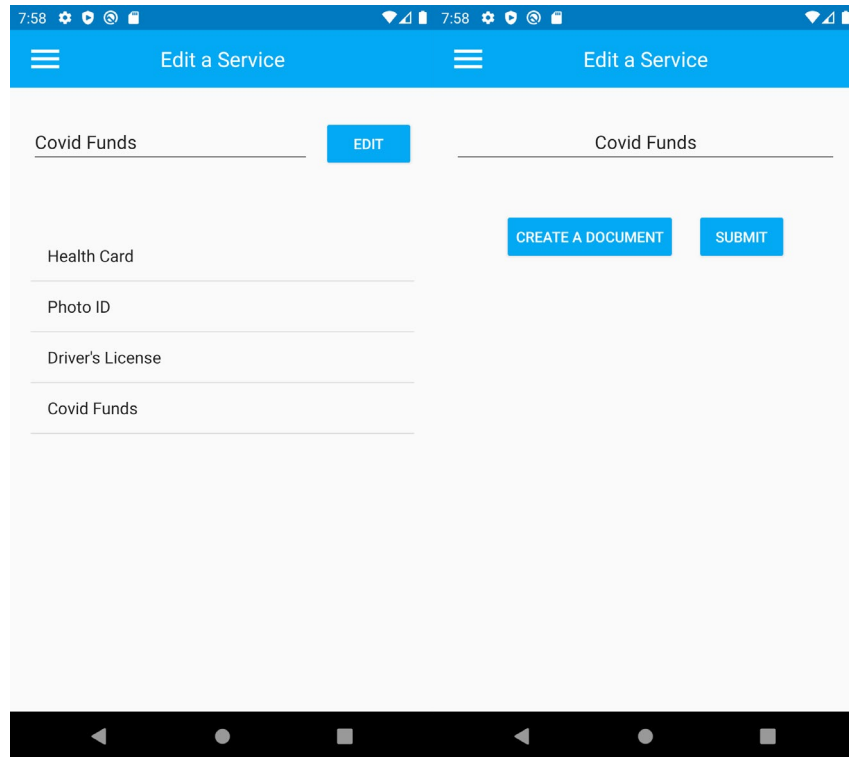
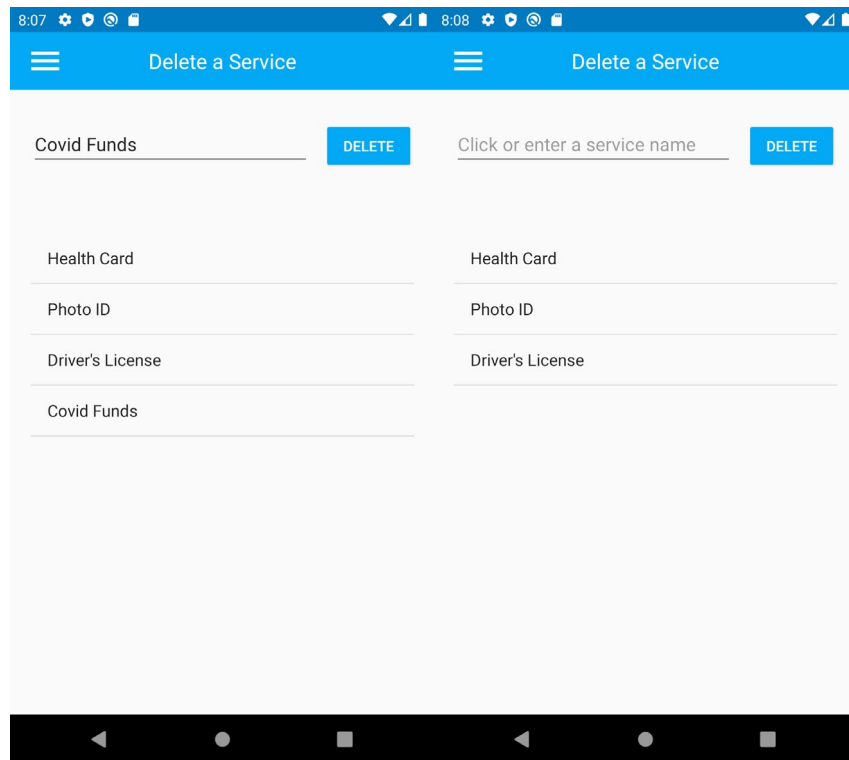
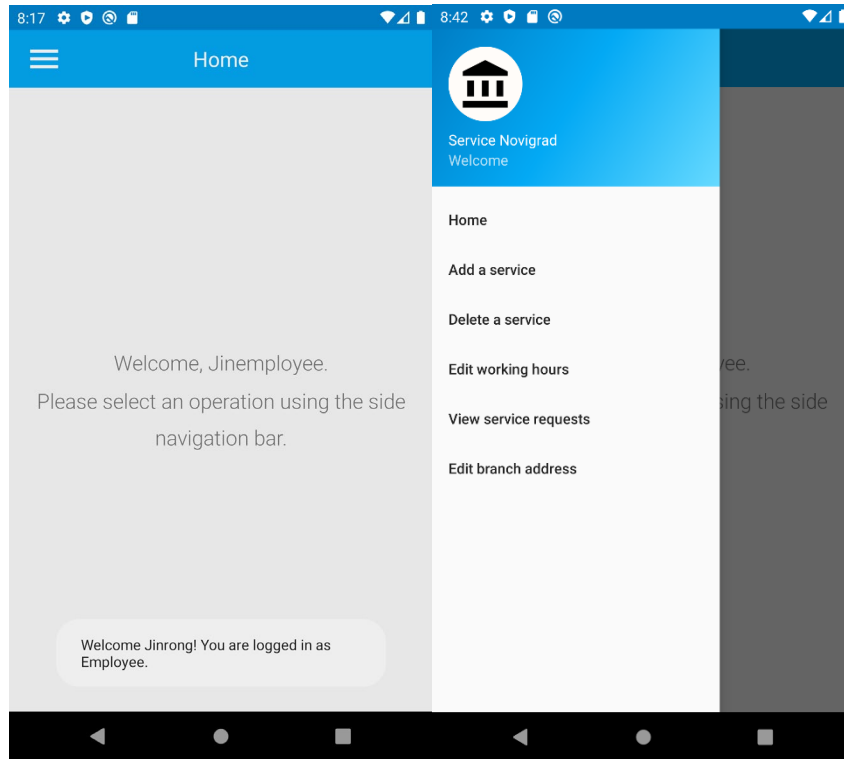


Figure 9 Edit service page: Similar page with Create a Document to create service



### 4.3 Logged in as Employee



*Figure 10 Home page for employee and navigation bar*

By either:

- clicking on the icon that resides the top-left most,
- or swiping right from the left side of the screen edge,

the navigation drawer will show up, which contains the following options for the Employee:

- Create an account
- Add a service
- Delete a service
- Edit working hour
- View service requests
- Edit branch address

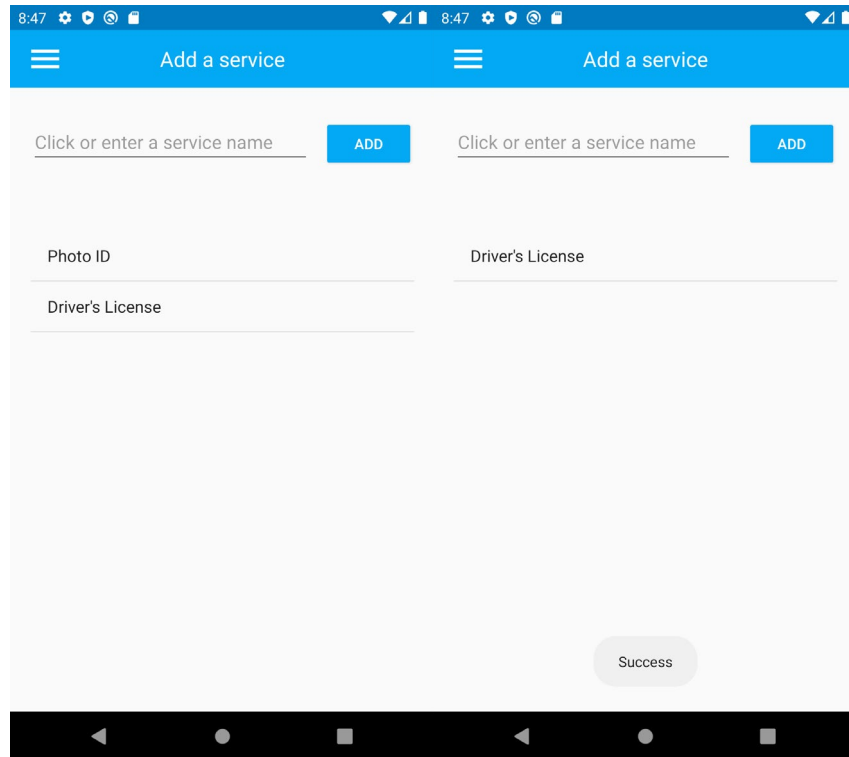


Figure 11 Add a service page for Employee: click on the available service

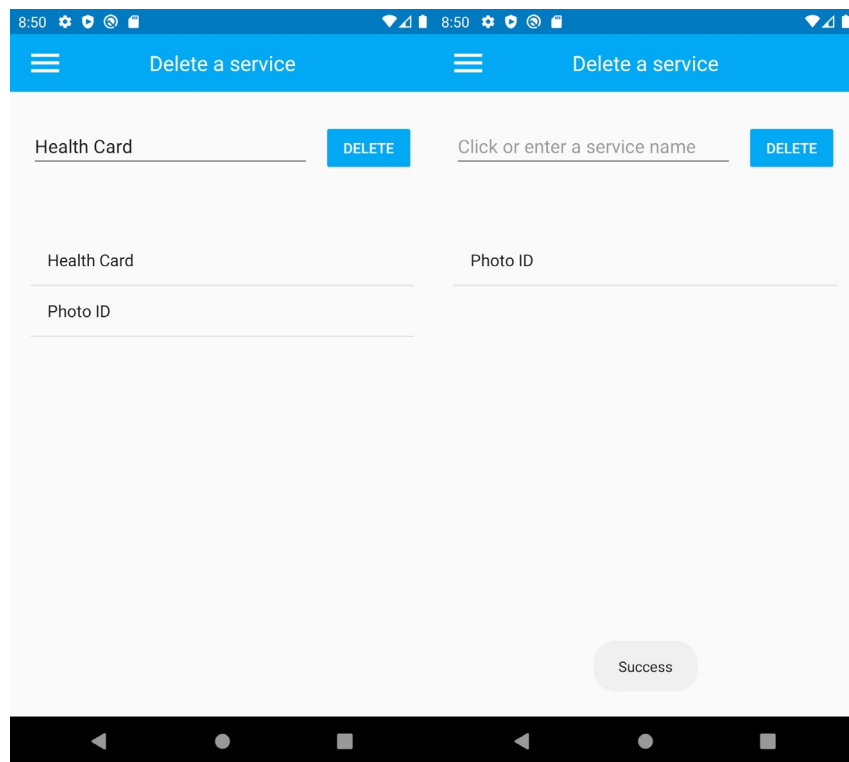


Figure 12 Delete a service page for employee

8:52 Edit working hours Edit working hours

Please select a date and continue Please select a date and continue

< December 2020 > < December 2020 >

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Date (yyyy-mm-dd) 2020-12-6

Start time (hh:mm) 8:00

End time (hh:mm) 15:00

SUBMIT Success

Figure 13 Edit working hours page: select a date on the calendar and start-end time for that day

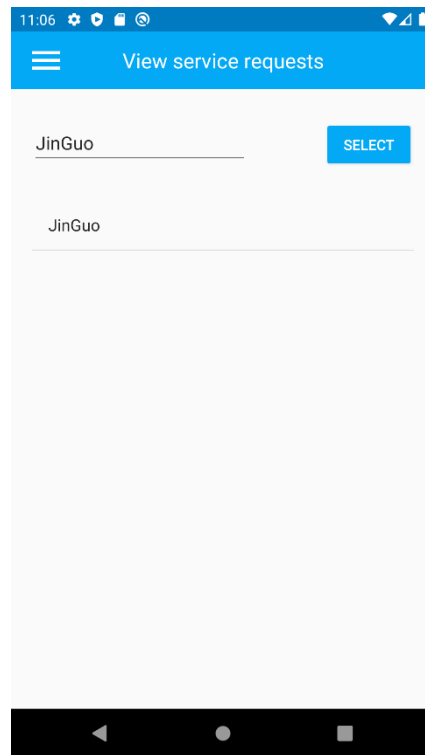
8:42 Edit branch address Edit branch address

Fill in the address of your branch Heaven

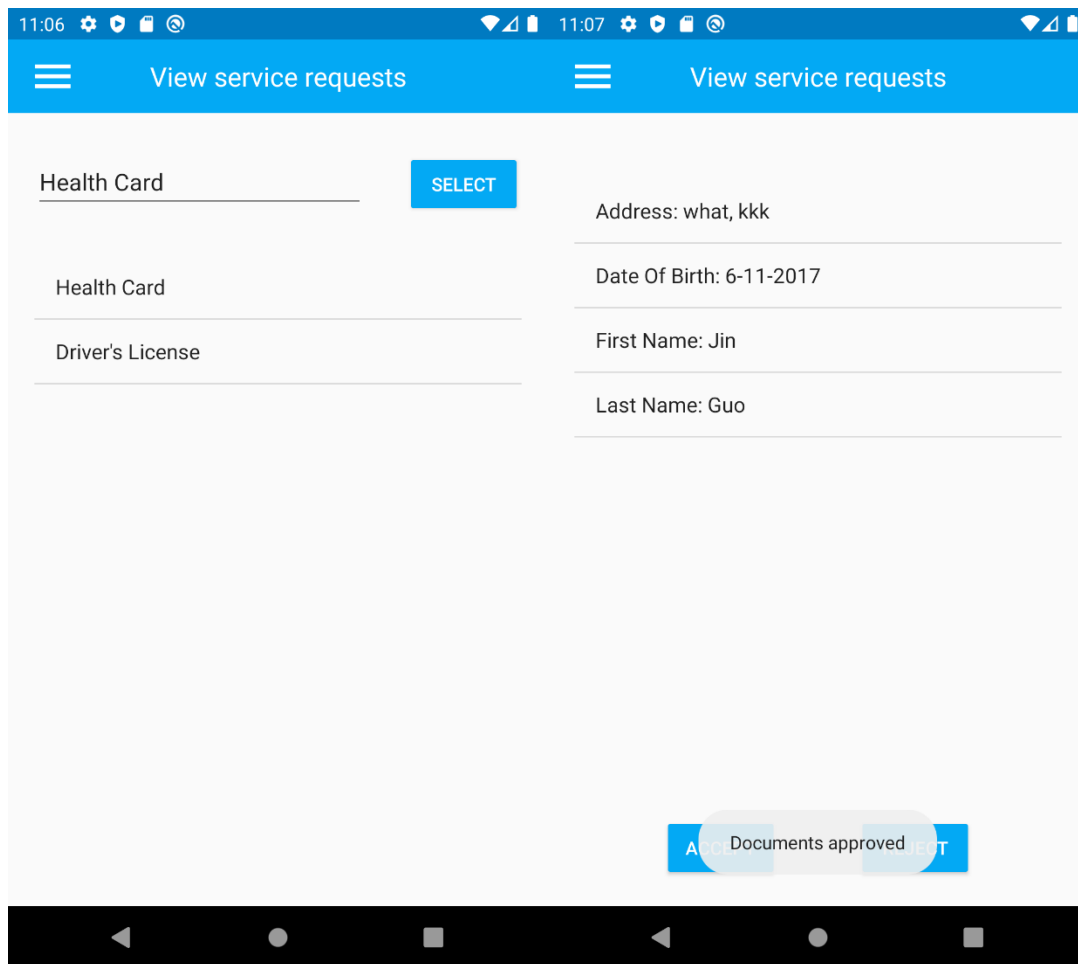
SUBMIT SUBMIT

Success

Figure 14 Edit branch address page: input address and click submit



*Figure 15 View service request page: select current requests with customer name*



*Figure 16 Select service that the same customer applied: select and continue, approve/reject page and information displayed(right)*

11:07 11:08

View service requests View service requests

Driver's License

Health Card

Driver's License

Address: what, kaa

Date Of Birth: 6-11-2012

First Name: Jin

License Type: G1

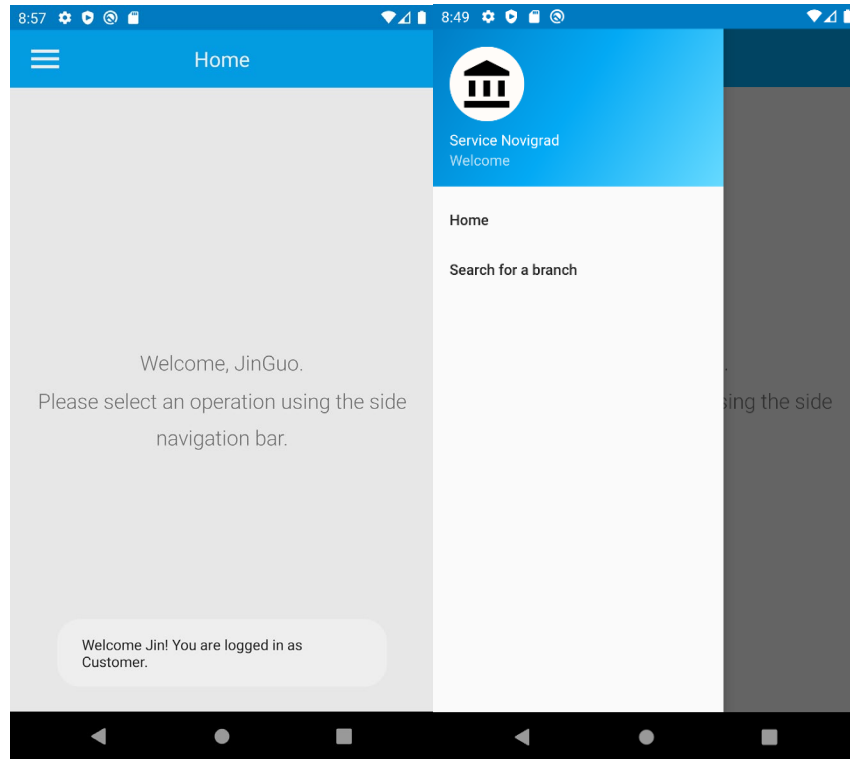
Last Name: Guo

status: None

*Figure 17 Select service that the same customer applied*



## 4.4 Logged in as Customer



*Figure18:Home page for Customer and navigation bar*

By either:

- clicking on the icon that resides the top-left most,
- or swiping right from the left side of the screen edge,

the navigation drawer will show up, which contains the following options for the Customer:

- Search for a branch (Select branch – Select Service – Fill the form and upload picture – rate this branch)

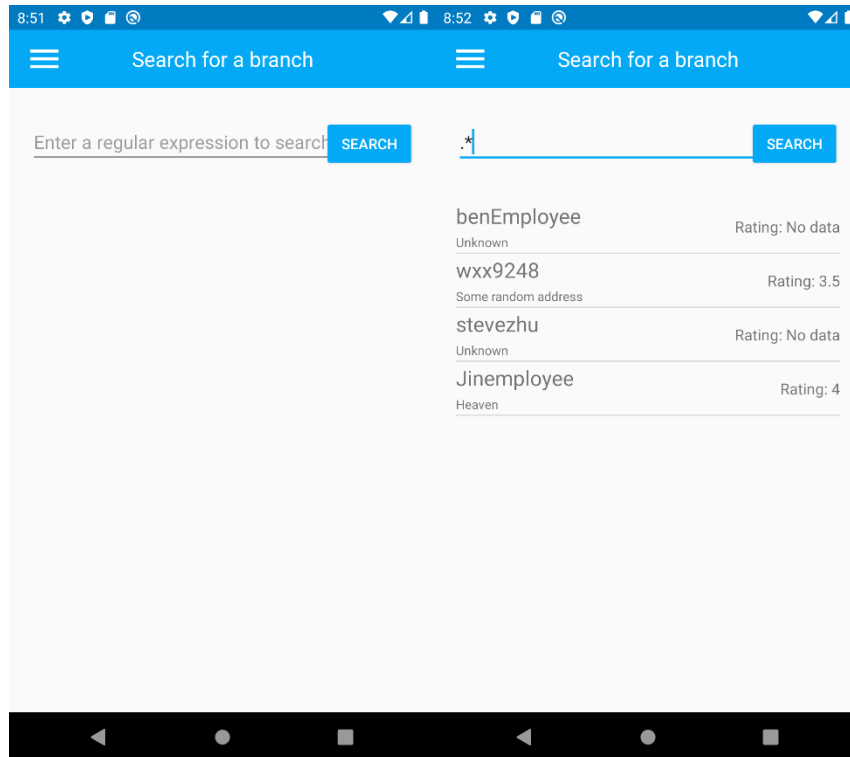


Figure 19: Search for a branch page for customer

The screenshot shows a mobile application interface for searching branches. The top bar is blue with a hamburger menu icon and the text 'Search for a branch'. Below this, there is a form with the following fields and buttons:

- Health Card**: A text input field with a blue 'SELECT' button next to it.
- Health Card**: A text input field.
- Photo ID**: A text input field.
- Firstname**: A text input field.
- LastName**: A text input field.
- Address(i.e Street No.)**: A text input field.
- Postal code**: A text input field.
- Please Select Below Your Birthday**: A section with three rows of date selection:
 

Month	Day	Year
Nov	05	2019
Dec	06	2020
Jan	07	2021

At the bottom of the form, there are two blue buttons: 'SUBMIT' and 'NEXT'.

Figure 20: Select a service page and application form page for health card and photo id

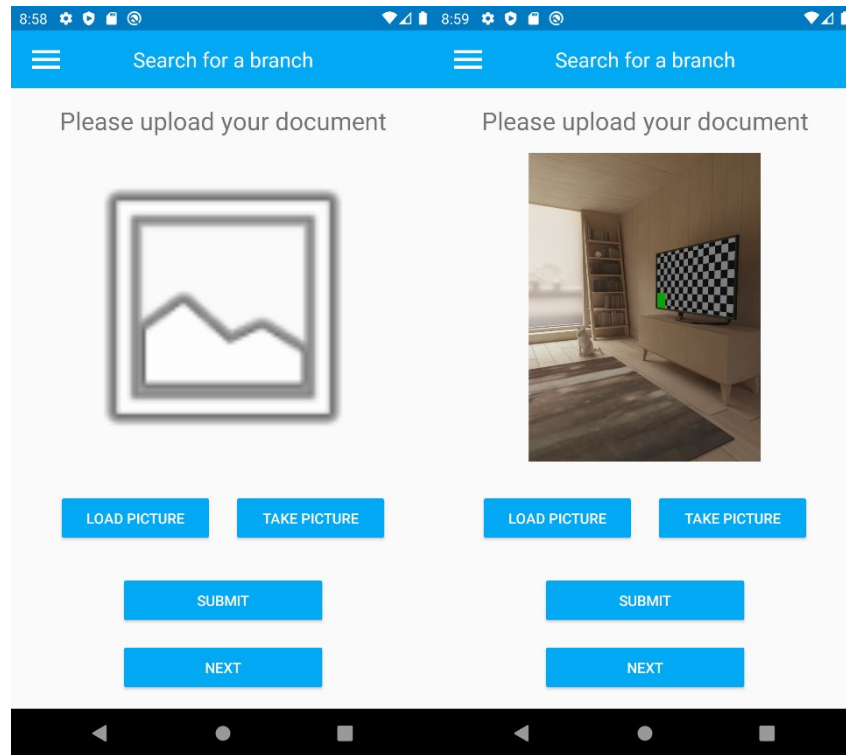
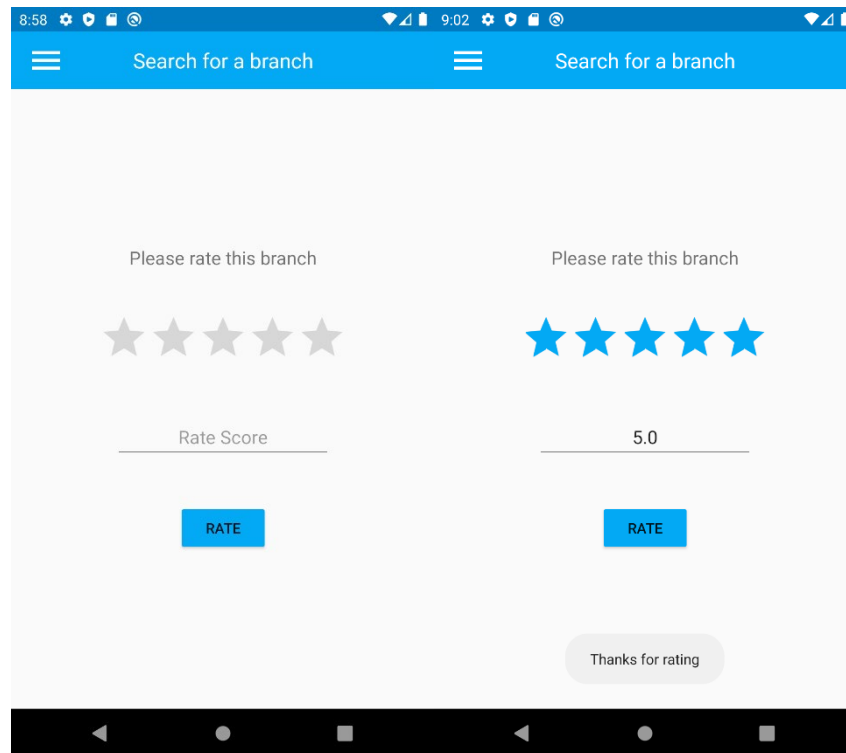


Figure 21: Upload picture page, user can either select picture from gallery or take a picture



*Figure 22: Customer Rate this branch page*

## **5. Discussion on Lessons Learned**

From this project, we learned how to use and connect the database and CircleCI.

We have experienced all the stages of developing a proper software, including indicating the goal of this software, determining the roles and players involved, developing methods and classes to achieve different functionalities that were required, and finally testing the software to see if desired requirements have been accomplished. As a future programmer, it is critical to understand how a project can be developed from paper to actual software. In the first place, we as students learned a lot of programming knowledge throughout the ongoing submission process of this project and experienced the spirit to work as a team. However, it is very frustrating when bugs occur, and have no idea how to fix them. Fortunately, one of the benefits of working as a team is that other members of the team could see things from a different perspective so that it would be easier for the one working alone.