

## **SEG 2105 Project: InstaFix**

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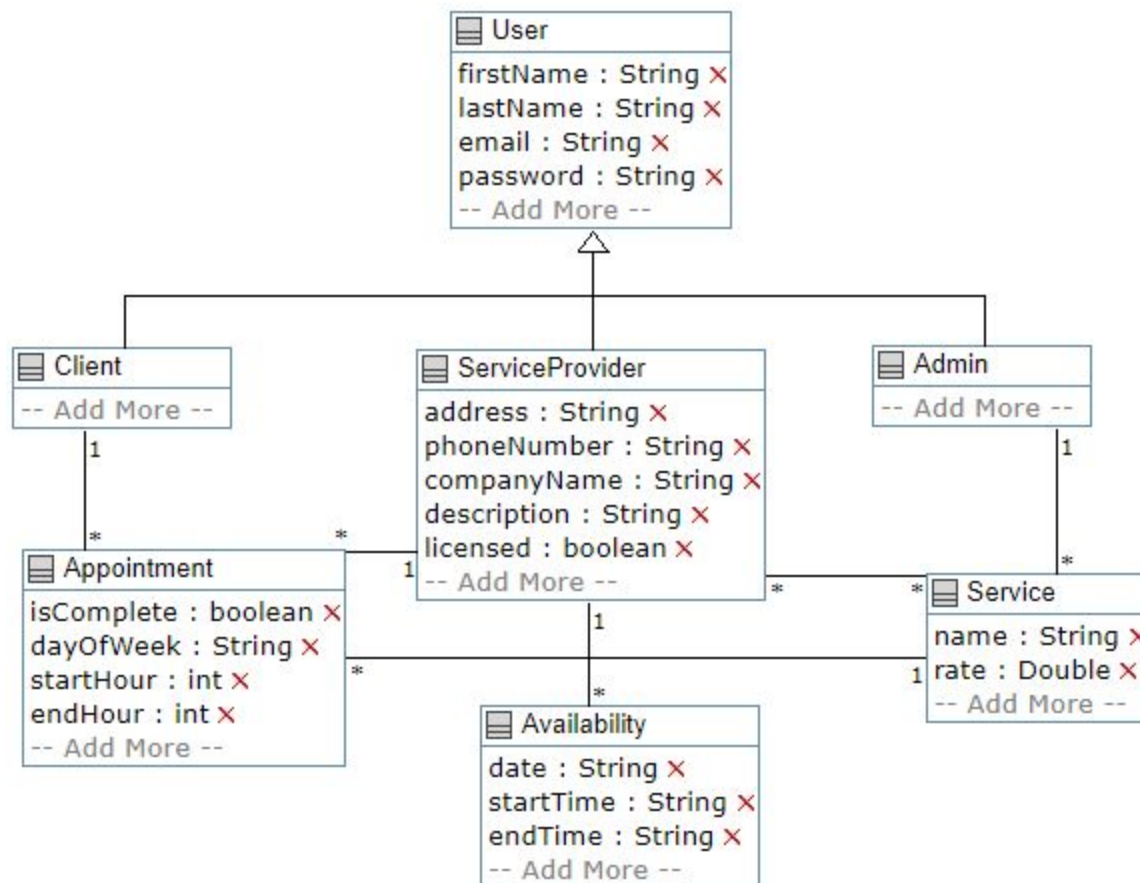
## 1.0 INTRODUCTION

Need to revamp the look of your home? Is time consumption your main concern in bringing a change? If so, look no further. Instafix is an android application which is easily accessible and usable for everyone.

Are you a **customer** looking for a renovation? From patios to decks, and bedroom renovations our general contractors can do it with great skill and expertise. We have trained and trusted home improvement service providers in Ottawa who excel at various home improvement projects and deliver the best results. All the information of each service provider will be provided in Instafix. The application will list all the services and their price offered from different service providers in Ottawa. As the customer, you can book an appointment with a service provider and get your renovations arranged within seconds. To top it off, each service providers has their own rating and reviews that you can use to select the right service provider for you.

Are you a **service provider** looking to advertise your services? Instafix allows you to create your own account and publish your services for customers to see. You can adjust your availability and see your orders from customers as well.

## 2.0 UML CLASS DIAGRAM




### 3.0 CONTRIBUTION

Deliverable	Name	Percent Contribution	Contribution
1	Bhalachandra	25	- Layout and Implementation for Main Activity and SignIn - Firebase Setup for SignIn
	Harsh	20	- Created GitHub Repo - Firebase Setup
	Haard	15	- Testing/Debugging - Layout and Implementation of Welcome Activity
	Nischal Sharma	30	- Layout and Implementation SignUp - Firebase Setup for SignUp
	Nishchal Nepal	10	- UML
2	Bhalachandra	20	- Layout and Implementation for Admin Activity
	Harsh	25	- UML - Unit Test Cases - ListView for Services - CircleCI
	Haard	30	- Firebase Implementation for Services (Add and Remove Services)
	Nischal Sharma	25	- Firebase Implementation for Services (Edit Services)
	Nishchal Nepal	0	
3	Bhalachandra	25	- Layout and Implementation for Availability Activity and Dialog -Firebase Implementation for Add Availability
	Harsh	15	- UML - Unit Test Cases - Testing/Debugging - Created Firebase Classes

	Haard	20	<ul style="list-style-type: none"> <li>- Firebase Implementation for Add, Edit and Remove Service</li> <li>- ListView for Service</li> </ul>
	Nischal Sharma	20	<ul style="list-style-type: none"> <li>- Firebase Implementation for Edit and Remove Availability</li> <li>- ListView for Availability</li> </ul>
	Nishchal Nepal	20	<ul style="list-style-type: none"> <li>- Layout and Implementation for Additional Information at SignUp</li> </ul>
4	Bhalachandra	15	<ul style="list-style-type: none"> <li>- CircleCI Status Button</li> <li>- Add Rating</li> <li>- Fragments for Client Homepage Implemented</li> </ul>
	Harsh	10	<ul style="list-style-type: none"> <li>- UML</li> <li>- Test cases</li> </ul>
	Haard	25	<ul style="list-style-type: none"> <li>- Search by service name, rating and availability</li> <li>- Booking Implementation for Add</li> </ul>
	Nischal Sharma	25	<ul style="list-style-type: none"> <li>- Listview Showing Client Appointments and its adapter</li> <li>- Navigation Drawer and Fragment created for Client and Service Provider Views</li> <li>- Moved Old Service Provider back to new fragment mode</li> </ul>
	Nishchal Nepal	25	<ul style="list-style-type: none"> <li>- Listview Showing Client Appointments and its adapter</li> <li>- Setup old Service Provider to new fragment layout</li> <li>- Report</li> </ul>

## 4.0 SCREENSHOTS OF APP

Home Page	Sign In Page	Sign Up Page (No Admin Initialized)																
<div><div>InstaFix</div><div></div><div>InstaFix</div><div><div>SIGN IN</div><div>SIGN UP</div></div></div>	<div><div>InstaFix</div><div>Sign In</div><div>Email:<div>Enter Username</div></div><div>Password:<div>Enter Password</div></div><div><div>SIGN IN</div><div>Click here to Sign Up</div></div></div>	<div><div>InstaFix</div><div>Sign Up</div><div>Name<div>Enter First Name</div><div>Enter Last Name</div></div><div>Username:<div>Enter Username</div></div><div>Email:<div>Enter your e-mail</div></div><div>Password:<div>Enter Password</div><div>Verify your password</div><div><div><input type="radio"/> Client</div><div><input type="radio"/> Service Provider</div><div><input type="radio"/> Admin</div></div><div>SIGN UP</div></div></div>																
Sign Up Page (With Admin Initialized)	Admin Home Page	Admin Services Page																
<div><div>InstaFix</div><div>Sign Up</div><div>Name<div>Enter First Name</div><div>Enter Last Name</div></div><div>Username:<div>Enter Username</div></div><div>Email:<div>Enter your e-mail</div></div><div>Password:<div>Enter Password</div><div>Verify your password</div><div><div><input type="radio"/> Client</div><div><input type="radio"/> Service Provider</div></div><div>SIGN UP</div></div></div>	<div><div>InstaFix</div><div>Welcome Admin!</div><div>You are logged in as Admin</div><div><div>SERVICES</div><div>SIGN OUT</div></div></div>	<div><div>InstaFix</div><div><div>ADD</div><table><tr><td>Plumber</td><td>50.0</td></tr><tr><td>Mover</td><td>20.0</td></tr><tr><td>Therapist</td><td>30.0</td></tr><tr><td>Electrician</td><td>60.0</td></tr><tr><td>Handyman</td><td>900.0</td></tr><tr><td>Garden Work</td><td>50.0</td></tr><tr><td>Painter</td><td>1.0</td></tr><tr><td>Solar Panel Installation</td><td>1.0</td></tr></table></div></div>	Plumber	50.0	Mover	20.0	Therapist	30.0	Electrician	60.0	Handyman	900.0	Garden Work	50.0	Painter	1.0	Solar Panel Installation	1.0
Plumber	50.0																	
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Electrician	60.0																	
Handyman	900.0																	
Garden Work	50.0																	
Painter	1.0																	
Solar Panel Installation	1.0																	

<div>Service Provider Information Page</div> <div><div>5:59</div><div>InstaFix</div><div>Service Provider Information</div><div>Address</div><div>Enter Address</div><div>Phone</div><div>Enter Phone Number</div><div>Company</div><div>Enter Company Name</div><div>Description</div><div>e.g. I have 20 years of experience</div><div>NEXT</div></div>	<div>Service Provider Home Page</div> <div><div>5:22</div><div>Home</div><div>Welcome Mario!</div><div>You are logged in as ServiceProvider</div><div>Average rate of service is 5</div><div>Availabilities:</div><div><div>Sunday</div><div>N/A - N/A</div></div><div><div>Monday</div><div>00:18 - N/A</div></div><div><div>Tuesday</div><div>N/A - N/A</div></div><div><div>Wednesday</div><div>01:15 - 06:15</div></div><div><div>Thursday</div><div>12:13 - 21:42</div></div></div>	<div>Fragments in Service Provider</div> <div><div>5:23</div><div>Home</div><div>Home</div><div>Availability</div><div>Services</div><div>Orders</div><div>Sign Out</div><div><div>g!</div><div>Provider</div><div>is 5</div><div>N/A</div><div>N/A</div><div>N/A</div><div>06:15</div><div>21:42</div></div></div>
<div>Service Provider Availability Page</div> <div><div>5:25</div><div>Availability</div><div>Set Availability</div><div><div>Set Availability</div><div>Select Day</div><div>Sunday</div><div>SET START TIME</div><div>SET END TIME</div><div>SET AVAILABILITY</div><div>REMOVE AVAILABILITY</div></div></div>	<div>Service Provider Services Page 1</div> <div><div>5:26</div><div>Services</div><div>Your Services:</div><div>ADD</div><div><div>Therapist</div><div>30.0</div></div><div><div>Handyman</div><div>900.0</div></div></div>	<div>Service Provider Services Page 2</div> <div><div>5:27</div><div>Services</div><div>Click the service to add:</div><div>BACK</div><div><div>Plumber</div><div>50.0</div></div><div><div>Mover</div><div>20.0</div></div><div><div>Therapist</div><div>30.0</div></div><div><div>Electrician</div><div>60.0</div></div><div><div>Handyman</div><div>900.0</div></div><div><div>Garden Work</div><div>50.0</div></div><div><div>Painter</div><div>1.0</div></div></div>

## Service Provider Orders Page

5:27

Orders

Your Current Orders:

Thurs- day	Thera- pist	Rick Sanchez	12:13 - 21:42
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## Client Home Page

5:29

Home

Welcome

Client: Rick Sanchez

Current Appointments

Thursday	Therapist	Mario Italiano	12:13 - 21:42
Sunday	Electrician	Mario Red	06:30 - 18:30
Sunday	Garden Work	Mario Red	06:30 - 18:30
Sunday	Mover	Mario Red	06:30 - 18:30

## Fragments in Client

5:31

Home

Find Services

Sign Out

12:13 - 21:42

06:30 - 18:30

06:30 - 18:30

06:30 - 18:30

## Client Find Services Page

5:33

Find Services

Search Service

Day Start Time End Time

## Set availability for client in Find Services Page

5:35

Find Services

Search Service

Set Availability

Select Day

Sunday

SET START TIME SET END TIME

SEARCH

CLEAR

## Rate a service provider in Client Home Page

7:59

Home

Welcome

Client: Rick Sanchez

Review

Rate Your Experience (1 - 5)

Comment (Optional)

Please comment on your experience

SUBMIT

## 5.0 LESSONS LEARNED

### Nishchal Nepal

Some things i learned:

- Start small, then extend  
We started by implementing one new concept at a time for each deliverable such as firebase, listview, CircleCI, and more, then extended its approach for future deliverables.
- Change one thing at a time  
In the process of updating codes for each deliverable, we had to focus on certain sections while testing changes one at a time.
- Add logging and error handling early  
By applying error checking in our SignIn and SignUp pages right after its creation, we avoided many frustrations that could have come while logging into the application using Firebase.
- Test the parts before the whole  
As we progressed through the project, the amount of code from each person in the group was becoming untrackable. To overcome this issue, we had to work on small parts by creating our own branch in GitHub. We merged it after each individual section performed properly.
- Everything takes longer than you think

### Nischal Sharma

- Learned how to implement Asynchronous behavioral methods for Firebase Datasnapshot information
- Learned how to setup Fragment associated navigation drawer
- Learned how Android Studio uses de-appreciated code for Navigation Drawer and its fragment

### Haard Trivedi

- Learned how to utilize Firebase to the best extent and its features, especially data snapshots.
- The listview was an integral part of the project and so it was necessary to learn the best practices in order to create and operate list views in the project
- Learned about the engineering cycle and how a DevOps environment would function

### Harsh Gupta

- Learned that if a project is not organized properly from the beginning, developing the project further is going to be a terribly annoying and difficult process.
- Learned about CircleCI's practical benefits and how to implement it.
- Learned that Stack Overflow is usually more useful than official documentation.

### Bhalachandra Malghan

- Learnt different debugging techniques, including use the debug mode in android studio and better understanding the error messages being thrown.
- The project must be planned well from the start, we decided to move from a one page to having multiple fragments on the last deliverable, it lead to a lot of unnecessary work of moving pages and functionality around.