

Sanga Kalagam Android App

A report submitted for the course named Internship

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Dr. Balram Sanjai

Abstract

In this report , I am working on Android app.

This app was developed by noticing the social issue with neighbours in our society where most of the people do not know about there neighbours and area. By taking this into notice I have developed this app to solve this issue.

It's Android app using java and PHP ,MySQL

Use PHP for serverside and Mysql for database

Four types of login: SUPER ADMIN, ADMIN, MANAGER and USER

App name: Sanga kalagam

User role: signup/login, reference, membership validity and member fee pay (fee per year), can view sangam details, register for joining meeting.

Login using username and password

Signup using email, name, address, phone num, Ref erred by

Dashboard : membership validity, sangam details, registers for joining meeting

Admin: login with username password, controls manager(access/denied)

,Admin sets membership fee for app(yearly/monthly) share details of sangam and current/upcoming events, Controls users

access(block/release) , create registration form for users fo meeting

(meeting can be paid/free (admin sets fee amount) and admin can see all details of user from email to their address.

Super admin same as admin with extra feature such that super admin can restrict admin too from login.

Manager role : can restrict users.

Acknowledgement

Firstly, I would like to thank Dr. Balram sir for guiding us through Each and every step of the process with knowledge and support. His Thoughts have been a constant source of inspiration for us. I would also Like to acknowledge the contribution of all faculty members of the Department for their kind assistance, suggestions and cooperation Throughout the development of the project.

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Chapter 1

Introduction

1.1 Problem statement and Objective

The Android app is something almost everyone using either on a daily basis or at least once in a while. I am working on Android app.

This app was developed by noticing the social issue with neighbours in our society where most of the people do not know about there neighbours and area. By taking this into notice I have developed this app to solve this issue.

It's Android app using java and PHP ,MySQL.

1.2 Project Features

List the core features of the project which I am planning to build

Use PHP for serverside and Mysql for database

Four types of login: SUPER ADMIN, ADMIN, MANAGER and USER

User role: signup/login, reference, membership validity and member fee pay (fee per year), can view sangam details, register for joining meeting.

Login using username and password

Signup using email, name, address, phone num, Ref erred by

Dashboard : membership validity, sangam details, registers for joining meeting

Admin: login with username password, controls manager(access/denied) ,Admin sets membership fee for app(yearly/monthly) share details of

sangam and current/upcoming events, Controls users access(block/release) , create registration form for users fo meeting (meeting can be paid/free (admin sets fee amount) and admin can see all details of user from email to their address.

Super admin same as admin with extra feature such that super admin can restrict admin too from login.

Manager role : can restrict users.

1.3 Project Scope

The app can be updated or modified in future with respect to user requirements. The app can be updated by making changes in user interface, user interaction and customer support.

1.4 Summary

This app was developed by noticing the social issue with neighbours in our society where most of the people do not know about there neighbours and area. By taking this into notice I have developed this app to solve this issue.

Chapter 2:

Existing System Study

2.1 Introduction

Sanga kalagam Android app using java and PHP ,MySQL. So in this chapter we talk about software and application,project setup.

2.2 Software and Applications

1. **Android Studio** : Android Studio provides a unified environment where you can build apps for Android phones, tablets, Android Wear, Android TV, and Android Auto. Structured code modules allow you to divide your project into units of functionality that you can independently build, test, and debug.
2. **Java**: Java is a high-level, class-based, object-oriented programming language that is designed to have as few implementation dependencies as possible. One of the most significant advantages of Java is its ability to move easily from one computer system to another. The ability to run the same program on many different systems is crucial to World Wide Web software, and Java succeeds at this by being platform-independent at both the source and binary levels.
3. **PHP**: PHP is a server-side scripting language used to develop websites and web applications. It is a go-between for the server and the front end of a website or web application that manages dynamic content, databases and such. PHP's purpose is **to create websites and web applications**.

4. **MySQL** : MySQL is ideal for storing application data, specifically web application data. Additionally you should use MySQL if you need a relational database which stores data across multiple tables. As MySQL is a relational database, it's a good fit for applications that rely heavily on multi-row transactions.
5. **XML** : XML stands for eXtensible Markup Language, which is a way of describing data using a text-based document. Because XML is extensible and very flexible, it's used for many different things, including defining the UI layout of Android apps.

2.3 Project SetUp

Android Studio: firstly we create new folder name Sanga then I will install dependencies for my project .Then I will create folder and file for coding.

```
plugins {  
    id 'com.android.application'  
    id 'com.google.gms.google-services'  
}  
  
android {  
    compileSdk 32  
  
    defaultConfig {  
        applicationId "com.visanka.sangam"  
        minSdk 23  
        targetSdk 32  
        versionCode 1  
        versionName "1.0"  
  
        testInstrumentationRunner "androidx.test.runner.AndroidJUnitRunner"  
    }  
  
    buildTypes {  
        release {  
            minifyEnabled false  
            proguardFiles getDefaultProguardFile('proguard-android-optimize.txt'), 'proguard-rules.pro'  
        }  
    }  
}
```

```

    }
    compileOptions {
        sourceCompatibility JavaVersion.VERSION_1_8
        targetCompatibility JavaVersion.VERSION_1_8
    }
}

dependencies {

    implementation 'androidx.appcompat:appcompat:1.5.0'
    implementation 'com.google.android.material:material:1.6.1'
    implementation 'androidx.constraintlayout:constraintlayout:2.1.4'
    implementation 'androidx.constraintlayout:constraintlayout-core:1.0.4'
    implementation 'com.google.firebase:firebase-messaging:23.1.2'

    testImplementation 'junit:junit:4.13.2'
    androidTestImplementation 'androidx.test.ext:junit:1.1.3'
    androidTestImplementation 'androidx.test.espresso:espresso-core:3.4.0'
    implementation 'com.android.volley:volley:1.2.1'
    implementation 'com.razorpay:checkout:1.6.26'

}

```

```

package com.visanka.sangam;

public class params {

    public static final String FILE_URL
    ="http://192.168.239.234/php/Register.php";
    public static final String MANAGER_URL
    ="http://192.168.239.234/php/manager.php";
    public static final String LOGIN_URL
    ="http://192.168.239.234/php/login.php";
    public static final String SUPERADMIN_URL
    ="http://192.168.239.234/php/superadmin.php";

    public static final String ADMIN_URL
    ="http://192.168.239.234/php/admin.php";

}

```

Chapter 3:

System Design

3.1 Introduction

This chapter focuses on the systematic approaches to be adopted to guide help in the starting to the completion of the project, it will mainly focus on a development life cycle model and its advantages and disadvantages. The chapter aims to conclude with why the methodology was chosen for the duration of the project and the reasons behind choosing it. If the correct methodology is chosen and followed correctly, it should help to ensure the project stays on schedule.

3.2 Life Cycle

3.2.1 Prototype Model

In Prototype Model, a throw-away prototype is built with potentially few features included to closely understand the requirements. The prototype is not the complete system because many of the features are not built in the prototype, it is simply a prototype of what the final system will look like so that the client/user can get close feel of the system before the final system is even built.

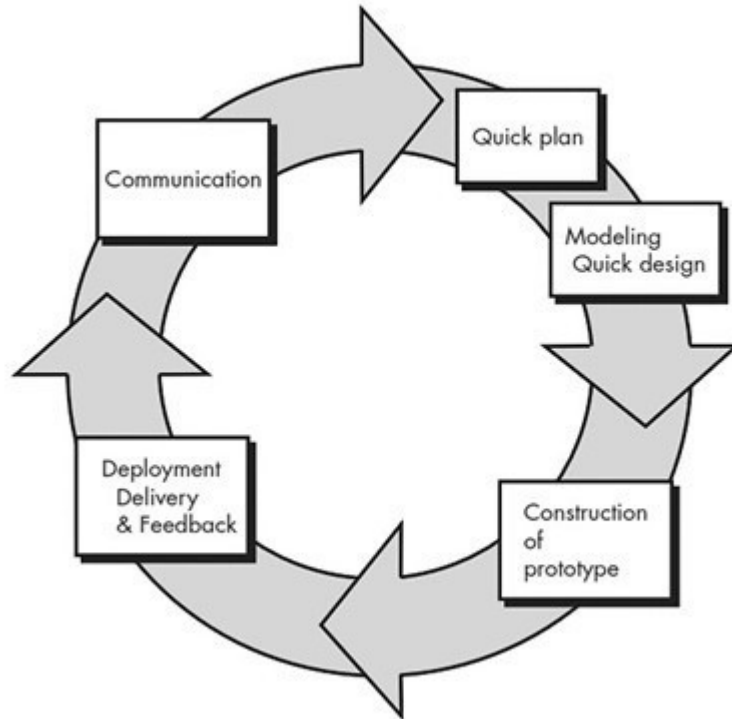


Figure 1 prototype model

Advantages of Prototype Model to the project:

- Errors can be detected much earlier in the lifecycle since therefore requirements can be changed with the feedback of the client, who are the students and myself in this case, if the error is time consuming to fix, as the project will have to be delivered on time.
- Feedback can be gathered early on in the development lifecycle through prototypes, this means that the feedback received from supervisor and participants students can be applied earlier than later in the lifecycle, saving time and helping to complete the project on schedule. This also means that the final system will satisfy the problem identified, as feedbacks from both supervisors and students will be regularly inputted in very prototype developed.

Disadvantages of Prototype Model to the project:

- Prototype have to be regularly developed which means, this could lead to continuous implantation and repairing, which could be time consuming.
- This methodology could increase problems, such as getting attached to prototype built and using that prototype design to the final system rather than changing it according to the feedback received. This means the final system cannot be according to the requirements and the requirements are not met.

3.3 Justification of Chosen Lifecycle

The chosen lifecycle methodology to be followed by the system was Prototype Model. This methodology was chosen because it allows to work on different aspects of the system requirements separately, this allows to get feedbacks on different prototypes very quickly and allows changes to be made, so that the final system matches with the requirements specified. Furthermore, it also helps to see that the project schedule, Gantt chart, is accurate and achievable. The chosen lifecycle has different variations which can be used, chosen is that Evolutionary Prototyping variation is very effective for myself. It is first time making a system which requires different components to be researched and implemented because usually this was done in a group which meant shared workload and made it easier as each member were allocated certain aspects of the system. However, as this time it is an individual work, Evolutionary Prototyping lifecycle helps to create a prototype and keep adding new prototypes on top of the initial prototype and tested along with the components of the first prototype, i.e., Database, will have to bear in mind that the first prototype must be robust. This is better than the Waterfall

Model as the waterfall model needs have all the requirements stated, along with the design and by the time it is coding stage, it could be late to make changes to the requirements, if a requirement proved to be hard to do or time-consuming, this could lead to delay in project schedule, prolong the delivery of the system and add additional constraints to other aspects of the project, i.e., Write-ups.

3.4 Summary

The chapter aims to conclude with why the methodology was chosen for the duration of the project and the reasons behind choosing it. If the correct methodology is chosen and followed correctly, it should help to ensure the project stays on schedule.

Chapter 4:

Implementation & Working of App

4.1 Introduction

So in this chapter we talk about coding and testing part.

4.2 Steps of implementaion

□ Created 1 st Registration page with Name, Email, Password, Phone Number, Address, as Input Fields. Provided two button, one is to submit the registration and another button is to visit login page if already registered.

Sanga

Register yourself!

Name

Email

password

Phone number

Address

SUBMIT

Already have account?

LOGIN



Register.php

```
1  <?PHP
2  $server = "127.0.0.1";
3  $username = "root";
4  $password = "";
5  $database = "android";
6  $conn = mysqli_connect($server,$username,$password,$database);
7  if(mysqli_connect_errno())
8  {
9      die("Connection error: ");
10 }
11 $name=$_POST['inputname'];
12 $email=$_POST['inputemail'];
13 $pass=$_POST['inputpass'];
14 $address=$_POST['inputaddress'];
15 $phone=$_POST['inputphone'];
16
17 $sql="insert into registeru(name,email,pass,address,phone) values('$name','$email','$pass','$address','$phone')";
18
19 $var1=mysqli_query($conn,$sql);
20 if(!$var1)
21 {
22     echo "cannot insert data into table";
23 }
24 mysqli_close($conn);
25
26 echo "connected";
27 ?>
```

- Created 2 nd Login Page with username and password input fields with multiple user type logins. User, Super Admin, Admin, Manager are 4 types of login types.

```
login.php
1  <?PHP
2  $server = "127.0.0.1";
3  $username = "root";
4  $password = "";
5  $database = "android";
6  $conn = mysqli_connect($server,$username,$password,$database);
7  if(mysqli_connect_errno())
8  {
9      die("Connection error: ");
10 }
11 $name=$_POST['inputname'];
12 $email=$_POST['inputemail'];
13 $pass=$_POST['inputpass'];
14 $address=$_POST['inputaddress'];
15 $phone=$_POST['inputphone'];
16
17 $sql="SELECT * FROM registeru WHERE email='$email' AND pass='$pass'";
18
19 $var1=mysqli_query($conn,$sql);
20 if(!$var1)
21 {
22     echo "username or password incorrect";
23 }
24 mysqli_close($conn);
25
26 echo "connected";
27 ?>
```

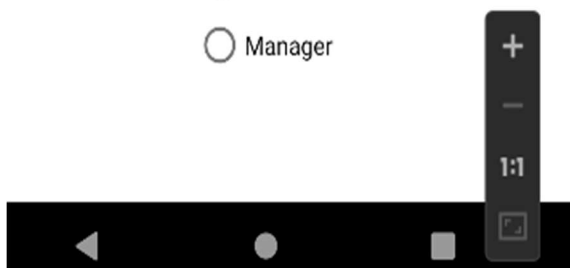
Login

Username

Password

SUBMIT

- ☐ User
- ☐ Super Admin
- ☐ Admin
- ☐ Manager



4.3 Working of Android app

User: User performs login and lands on dashboard page which is 3 rd page with respect to its login types. User finds different types of sangams in their dashboard.

DASHBOARD

Name	Email	Phone no.	Address
Amit	a@gmail.com	8669040717	banda
<input type="button" value="SELECT"/>			
Name	Email	Phone no.	Address
Amit	a@gmail.com	8669040717	Banda
<input type="button" value="SELECT"/>			
Name	Email	Phone no.	Address
Akash	ak@gmail.com	8669040717	Nashik
<input type="button" value="SELECT"/>			

Selecting on of the sangam will send user on 'sangam details' page which is 4 th page of application.

Sanga

SANGHAM DETAILS

NAME : Amit

ADDRESS : banda

MOBILE No: 86069040717

HOW MANY MEMBERS : 1

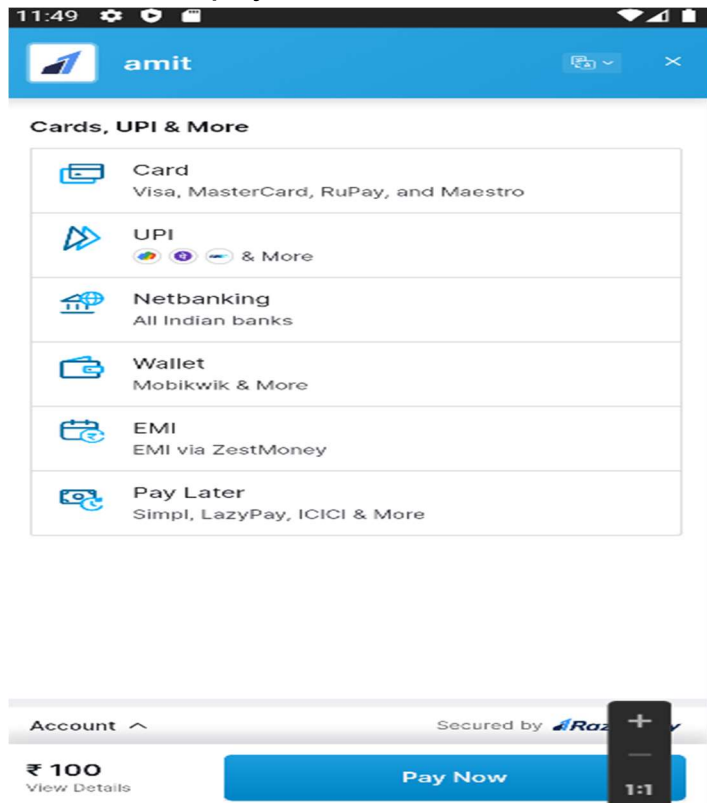
On Selecting Register button ,this will go to payment page.

Sanga



PAY

Now select 'pay' button.



Super Admin: Super Admin has power to restrict or delete admin from database by using PHP code.

```
superadmin.php
1  <?PHP
2  $server = "127.0.0.1";
3  $username = "root";
4  $password = "";
5  $database = "android";
6  $conn = mysqli_connect($server,$username,$password,$database);
7  if(mysqli_connect_errno())
8  {
9      die("Connection error: ");
10 }
11
12 $email=$_POST['managerentry'];
13
14 $sql="DELETE FROM admin WHERE username = '$email'";
15 if($conn->query($sql)===TRUE){
16     echo "deleted";
17 }
18 mysqli_close($conn);
19
20 echo "connected";
21 ?>
```

Super Admin has to provide username or admin ID in input field which is provided on 5 th Super Admin page to delete/restrict admin

SUPER ADMIN

Enter admin username to Restrict

Enter admin username

RESTRICT ADMIN

Manager: Manager has power to delete users from their application on basis of their email. This page is also 6 th page of application.

```
manager.php
1  <?PHP
2  $server = "127.0.0.1";
3  $username = "root";
4  $password = "";
5  $database = "android";
6  $conn = mysqli_connect($server,$username,$password,$database);
7  if(mysqli_connect_errno())
8  {
9      die("Connection error: ");
10 }
11
12 $email=$_POST['managereentry'];
13
14 $sql="DELETE FROM registeru WHERE email = '$email'";
15 if($conn->query($sql)===TRUE){
16     echo "deleted";
17 }
18 mysqli_close($conn);
19
20 echo "connected";
21 ?>
```

MANAGER PANEL

Enter User Email to delete

DELETE

Admin: Admin has power to restrict or delete manager from database by using PHP code.

```
admin.php
1  <?PHP
2  $server = "127.0.0.1";
3  $username = "root";
4  $password = "";
5  $database = "android";
6  $conn = mysqli_connect($server,$username,$password,$database);
7  if(mysqli_connect_errno())
8  {
9      die("Connection error: ");
10 }
11
12 $email=$_POST['managerentry'];
13
14 $sql="DELETE FROM manager WHERE username = '$email'";
15 if($conn->query($sql)===TRUE){
16     echo "deleted";
17 }
18 mysqli_close($conn);
19
20 echo "connected";
21 ?>
```


Admin has to provide username of manager in input field which is provided on Admin page to delete/restrict manager. Admin can set yearly or monthly membership fee for app.

Sanga

ADMIN

☐ Yearly sets membership fee

☐ Monthly sets membership fee

SET FEE

Enter manager username to Restrict

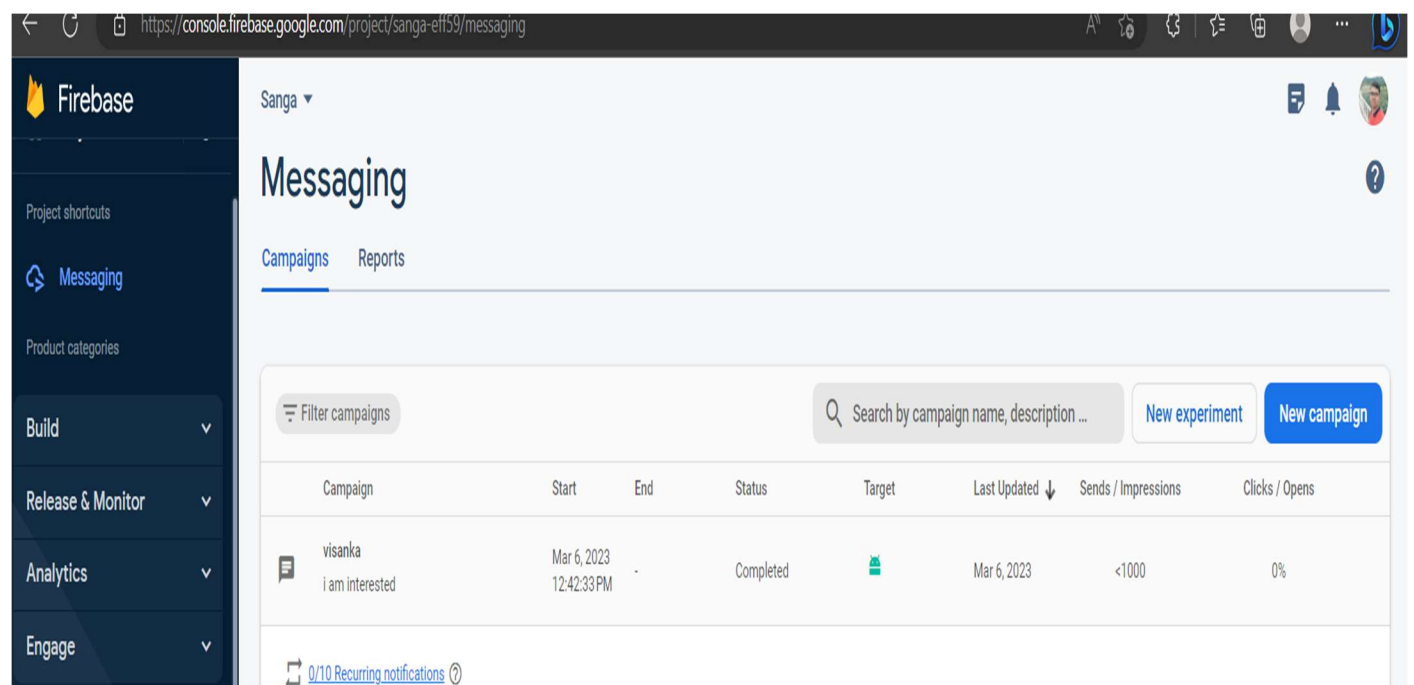
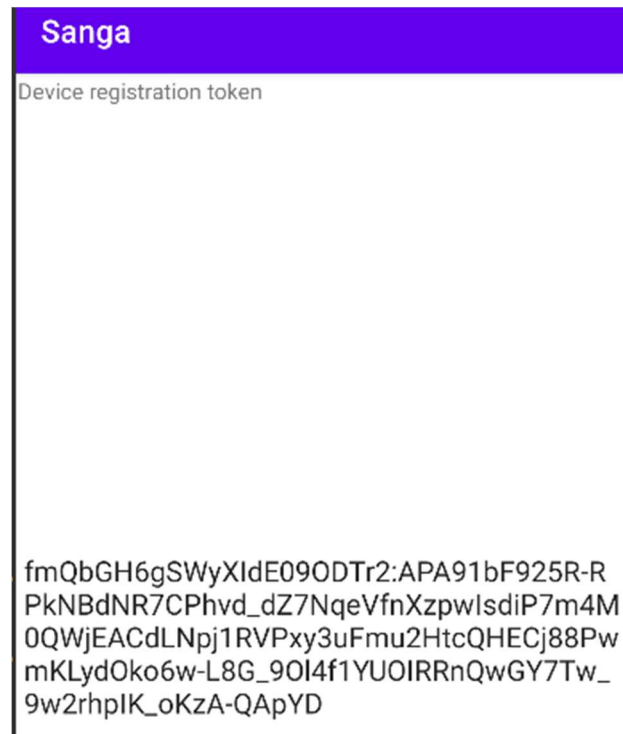
Enter manager username

RESTRICT MANAGER

localhost/phpmyadmin/index.php?route=/table/structure&db=android&table=admin

Server: 127.0.0.1 » Database: android » Table: admin										
Browse Structure SQL Search Insert Export Import Privileges Operations										
Table structure Relation view										
	#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
<input type="checkbox"/>	1	username	varchar(255)	utf8mb4_general_ci		No	None			Change Drop More
<input type="checkbox"/>	2	password	int(11)			No	None			Change Drop More

Push Notification service by using Firebase.



Firebase Cloud Messaging (FCM) provides a reliable and battery-efficient connection between your server and devices that allows you to deliver and receive messages and notifications on iOS, Android, and the web at no cost.

```
public class push_notificationActivity extends AppCompatActivity {  
    EditText etToken;  
  
    @Override  
    protected void onCreate(Bundle savedInstanceState) {  
        super.onCreate(savedInstanceState);  
        setContentView(R.layout.activity_push_notification);  
        etToken=findViewById(R.id.etToken);  
        FirebaseMessaging.getInstance().getToken()  
            .addOnCompleteListener(new OnCompleteListener<String>() {  
                @Override  
                public void onComplete(@NonNull Task<String> task) {  
                    if (!task.isSuccessful()) {  
                        System.out.println("Fetching FCM registration token failed");  
                        return;  
                    }  
  
                    String token = task.getResult();  
                    System.out.println( token);  
                    Toast.makeText( context: push_notificationActivity.this, text: "your device registration token is" + token, Toast.LENGTH  
etToken.setText(token);  
                }  
            })  
    }  
}
```

Chapter 5:

Conclusion

This app was developed by noticing the social issue with neighbours in our society where most of the people do not know about there neighbours and area. By taking this into notice I have developed this app to solve this issue.

Sanga kalagam app allows individuals to keep in touch with friends and extended family. The app can be updated or modified in future with respect to user requirment. The app can be updated by making changes in user interface, user interaction and customer support.

I am Amit Kumar as a developer with respect to application's integrity to other developers which fully supports the understandibility of sophisticated developers.

5.1 Bibliography

<https://console.firebase.google.com/project/sanga-eff59/inappmessaging/compose>

<https://console.firebase.google.com/project/sanga-eff59/messaging>