SYNOPSIS

1.1 TITLE OF THE PROJECT

"Android App to find restaurant nearby in city"

1.2 INTRODUCTION

Android is a mobile operating system developed by Google, based on a modified version of the Linux kernel and other opensource software and designed primarily for touchscreen mobile devices such as smartphones and tablets. In addition, Google has further developed Android TV for televisions, Android Auto for cars, and Wear OS for wrist watches, each with a specialized user interface. Variants of Android are also used on game consoles, digital cameras, PCs and other electronics.

1.3 OBJECTIVES

The app can be used by any person for checking restaurant their city App takes your location into consideration and displays all the nearby hotels with their address so that user can directly contact the restaurant and enquire about the place.

1.4 PROJECT CATEGORY
☐ Mobile Application

1.5 LANGUAGE USED
☐ Front End: XML
☐ Back End: Java

1.6 HARDWARE REQUIREMENTS
☐ RAM: 16GB RAM or above
☐ Hard disk: 256GB hard disk or above
☐ Mobile device

1.7 SOFTWARE REQUIREMENTS
☐ Operating system: windows 10 & above
☐ Java Development kit 7 +
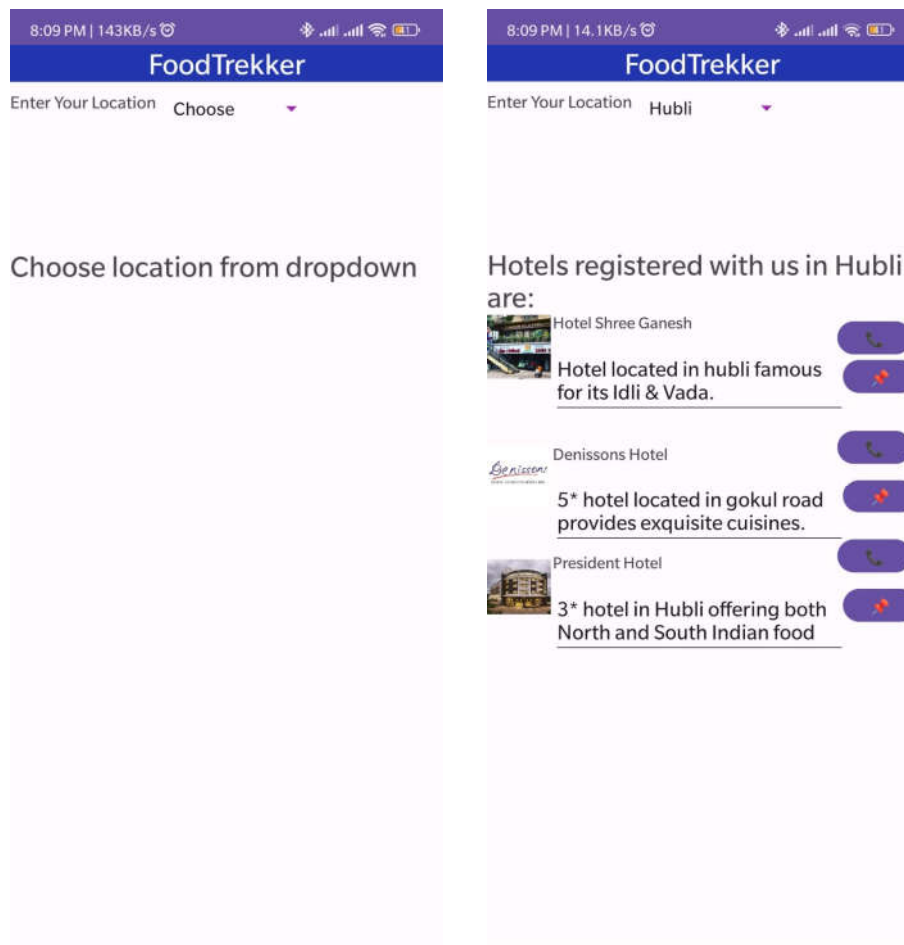☐ Android Studio 3.1.4 +
☐ Android SDK Manager
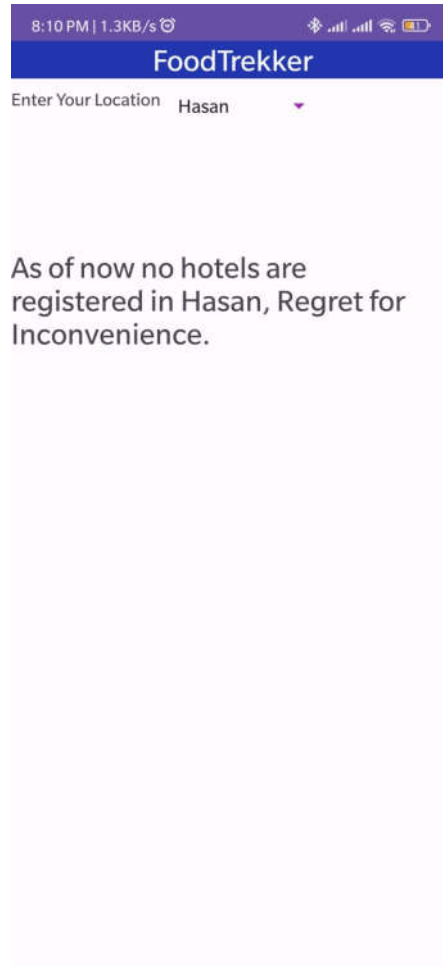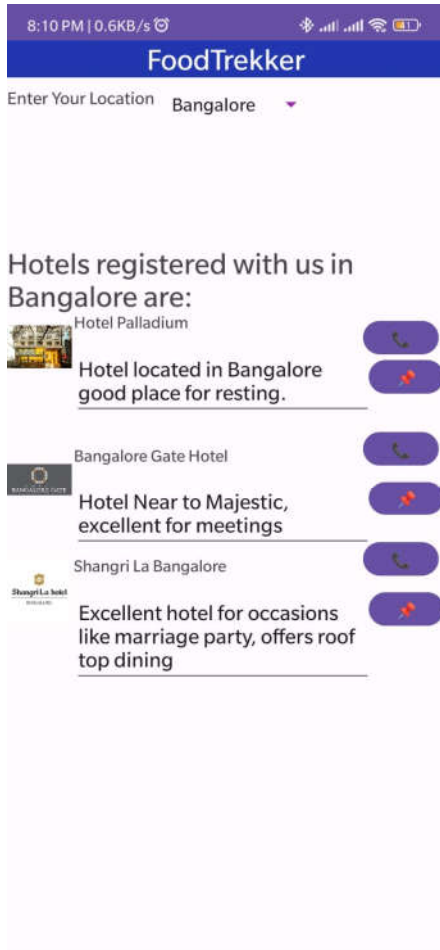
1.8 LIMITATIONS

- The mobile should be connected to the internet
- Basic knowledge of computers and the internet is important

1.9 FUTURE SCOPE

FoodTrekker has a promising future with various avenues for expansion and enhancement. Firstly, integrating advanced recommendation algorithms could provide users with tailored restaurant suggestions based on their preferences and past choices. Additionally, further refining the review system to include comprehensive feedback, images, and even video reviews would offer a richer user experience. Expanding the app's capabilities to facilitate restaurant reservations directly through the platform and incorporating delivery and takeout services would make it a comprehensive dining companion. Considering multi-platform support, including Android, iOS, and potentially a web application, would broaden its accessibility. Moreover, embracing social networking features, such as the ability to follow friends and plan group outings, could foster a sense of community among users. The app could also benefit from language localization to cater to a global audience, while cuisine-specific features like dietary filters and cultural preferences could enhance its relevance.

1.10 SCREENSHOTS

FoodTrekker

Enter Your Location   Bangalore   ▼

Hotels registered with us in
Bangalore are:

Hotel Palladium

Hotel located in Bangalore
good place for resting.

Bangalore Gate Hotel

Hotel Near to Majestic,
excellent for meetings

Shangri La Bangalore

Excellent hotel for occasions
like marriage party, offers roof
top dining

FoodTrekker

Enter Your Location   Hasan   ▼

As of now no hotels are
registered in Hasan, Regret for
Inconvenience.

CODE:

header.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:background="#2136AF">

    <RelativeLayout
        android:layout_width="wrap_content"
        android:layout_height="wrap_content">

        <TextView
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:textSize="25sp"
            android:text="FoodTrekker"
            android:textColor="@color/white"
            android:gravity="center"/>
    </RelativeLayout>
</RelativeLayout>
```

activity_main.xml

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    tools:context=".MainActivity" >
    <include layout="@layout/header"/>
    <RelativeLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent">
        <TextView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginTop="8sp"
            android:text="Enter Your Location"
            android:textSize="15dp" />
        <Spinner
            android:id="@+id/spinner_dropdown"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginLeft="140dp"
            android:backgroundTint="#9C27B0"
            android:spinnerMode="dropdown" />
        <TextView
            android:id="@+id/info"
            android:layout_width="wrap_content"
```

```xml
        android:layout_height="wrap_content"

        android:layout_marginTop="150dp"

        android:text=""

        android:textSize="25sp" />
    <ImageView

        android:id="@+id/img1"

        android:layout_width="58dp"

        android:layout_height="64dp"

        android:layout_marginTop="210dp"

        tools:srcCompat="@tools:sample/avatars" />
    <TextView

        android:id="@+id/h1"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:layout_marginLeft="60dp"

        android:layout_marginTop="210dp"

        android:text="TextView" />
    <EditText

        android:id="@+id/h1_details"

        android:layout_width="268dp"

        android:layout_height="wrap_content"

        android:layout_marginLeft="60dp"

        android:layout_marginTop="240dp"

        android:ems="10"

        android:gravity="start|top"

        android:editable="false"/>
    <Button

        android:id="@+id/call1"

        android:layout_width="68dp"

        android:layout_height="38dp"
```

```xml
        android:layout_marginLeft="320dp"

        android:layout_marginTop="215dp"

        android:text="📞" />
    <Button

        android:id="@+id/map1"

        android:layout_marginLeft="325dp"

        android:layout_marginTop="250dp"

        android:layout_width="68dp"

        android:layout_height="38dp"

        android:text="📌" />
    <ImageView

        android:id="@+id/img3"

        android:layout_width="58dp"

        android:layout_height="64dp"

        android:layout_marginTop="430dp"

        tools:srcCompat="@tools:sample/avatars" />
    <TextView

        android:id="@+id/h3"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:layout_marginLeft="60dp"

        android:layout_marginTop="430dp"

        android:text="TextView" />
    <EditText

        android:id="@+id/h3_details"

        android:layout_width="268dp"

        android:layout_height="wrap_content"

        android:layout_marginLeft="60dp"

        android:layout_marginTop="460dp"

        android:ems="10"
```

```xml
        android:gravity="start|top"

        android:editable="false" />

    <Button

        android:id="@+id/call3"

        android:layout_width="68dp"

        android:layout_height="38dp"

        android:layout_marginLeft="320dp"

        android:layout_marginTop="415dp"

        android:text="📞" />

    <Button

        android:id="@+id/map3"

        android:layout_marginLeft="325dp"

        android:layout_marginTop="460dp"

        android:layout_width="68dp"

        android:layout_height="38dp"

        android:text="📌" />

    <ImageView

        android:id="@+id/img2"

        android:layout_width="58dp"

        android:layout_height="64dp"

        android:layout_marginTop="330dp"

        tools:srcCompat="@tools:sample/avatars" />

    <TextView

        android:id="@+id/h2"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:layout_marginLeft="60dp"

        android:layout_marginTop="330dp"

        android:text="TextView" />

    <EditText
```

```xml
        android:id="@+id/h2_details"

        android:layout_width="268dp"

        android:layout_height="wrap_content"

        android:layout_marginLeft="60dp"

        android:layout_marginTop="360dp"

        android:ems="10"

        android:gravity="start|top"

        android:editable="false" />

    <Button

        android:id="@+id/call2"

        android:layout_width="68dp"

        android:layout_height="38dp"

        android:layout_marginLeft="320dp"

        android:layout_marginTop="315dp"

        android:text="📞" />

    <Button

        android:id="@+id/map2"

        android:layout_marginLeft="325dp"

        android:layout_marginTop="360dp"

        android:layout_width="68dp"

        android:layout_height="38dp"

        android:text="📌" />

    </RelativeLayout>

</LinearLayout>
```

MainActivity.java

```java
package com.example.foodtrekker;
import androidx.appcompat.app.AppCompatActivity;
import android.annotation.SuppressLint;
import android.content.Intent;
import android.content.res.Resources;
import android.graphics.drawable.Drawable;
import android.net.Uri;
import android.os.Build;
import android.util.Log;
import android.view.View;
import android.widget.*;
import android.os.Bundle;
public class MainActivity extends AppCompatActivity {
    Spinner drop;
    TextView info;
    String[] items={"Choose","Hubli","Bangalore","Hasan"};
    ImageView img1,img2,img3;
    TextView hotel1,hotel2,hotel3;
    EditText hotel1_details,hotel2_details,hotel3_details;
    Button call1,call2,call3;
    Button map1,map2,map3;
    @SuppressLint("SetTextI18n")
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        drop=(Spinner) findViewById(R.id.spinner_dropdown);
        ArrayAdapter<String>adapter=new ArrayAdapter<>(this,
                android.R.layout.simple_spinner_dropdown_item,items);
```

```java
drop.setAdapter(adapter);
info=(TextView)findViewById(R.id.info);
hotel1=(TextView) findViewById(R.id.h1);
hotel2=(TextView) findViewById(R.id.h2);
hotel3=(TextView) findViewById(R.id.h3);
hotel1_details=(EditText) findViewById(R.id.h1_details);
hotel2_details=(EditText) findViewById(R.id.h2_details);
hotel3_details=(EditText) findViewById(R.id.h3_details);
call1=(Button) findViewById(R.id.call1);
call2=(Button) findViewById(R.id.call2);
call3=(Button) findViewById(R.id.call3);
map1=(Button) findViewById(R.id.map1);
map2=(Button) findViewById(R.id.map2);
map3=(Button) findViewById(R.id.map3);
img1=(ImageView) findViewById(R.id.img1);
img2=(ImageView) findViewById(R.id.img2);
img3=(ImageView) findViewById(R.id.img3);
invisible();
drop.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener() {
    @Override
    public void onItemSelected(AdapterView<?> adapterView, View view, int i, long l) {
        String selectedItem=items[i];
        Log.d("Dropdown","Selected item:"+selectedItem);
        if(selectedItem!="Choose") {
            info.setText("Hotels registered with us in " + selectedItem + " are:");
            switch(selectedItem){
                case "Hubli":
                    hubli();
                    break;
                case "Bangalore":
```

```java
                bangalore();
                break;
            case "Hasan":
                info.setText("As of now no hotels are registered in Hasan, Regret " +
                    "for Inconvenience.");
                invisible();
                break;
            default:
                Toast.makeText(MainActivity.this,"Invalid
Option",Toast.LENGTH_LONG).show();
                break;
        }
    }
    else {
        info.setText("");
        invisible();
    }
}
@Override
public void onNothingSelected(AdapterView<?> adapterView) {
    Log.d("No DropDown","No item Selected");
}
});
}
public void hubli(){
    img1.setImageResource(R.drawable.ganesh_ubl);
    hotel1.setText("Hotel Shree Ganesh");
    hotel1_details.setText("Hotel located in hubli famous for its Idli & Vada.");
    call1.setOnClickListener(new View.OnClickListener() {
        @Override
```

```java
    public void onClick(View v) {
        call("1234567890");
    }
});
map1.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        map("15.35523529882348,75.1413573652321");
    }
});
img2.setImageResource(R.drawable.denissons_ubl);
hotel2.setText("Denissons Hotel");
hotel2_details.setText("5* hotel located in gokul road provides exquisite cuisines.");
call2.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        call("0987654321");
    }
});
map2.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        map("15.349182846683652,75.11276123792824");
    }
});
img3.setImageResource(R.drawable.president_ubl);
hotel3.setText("President Hotel");
hotel3_details.setText("3* hotel in Hubli offering both North and South Indian food");
call3.setOnClickListener(new View.OnClickListener() {
    @Override
```

```java
            public void onClick(View v) {
                call("7854965123");
            }
        });
        map3.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                map("15.382082664586198,75.11360756676474");
            }
        });
        visible();
    }
    public void bangalore(){
        img1.setImageResource(R.drawable.palladium_blr);
        hotel1.setText("Hotel Palladium");
        hotel1_details.setText("Hotel located in Bangalore good place for resting.");
        call1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                call("2323252121");
            }
        });
        map1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                map("12.978893801339906, 77.57951232624052");
            }
        });
        img2.setImageResource(R.drawable.bangalore_gate_blr);
        hotel2.setText("Bangalore Gate Hotel");
```

```java
hotel2_details.setText("Hotel Near to Majestic, excellent for meetings");
call2.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        call("0987654321");
    }
});
map2.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        map("12.973794556814324, 77.57919369555425");
    }
});
img3.setImageResource(R.drawable.shangri_la_blr);
hotel3.setText("Shangri La Bangalore");
hotel3_details.setText("Excellent hotel for occasions like marriage party, " +
        "offers roof top dining");
call3.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        call("7854965123");
    }
});
map3.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        map("12.992058162833168, 77.58817497836102");
    }
});
visible();
```

```java
        }
    public void hasan(){}
    public void invisible(){
        hotel1.setVisibility(View.INVISIBLE);
        hotel2.setVisibility(View.INVISIBLE);
        hotel3.setVisibility(View.INVISIBLE);
        hotel1_details.setVisibility(View.INVISIBLE);
        hotel2_details.setVisibility(View.INVISIBLE);
        hotel3_details.setVisibility(View.INVISIBLE);
        call1.setVisibility(View.INVISIBLE);
        call2.setVisibility(View.INVISIBLE);
        call3.setVisibility(View.INVISIBLE);
        map1.setVisibility(View.INVISIBLE);
        map2.setVisibility(View.INVISIBLE);
        map3.setVisibility(View.INVISIBLE);
        img1.setVisibility(View.INVISIBLE);
        img2.setVisibility(View.INVISIBLE);
        img3.setVisibility(View.INVISIBLE);   }
    public void visible(){
        hotel1.setVisibility(View.VISIBLE);
        hotel2.setVisibility(View.VISIBLE);
        hotel3.setVisibility(View.VISIBLE);
        hotel1_details.setVisibility(View.VISIBLE);
        hotel2_details.setVisibility(View.VISIBLE);
        hotel3_details.setVisibility(View.VISIBLE);
        call1.setVisibility(View.VISIBLE);
        call2.setVisibility(View.VISIBLE);
        call3.setVisibility(View.VISIBLE);
        map1.setVisibility(View.VISIBLE);
        map2.setVisibility(View.VISIBLE);
```

```java
            map3.setVisibility(View.VISIBLE);

            img1.setVisibility(View.VISIBLE);

            img2.setVisibility(View.VISIBLE);

            img3.setVisibility(View.VISIBLE);

        }

        public void call(String number){

            Uri uri=Uri.parse("tel:"+number);

            Intent call=new Intent(Intent.ACTION_DIAL,uri);

            try{

                startActivity(call);

            }

            catch(Exception e){

                e.printStackTrace();

            }

        }

        public void map(String geoLocation){

            Uri location=Uri.parse("geo:"+geoLocation+"?z=15");

            Intent openMap=new Intent(Intent.ACTION_VIEW,location);

            openMap.setPackage("com.google.android.apps.maps");

            try{

                startActivity(openMap);

            }

            catch(Exception e){

                e.printStackTrace();

            }

        }

}
```