Gradle scripts…

Build.gradle

apply **plugin**: **'com.android.application'**dependencies {  
 implementation **'com.android.support.constraint:constraint-layout:+'** implementation **'com.google.firebase:firebase-database:11.0.4'**}  
android {  
 compileSdkVersion 26  
 defaultConfig {  
 applicationId **"com.amruth.ambi.medicinedespenser"** minSdkVersion 18  
 targetSdkVersion 26  
 versionCode 1  
 versionName **"1.0"** testInstrumentationRunner **"android.support.test.runner.AndroidJUnitRunner"** }  
 buildTypes {  
 release {  
 minifyEnabled **false** proguardFiles getDefaultProguardFile(**'proguard-android.txt'**), **'proguard-rules.pro'** }  
 }  
  
 repositories {  
 maven {  
 url **"https://repo.eclipse.org/content/repositories/paho-releases/"** }  
  
 }  
  
 dependencies {  
 implementation fileTree(**dir**: **'libs'**, **include**: [**'\*.jar'**])  
 *//noinspection GradleCompatible,GradleCompatible* implementation **'com.android.support:appcompat-v7:26.0.0'** implementation **'com.android.support.constraint:constraint-layout:1.0.2'** implementation **'com.google.firebase:firebase-database:11.0.4'** testImplementation **'junit:junit:4.12'** implementation(**'org.eclipse.paho:org.eclipse.paho.android.service:1.0.2'**) {  
 exclude **module**: **'support-v4'** }  
  
 androidTestImplementation **'com.android.support.test:runner:0.5'** androidTestImplementation **'com.android.support.test.espresso:espresso-core:2.2.2'** }  
  
  
  
  
 apply **plugin**: **'com.google.gms.google-services'**}  
apply **plugin**: **'com.google.gms.google-services'**

AndroidManifest.xml

*<?*xml version="1.0" encoding="utf-8"*?>*<manifest xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:tools="http://schemas.android.com/tools"  
 package="com.amruth.ambi.medicinedespenser"  
 tools:ignore="ExtraText">  
  
 <uses-permission android:name="android.permission.WAKE\_LOCK" />  
 <uses-permission android:name="android.permission.INTERNET" />  
 <uses-permission android:name="android.permission.ACCESS\_NETWORK\_STATE" />  
 <uses-permission android:name="android.permission.READ\_PHONE\_STATE" />  
  
 <application  
 android:allowBackup="true"  
 android:icon="@drawable/med1"  
 android:label="@string/app\_name"  
 android:roundIcon="@mipmap/ic\_launcher\_round"  
 android:supportsRtl="true"  
 android:theme="@style/AppTheme">  
 <activity android:name=".MainActivity">  
 <intent-filter>  
 <action android:name="android.intent.action.MAIN" />  
  
 <category android:name="android.intent.category.LAUNCHER" />  
 </intent-filter>  
 </activity>  
 <activity android:name=".retrive" />  
  
 <service android:name="org.eclipse.paho.android.service.MqttService" />  
  
 <activity android:name=".food1" />  
 <activity android:name=".food2" />  
 <activity android:name=".email" />  
 <activity android:name=".Adapters.details"></activity>  
 </application>  
  
</manifest>

Layout..

activitymain\_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"  
 android:layout\_gravity="center"  
 android:gravity="bottom"  
 android:background="#f2f4ee"  
  
 tools:context="com.amruth.ambi.medicinedespenser.MainActivity"**>  
  
 <**ImageView  
 android:layout\_width="273dp"  
 android:layout\_height="243dp"  
 android:layout\_gravity="center"  
 android:layout\_marginBottom="50dp"  
 android:layout\_marginLeft="50dp"  
 android:layout\_marginRight="50dp"  
 android:layout\_marginTop="1dp"  
 android:gravity="top"  
 android:maxHeight="10dp"  
 android:maxWidth="10dp"  
 android:src="@drawable/pil"** />  
  
 <**Button  
  
 android:id="@+id/morning"  
 android:layout\_width="match\_parent"  
 android:layout\_height="45dp"  
 android:layout\_marginBottom="5dp"  
 android:layout\_marginLeft="25dp"  
 android:layout\_marginRight="30dp"  
 android:layout\_marginTop="5dp"  
 android:layout\_weight="0"  
 android:background="#d01486d9"  
 android:text="Morning"  
 android:textColor="#020101"  
  
 android:textSize="20dp"** />  
  
  
 <**Button  
 android:id="@+id/night"  
 android:layout\_width="match\_parent"  
 android:layout\_height="43dp"  
 android:layout\_marginBottom="30dp"  
 android:layout\_marginLeft="25dp"  
 android:layout\_marginRight="25dp"  
 android:layout\_marginTop="5sp"  
 android:layout\_weight="0"  
 android:background="#c393c9"  
 android:text="Night"  
 android:textColor="#0d0b0b"  
 android:textSize="20dp"** />  
  
  
  
  
 </**LinearLayout**>

Activity\_food1.xml

*<?***xml version="1.0" encoding="utf-8"***?>*<**android.widget.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"  
  
 tools:context="com.amruth.ambi.medicinedespenser.food1"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:gravity="center"  
 android:background="#d6d1c6"  
 android:orientation="vertical"**>  
  
 <**Button  
 android:id="@+id/bf"  
 android:layout\_width="358dp"  
 android:layout\_height="99dp"  
 android:text="Before food"  
 tools:layout\_editor\_absoluteX="264dp"  
 tools:layout\_editor\_absoluteY="194dp"  
 android:background="@drawable/round"  
 android:textColor="#fff"  
 android:textSize="20dp"  
 android:layout\_marginLeft="50dp"  
 android:layout\_marginRight="50dp"  
 android:layout\_marginBottom="10dp"  
 android:layout\_marginTop="10dp"**/>  
  
 <**Button  
 android:id="@+id/af"  
 android:layout\_width="355dp"  
 android:layout\_height="101dp"  
 android:text="After food"  
 android:layout\_marginRight="50dp"  
 android:layout\_marginLeft="50dp"  
 tools:layout\_editor\_absoluteX="26dp"  
 tools:layout\_editor\_absoluteY="194dp"  
 android:background="@drawable/round"  
 android:textSize="20dp"  
 android:textColor="#fff"  
 android:layout\_marginBottom="10dp"  
 android:layout\_marginTop="10dp"**/>  
  
</**android.widget.LinearLayout**>

Activity\_food2.xml

*<?***xml version="1.0" encoding="utf-8"***?>*<**android.widget.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"  
  
 tools:context="com.amruth.ambi.medicinedespenser.food1"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:gravity="center"  
 android:background="#d6d1c6"  
 android:orientation="vertical"**>  
  
 <**Button  
 android:id="@+id/bf"  
 android:layout\_width="358dp"  
 android:layout\_height="99dp"  
 android:text="Before food"  
 tools:layout\_editor\_absoluteX="264dp"  
 tools:layout\_editor\_absoluteY="194dp"  
 android:background="@drawable/round"  
 android:textColor="#fff"  
 android:textSize="20dp"  
 android:layout\_marginLeft="50dp"  
 android:layout\_marginRight="50dp"  
 android:layout\_marginBottom="10dp"  
 android:layout\_marginTop="10dp"**/>  
  
 <**Button  
 android:id="@+id/af"  
 android:layout\_width="355dp"  
 android:layout\_height="101dp"  
 android:text="After food"  
 android:layout\_marginRight="50dp"  
 android:layout\_marginLeft="50dp"  
 tools:layout\_editor\_absoluteX="26dp"  
 tools:layout\_editor\_absoluteY="194dp"  
 android:background="@drawable/round"  
 android:textSize="20dp"  
 android:textColor="#fff"  
 android:layout\_marginBottom="10dp"  
 android:layout\_marginTop="10dp"**/>  
  
</**android.widget.LinearLayout**>

Food.xml

*<?***xml version="1.0" encoding="utf-8"***?>*<**LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 xmlns:tools="http://schemas.android.com/tools"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 android:gravity="center"  
 android:background="#d6d1c6"  
 android:orientation="vertical"**>  
  
 <**Button  
 android:id="@+id/bf"  
 android:layout\_width="358dp"  
 android:layout\_height="99dp"  
 android:text="Before food"  
 tools:layout\_editor\_absoluteX="264dp"  
 tools:layout\_editor\_absoluteY="194dp"  
 android:background="@drawable/round"  
 android:textColor="#fff"  
 android:textSize="20dp"  
 android:layout\_marginLeft="50dp"  
 android:layout\_marginRight="50dp"  
 android:layout\_marginBottom="10dp"  
 android:layout\_marginTop="10dp"**/>  
  
 <**Button  
 android:id="@+id/af"  
 android:layout\_width="355dp"  
 android:layout\_height="101dp"  
 android:text="After food"  
 android:layout\_marginRight="50dp"  
 android:layout\_marginLeft="50dp"  
 tools:layout\_editor\_absoluteX="26dp"  
 tools:layout\_editor\_absoluteY="194dp"  
 android:background="@drawable/round"  
 android:textSize="20dp"  
 android:textColor="#fff"  
 android:layout\_marginBottom="10dp"  
 android:layout\_marginTop="10dp"**/>  
  
</**LinearLayout**>

Activity\_email.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="com.amruth.ambi.medicinedespenser.email"**>  
  
 <**EditText  
 android:id="@+id/em"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:ems="10"  
 android:hint="Enter your Email Id"  
 android:inputType="textPersonName"** />  
  
 <**Button  
 android:id="@+id/sub"  
 android:layout\_width="200dp"  
 android:layout\_height="wrap\_content"  
 android:layout\_gravity="center"  
 android:elevation="0dp"  
 android:text="submit"** />  
  
</**LinearLayout**>

Activity\_details.xml

*<?***xml version="1.0" encoding="utf-8"***?>*<**android.widget.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"  
 tools:context="com.amruth.ambi.medicinedespenser.Adapters.details"**>  
<**TextView  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/ListV"**></**TextView**>  
</**android.widget.LinearLayout**>

Logs.xml

*<?***xml version="1.0" encoding="utf-8"***?>*<**LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 android:orientation="vertical" android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"**>  
  
 <**TextView  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/textview"  
 android:textSize="18sp"  
 android:typeface="serif"/>**   
</**LinearLayout**>

Menu…

Menu.xml

*<?*xml version="1.0" encoding="utf-8"*?>*<menu xmlns:android="http://schemas.android.com/apk/res/android">  
 <item android:id="@+id/add"  
 android:title="Add Email Id"  
 ></item>  
  
 <item android:id="@+id/ret"  
 android:title="See Details"  
 ></item>  
  
</menu>

Drawable…

Round.xml

*<?***xml version="1.0" encoding="utf-8"***?>*<**shape xmlns:android="http://schemas.android.com/apk/res/android"  
 android:shape="rectangle"**>  
  
 <**solid android:color="#54a7b6"**/>  
 <**corners android:radius="1500000dp"**/>  
  
</**shape**>

java…

Adapters..

Details.java

**package** com.amruth.ambi.medicinedespenser.Adapters;  
  
**import** android.app.Activity;  
**import** android.content.Context;  
**import** android.support.annotation.NonNull;  
**import** android.support.annotation.Nullable;  
**import** android.view.LayoutInflater;  
**import** android.view.View;  
**import** android.view.ViewGroup;  
**import** android.widget.ArrayAdapter;  
**import** android.widget.TextView;  
  
**import** com.amruth.ambi.medicinedespenser.Model.logs;  
**import** com.amruth.ambi.medicinedespenser.R;  
  
**import** java.util.List;  
  
*/\*\*  
 \* Created by amruth on 06-07-2018.  
 \*/***public class** getdetails **extends** ArrayAdapter<logs> {  
  
 **private** Activity **context**;  
 List<logs> **list**;  
  
  
 **public** getdetails(@NonNull Activity context, List<logs> list) {  
 **super**(context, R.layout.***logs***,list);  
  
 **this**.**context** = context;  
 **this**.**list** = list;  
  
 }  
  
 @NonNull  
 @Override  
 **public** View getView(**int** position, @Nullable View convertView, @NonNull ViewGroup parent) {  
  
 LayoutInflater inflater = **context**.getLayoutInflater();  
 View loglist = inflater.inflate(R.layout.***logs***,**null**,**true**);  
  
 TextView textView = loglist.findViewById(R.id.***textview***);  
  
 logs a = **list**.get(position);  
  
 textView.setText(a.getTime());  
  
 **return** loglist;  
 }  
}

getdetails.java

**package** com.amruth.ambi.medicinedespenser.Adapters;  
  
**import** android.app.Activity;  
**import** android.content.Context;  
**import** android.support.annotation.NonNull;  
**import** android.support.annotation.Nullable;  
**import** android.view.LayoutInflater;  
**import** android.view.View;  
**import** android.view.ViewGroup;  
**import** android.widget.ArrayAdapter;  
**import** android.widget.TextView;  
  
**import** com.amruth.ambi.medicinedespenser.Model.logs;  
**import** com.amruth.ambi.medicinedespenser.R;  
  
**import** java.util.List;  
  
*/\*\*  
 \* Created by amruth on 06-07-2018.  
 \*/***public class** getdetails **extends** ArrayAdapter<logs> {  
  
 **private** Activity **context**;  
 List<logs> **list**;  
  
  
 **public** getdetails(@NonNull Activity context, List<logs> list) {  
 **super**(context, R.layout.***logs***,list);  
  
 **this**.**context** = context;  
 **this**.**list** = list;  
  
 }  
  
 @NonNull  
 @Override  
 **public** View getView(**int** position, @Nullable View convertView, @NonNull ViewGroup parent) {  
  
 LayoutInflater inflater = **context**.getLayoutInflater();  
 View loglist = inflater.inflate(R.layout.***logs***,**null**,**true**);  
  
 TextView textView = loglist.findViewById(R.id.***textview***);  
  
 logs a = **list**.get(position);  
  
 textView.setText(a.getTime());  
  
 **return** loglist;  
 }  
}

model..

logs.java

**package** com.amruth.ambi.medicinedespenser.Adapters;  
  
**import** android.app.Activity;  
**import** android.content.Context;  
**import** android.support.annotation.NonNull;  
**import** android.support.annotation.Nullable;  
**import** android.view.LayoutInflater;  
**import** android.view.View;  
**import** android.view.ViewGroup;  
**import** android.widget.ArrayAdapter;  
**import** android.widget.TextView;  
  
**import** com.amruth.ambi.medicinedespenser.Model.logs;  
**import** com.amruth.ambi.medicinedespenser.R;  
  
**import** java.util.List;  
  
*/\*\*  
 \* Created by amruth on 06-07-2018.  
 \*/***public class** getdetails **extends** ArrayAdapter<logs> {  
  
 **private** Activity **context**;  
 List<logs> **list**;  
  
  
 **public** getdetails(@NonNull Activity context, List<logs> list) {  
 **super**(context, R.layout.***logs***,list);  
  
 **this**.**context** = context;  
 **this**.**list** = list;  
  
 }  
  
 @NonNull  
 @Override  
 **public** View getView(**int** position, @Nullable View convertView, @NonNull ViewGroup parent) {  
  
 LayoutInflater inflater = **context**.getLayoutInflater();  
 View loglist = inflater.inflate(R.layout.***logs***,**null**,**true**);  
  
 TextView textView = loglist.findViewById(R.id.***textview***);  
  
 logs a = **list**.get(position);  
  
 textView.setText(a.getTime());  
  
 **return** loglist;  
 }  
}

email.java

**package** com.amruth.ambi.medicinedespenser;  
  
**import** android.app.Application;  
**import** android.content.Intent;  
**import** android.provider.Settings;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.util.Log;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.EditText;  
**import** android.widget.Toast;  
  
**import** com.google.firebase.database.DataSnapshot;  
**import** com.google.firebase.database.DatabaseError;  
**import** com.google.firebase.database.DatabaseReference;  
**import** com.google.firebase.database.FirebaseDatabase;  
**import** com.google.firebase.database.Query;  
**import** com.google.firebase.database.ValueEventListener;  
  
**import** java.util.regex.Matcher;  
**import** java.util.regex.Pattern;  
  
  
**public class** email **extends** AppCompatActivity **implements** View.OnClickListener {  
 EditText **emailid**;  
 Button **submit**;  
 **int i**=0;  
 String **k**;  
 DatabaseReference **rootRef**;  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_email***);  
 **final** DatabaseReference rootRef= FirebaseDatabase.*getInstance*().getReference().child(**"email"**);  
 **emailid** = findViewById(R.id.***em***);  
 rootRef.addValueEventListener(**new** ValueEventListener() {  
 @Override  
 **public void** onDataChange(DataSnapshot dataSnapshot) {  
 *//for(DataSnapshot ds:rootRef.get)* }  
  
 @Override  
 **public void** onCancelled(DatabaseError databaseError) {  
  
 }  
 });  
 **submit** = findViewById(R.id.***sub***);  
 **submit**.setOnClickListener(**this**);  
 }  
 @Override  
 **public void** onClick(View view) {  
 **final** String E = **emailid**.getText().toString();  
  
 **if** (validateEmail(E)) {  
  
 **rootRef** = FirebaseDatabase.*getInstance*().getReference(**"email"**);  
 **rootRef**.push().setValue(E);  
  
 Toast.*makeText*(getApplicationContext(), **"Email Id added "**, Toast.***LENGTH\_LONG***).show();  
   
 onBackPressed();  
  
  
 }  
 **else** {  
 Toast.*makeText*(getApplicationContext(), **"Enter valid Email Id "**, Toast.***LENGTH\_LONG***).show();  
 }  
  
 }  
  
  
 **public boolean** validateEmail(String email) {  
  
  
 Pattern pattern;  
 Matcher matcher;  
 String EMAIL\_PATTERN = **"^[\_A-Za-z0-9-]+(\\.[\_A-Za-z0-9-]+)\*@[A-Za-z0-9]+(\\.[A-Za-z0-9]+)\*(\\.[A-Za-z]{2,})$"**;  
 pattern = Pattern.*compile*(EMAIL\_PATTERN);  
 matcher = pattern.matcher(email);  
 **return** matcher.matches();  
  
 }  
}  
  
food1.java

**package** com.amruth.ambi.medicinedespenser;  
  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.util.Log;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.Toast;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.util.Log;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.TextView;  
**import** android.widget.Toast;  
  
**import** org.eclipse.paho.android.service.MqttAndroidClient;  
**import** org.eclipse.paho.client.mqttv3.IMqttActionListener;  
**import** org.eclipse.paho.client.mqttv3.IMqttDeliveryToken;  
**import** org.eclipse.paho.client.mqttv3.IMqttToken;  
**import** org.eclipse.paho.client.mqttv3.MqttCallback;  
**import** org.eclipse.paho.client.mqttv3.MqttClient;  
**import** org.eclipse.paho.client.mqttv3.MqttException;  
**import** org.eclipse.paho.client.mqttv3.MqttMessage;  
  
**import** java.io.UnsupportedEncodingException;  
  
  
**public class** food1 **extends** AppCompatActivity {  
 **private** Button **b**, **a**;  
 MqttAndroidClient **client**;  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_food1***);  
 **b** = findViewById(R.id.***bf***);  
 **a** = findViewById(R.id.***af***);  
  
  
 String clientId = MqttClient.*generateClientId*();  
 **client** = **new** MqttAndroidClient(getApplicationContext(), **"tcp://iot.eclipse.org:1883"**,  
 clientId);  
  
 **try** {  
 IMqttToken token = **client**.connect();  
 token.setActionCallback(**new** IMqttActionListener() {  
 @Override  
 **public void** onSuccess(IMqttToken asyncActionToken) {  
 *// We are connected* Log.*d*(**"MQTT"**, **"onSuccess"**);  
 Toast.*makeText*(food1.**this**, **"Successfull"**, Toast.***LENGTH\_SHORT***).show();  
 }  
  
 @Override  
 **public void** onFailure(IMqttToken asyncActionToken, Throwable exception) {  
 *// Something went wrong e.g. connection timeout or firewall problems* Log.*d*(**"MQTT"**, **"onFailure"**);  
  
 Toast.*makeText*(food1.**this**, **"Not Successfull"**, Toast.***LENGTH\_SHORT***).show();  
  
 }  
 });  
 } **catch** (MqttException e) {  
 e.printStackTrace();  
 }  
  
  
  
  
 **b**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View view) {  
  
  
 String topic = **"paho/atm"**;  
 String payload = **"mbf"**;  
 **byte**[] encodedPayload = **new byte**[0];  
 **try** {  
 encodedPayload = payload.getBytes(**"UTF-8"**);  
 MqttMessage message = **new** MqttMessage(encodedPayload);  
 **client**.publish(topic, message);  
 } **catch** (UnsupportedEncodingException | MqttException e) {  
 e.printStackTrace();  
 }  
 Toast.*makeText*(getApplicationContext(), **"Morning, Before food tablet box is opening"**, Toast.***LENGTH\_SHORT***).show();  
 onBackPressed();  
  
  
 }  
 });  
  
 **client**.setCallback(**new** MqttCallback() {  
 @Override  
 **public void** connectionLost(Throwable cause) {  
  
 }  
  
 @Override  
 **public void** messageArrived(String topic, MqttMessage message) **throws** Exception {  
  
 topic = **"foo/bar1"**;  
  
  
  
 }  
  
 @Override  
 **public void** deliveryComplete(IMqttDeliveryToken token) {  
  
 }  
  
 }  
 );  
 **a**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View view) {  
 String topic = **"paho/atm"**;  
 String payload = **"maf"**;  
 **byte**[] encodedPayload = **new byte**[0];  
 **try** {  
 encodedPayload = payload.getBytes(**"UTF-8"**);  
 MqttMessage message = **new** MqttMessage(encodedPayload);  
 **client**.publish(topic, message);  
 } **catch** (UnsupportedEncodingException | MqttException e) {  
 e.printStackTrace();  
 }  
 Toast.*makeText*(getApplicationContext(), **"Morning, After food tablet box is opening"**, Toast.***LENGTH\_LONG***).show();  
 onBackPressed();  
  
  
 }  
 });  
  
 **client**.setCallback(**new** MqttCallback() {  
 @Override  
 **public void** connectionLost(Throwable cause) {  
  
 }  
  
 @Override  
 **public void** messageArrived(String topic, MqttMessage message) **throws** Exception {  
  
 topic = **"foo/bar1"**;  
  
  
  
 }  
  
 @Override  
 **public void** deliveryComplete(IMqttDeliveryToken token) {  
  
 }  
  
 }  
 );} }

food2.java

**package** com.amruth.ambi.medicinedespenser;  
  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.util.Log;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.Toast;  
  
**import** org.eclipse.paho.client.mqttv3.IMqttDeliveryToken;  
**import** org.eclipse.paho.client.mqttv3.MqttCallback;  
**import** org.eclipse.paho.client.mqttv3.MqttException;  
**import** org.eclipse.paho.client.mqttv3.MqttMessage;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.util.Log;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.widget.TextView;  
**import** android.widget.Toast;  
  
**import** org.eclipse.paho.android.service.MqttAndroidClient;  
**import** org.eclipse.paho.client.mqttv3.IMqttActionListener;  
**import** org.eclipse.paho.client.mqttv3.IMqttDeliveryToken;  
**import** org.eclipse.paho.client.mqttv3.IMqttToken;  
**import** org.eclipse.paho.client.mqttv3.MqttCallback;  
**import** org.eclipse.paho.client.mqttv3.MqttClient;  
**import** org.eclipse.paho.client.mqttv3.MqttException;  
**import** org.eclipse.paho.client.mqttv3.MqttMessage;  
  
**import** java.io.UnsupportedEncodingException;  
  
  
**import** java.io.UnsupportedEncodingException;  
  
**public class** food2 **extends** AppCompatActivity {  
 **private** Button **nb**, **na**;  
 MqttAndroidClient **client**;  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_food2***);  
 **nb** = findViewById(R.id.***nbf***);  
 **na** = findViewById(R.id.***naf***);  
 String clientId = MqttClient.*generateClientId*();  
 **client** = **new** MqttAndroidClient(getApplicationContext(), **"tcp://iot.eclipse.org:1883"**,  
 clientId);  
 **try** {  
 IMqttToken token = **client**.connect();  
 token.setActionCallback(**new** IMqttActionListener() {  
 @Override  
 **public void** onSuccess(IMqttToken asyncActionToken) {  
 *// We are connected* Log.*d*(**"MQTT"**, **"onSuccess"**);  
 Toast.*makeText*(food2.**this**, **"Successfull"**, Toast.***LENGTH\_SHORT***).show();  
 }  
  
 @Override  
 **public void** onFailure(IMqttToken asyncActionToken, Throwable exception) {  
 *// Something went wrong e.g. connection timeout or firewall problems* Log.*d*(**"MQTT"**, **"onFailure"**);  
  
 Toast.*makeText*(food2.**this**, **"Not Successfull"**, Toast.***LENGTH\_SHORT***).show();  
  
 }  
 });  
 } **catch** (MqttException e) {  
 e.printStackTrace();  
 }  
  
  
  
  
  
 **nb**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View view) {  
  
  
 String topic = **"paho/atm"**;  
 String payload = **"nbf"**;  
 **byte**[] encodedPayload = **new byte**[0];  
 **try** {  
 encodedPayload = payload.getBytes(**"UTF-8"**);  
 MqttMessage message = **new** MqttMessage(encodedPayload);  
 **client**.publish(topic, message);  
 } **catch** (UnsupportedEncodingException | MqttException e) {  
 e.printStackTrace();  
 }  
 Toast.*makeText*(getApplicationContext(), **"Night, Before food tablet box is opening"**, Toast.***LENGTH\_SHORT***).show();  
 onBackPressed();  
  
 }  
 });  
  
 **client**.setCallback(**new** MqttCallback() {  
 @Override  
 **public void** connectionLost(Throwable cause) {  
  
 }  
  
 @Override  
 **public void** messageArrived(String topic, MqttMessage message) **throws** Exception {  
  
 topic = **"foo/bar1"**;  
  
  
 }  
  
 @Override  
 **public void** deliveryComplete(IMqttDeliveryToken token) {  
  
 }  
  
 }  
 );  
  
  
 **na**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View view) {  
 String topic = **"paho/atm"**;  
 String payload = **"naf"**;  
 **byte**[] encodedPayload = **new byte**[0];  
 **try** {  
 encodedPayload = payload.getBytes(**"UTF-8"**);  
 MqttMessage message = **new** MqttMessage(encodedPayload);  
 **client**.publish(topic, message);  
 } **catch** (UnsupportedEncodingException | MqttException e) {  
 e.printStackTrace();  
 }  
 Toast.*makeText*(getApplicationContext(), **"Night, After food tablet box is opening"**, Toast.***LENGTH\_LONG***).show();  
 onBackPressed();  
  
  
 }  
 });  
  
 **client**.setCallback(**new** MqttCallback() {  
 @Override  
 **public void** connectionLost(Throwable cause) {  
  
 }  
  
 @Override  
 **public void** messageArrived(String topic, MqttMessage message) **throws** Exception {  
  
 topic = **"foo/bar1"**;  
  
  
 }  
  
 @Override  
 **public void** deliveryComplete(IMqttDeliveryToken token) {  
  
 }  
  
 }  
 );  
 }  
}

MainActivity.java

**package** com.amruth.ambi.medicinedespenser;  
  
**import** android.content.Intent;  
**import** android.support.v7.app.AppCompatActivity;  
**import** android.os.Bundle;  
**import** android.util.Log;  
**import** android.view.Menu;  
**import** android.view.MenuItem;  
**import** android.view.View;  
**import** android.widget.Button;  
**import** android.app.Activity;  
**import** android.widget.Toast;  
  
**import** com.amruth.ambi.medicinedespenser.Adapters.details;  
  
**import** org.eclipse.paho.android.service.MqttAndroidClient;  
**import** org.eclipse.paho.client.mqttv3.IMqttActionListener;  
**import** org.eclipse.paho.client.mqttv3.IMqttDeliveryToken;  
**import** org.eclipse.paho.client.mqttv3.IMqttToken;  
**import** org.eclipse.paho.client.mqttv3.MqttCallback;  
**import** org.eclipse.paho.client.mqttv3.MqttClient;  
**import** org.eclipse.paho.client.mqttv3.MqttException;  
**import** org.eclipse.paho.client.mqttv3.MqttMessage;  
  
**import** java.io.UnsupportedEncodingException;  
  
  
  
**public class** MainActivity **extends** AppCompatActivity {  
 Button **morn**,**night**;  
 MqttAndroidClient **client**;  
  
 @Override  
 **public boolean** onCreateOptionsMenu(Menu menu) {  
  
 *//Inflate the menu using menu inflater* getMenuInflater().inflate(R.menu.***menu***, menu);  
 **return true**;  
 }  
  
 @Override  
 **public boolean** onOptionsItemSelected(MenuItem item) {  
 **switch** (item.getItemId()) {  
 **case** R.id.***add***:  
  
 Intent i = **new** Intent(MainActivity.**this**, email.**class**);  
 startActivity(i);  
  
 **break**;  
  
 **case** R.id.***ret***:  
 Intent j = **new** Intent(MainActivity.**this**, details.**class**);  
 startActivity(j);  
  
 **break**;  
  
  
 **default**:  
 **return super**.onOptionsItemSelected(item);  
 }  
 **return true**;  
 }  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
 **morn** = findViewById(R.id.***morning***);  
 **night** = findViewById(R.id.***night***);  
  
  
  
  
  
  
 **morn**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View view) {  
 Intent i = **new** Intent(MainActivity.**this**, food1.**class**);  
 startActivity(i);  
  
  
  
 }  
 });  
  
  
  
  
  
  
 **night**.setOnClickListener(**new** View.OnClickListener() {  
 @Override  
 **public void** onClick(View view) {  
 Intent i = **new** Intent(MainActivity.**this**, food2.**class**);  
 startActivity(i);  
  
 }  
  
  
  
  
 });  
  
  
 }  
}