**Lab Report 3 : Double Activity App**

**Course Title: Mobile Application Development**

**Course Code: CSE-410**

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# GitHub Repository:

You can find the repository at the following link:
https://github.com/RubayedMunna/Android-Lab/tree/main/Lab_3/TwoActivity

## Code:

## activity_main.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:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:padding="100dp"

    tools:context=".MainActivity">

        <EditText
            android:id="@+id/message"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginTop="20dp"
            android:layout_gravity="center"
            android:hint="@string/hint"
            android:ems="10" />

        <Button
            android:id="@+id/send"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginTop="20dp"
            android:onClick="onSendMessage"
            android:layout_gravity="center"
            android:text="@string/send" />


        <TextView
            android:id="@+id/destination_label"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="@string/select_destination"
            android:textSize="18sp"
            android:layout_gravity="center_horizontal"
```

```
        android:paddingBottom="8dp"
        android:layout_marginTop="40dp"/>

    <Spinner
        android:id="@+id/destination_spinner"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:layout_gravity="center"
        android:layout_marginTop="40dp"
        android:layout_margin="16dp"
        android:entries="@array/destinations"/>

    <Button
        android:id="@+id/show_hotels_button"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="@string/show_hotels"
        android:layout_marginTop="16dp"
        android:onClick="onClickFindHotel"/>

    <TextView
        android:id="@+id/hotel_info_label"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/hotel_list"
        android:textSize="18sp"
        android:layout_gravity="center_horizontal"
        android:paddingTop="16dp"/>

    <ScrollView
        xmlns:android="http://schemas.android.com/apk/res/
           android"
        android:layout_width="match_parent"
        android:layout_height="0dp"
        android:layout_weight="1"
        android:padding="16dp">

            <androidx.cardview.widget.CardView
                android:layout_width="match_parent"
                android:layout_height="wrap_content"
                android:layout_marginTop="16dp"
                android:layout_marginBottom="16dp"
                android:elevation="4dp"
                app:cardCornerRadius="8dp"
                app:cardBackgroundColor="@android:color/white
                   ">

                    <TextView
                        android:id="@+id/hotel_details"
                        android:layout_width="match_parent"
                        android:layout_height="wrap_content"
```

```
                                android:text="@string/hotels"
                                android:textSize="16sp"
                                android:padding="16dp"
                                android:textColor="@android:color/
                                   black"
                                android:lineSpacingExtra="4dp"
                                android:background="@drawable/
                                   textview_background" />
                        </androidx.cardview.widget.CardView>

                </ScrollView>

</LinearLayout>
```

Listing 1: activity_main.xml

## activity_second.xml

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout 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:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".SecondActivity">

    <TextView
        android:id="@+id/message"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="TextView"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />
</androidx.constraintlayout.widget.ConstraintLayout>
```

Listing 2: activity_second.xml

## MainActivity.java

```
package com.example.twoactivity;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.ArrayAdapter;
```

```
import android.widget.Button;
import android.widget.EditText;
import android.widget.Spinner;
import android.widget.TextView;

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;

import java.util.HashMap;
import java.util.Map;

public class MainActivity extends AppCompatActivity {
    private Spinner destinationSpinner;
    private Button showHotelsButton;
    private TextView hotelDetails;

    private Map<String, String[]> hotelData;


    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_main);
        ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.
   main), (v, insets) -> {
            Insets systemBars = insets.getInsets(WindowInsetsCompat.
   Type.systemBars());
            v.setPadding(systemBars.left, systemBars.top, systemBars.
   right, systemBars.bottom);
            return insets;
        });

        destinationSpinner = findViewById(R.id.destination_spinner);
        showHotelsButton = findViewById(R.id.show_hotels_button);
        hotelDetails = findViewById(R.id.hotel_details);

        // Sample data for tourist destinations and their hotels
        String[] destinations = {"New York", "Paris", "Tokyo", "Dubai"
   };
        hotelData = new HashMap<>();
        hotelData.put("New York", new String[]{
                "Artezen Hotel \n24 John Street, New York, NY 10038,
   United States \n$188.10",
                "LUMA Hotel \n120 West 41st Street, New York, NY
   10036-7315, United States.\n$475",
                "NobleDEN Hotel \n196 Grand Street, Little Italy, New
   York, NY 10013, United States \n$284",
                "Hotel Scherman \n346 West 46th Street, Hell's Kitchen,
    New York, NY 10036, United States \n$249",
                "The Hotel Chelsea \n222 West 23rd Street, Chelsea, New
    York, NY 10011, United States \n$468",
                "The Wallace Hotel \n242 West 76th Street, Upper West
   Side, New York, NY 10023, United States \n$458.10",
```

```
            "Mint House \n70 Pine Street, New York, NY 10005,
United States \n$376"
        });
        hotelData.put("Paris", new String[]{
                "Mode Paris Aparthotel \n4 Rue Leroux, 16th arr., 75116
 Paris, France \n$301",
                "Drawing House \n21 Rue Vercing torix, 14th arr.,
75014 Paris, France \n$305",
                "Maison Albar - Le Diamond \n4, rue de la P pini re,
8th arr., 75008 Paris, France \n$480",
                "Sofitel Paris Arc De Triomphe \n14 Rue Beaujon, 8th
arr., 75008 Paris, France \n$370",
                "Sofitel Paris Arc De Triomphe \n14 Rue Beaujon, 8th
arr., 75008 Paris, France \n$364",
                "Le Basile H tel \n23 rue Godot de Mauroy, 9th arr.,
75009 Paris, France \n$458",
                "H tel Chamar \n35, Rue La Bruy re, 9th arr., 75009
Paris, France \n$295"

        });
        hotelData.put("Tokyo", new String[]{
                "Tokyo Bay Shiomi Prince Hotel \n135-0052 Tokyo-to,
Koto-ku Shiomi 2-8-16, Japan \n$280",
                "THE BLOSSOM HIBIYA \n105-0004 Tokyo-to, Shinbashi
1-1-13, Japan \n$258",
                "The Okura Tokyo \n105-0001 Tokyo-to, Minato-ku
Toranomon 2-10-4, Japan \n$323",
                "MIMARU Tokyo Hatchobori \n103-0025 Tokyo-to, 3-8-8
NIhombashi Kayabacho, Chuo-ku, Japan\n$286",
                "Imperial Hotel Tokyo \n100-8558 Tokyo-to, Chiyoda-ku
Uchisaiwai-cho 1-1-1, Japan \n$254",
                "The Tokyo Station Hotel \n100-0005 Tokyo-to, Chiyoda-
ku Marunouchi 1-9-1, Japan \n$199",
        });
        hotelData.put("Dubai", new String[]{
                "Jumeirah Burj Al Arab Dubai \nJumeirah Beach Road,
Dubai, United Arab Emirates \n$750",
                "One&Only One Za'abeel, \nZa'abeel Street Za'abeel 1 -
Level 25, Trade Centre, Dubai, United Arab Emirates, \n$805.10",
                "Kempinski The Boulevard Dubai \nSheikh Mohamed Bin
Rashid Boulevard, Downtown Dubai, PO Box 214477, Downtown Dubai,
214477 Dubai, United Arab Emirates \n$799.50",
                "The Lana - Dorchester Collection, \nMarasi Drive Burj
Khalifa District, Dubai, United Arab Emirates \n$785",
                "Mandarin Oriental Jumeira \n1 Jumeirah Street Jumeirah
 Beach Road, Jumeirah, Dubai, United Arab Emirates \n$849",
                "Shangri-La Dubai, \nSheikh Zayed Road, Trade Centre,
Dubai, United Arab Emirates \n$825",
        });

        // Populate the spinner with destinations
        ArrayAdapter<String> adapter = new ArrayAdapter<>(this, android
.R.layout.simple_spinner_item, destinations);
        adapter.setDropDownViewResource(android.R.layout.
simple_spinner_dropdown_item);
        destinationSpinner.setAdapter(adapter);

        // Set up button click listener
```

```
        showHotelsButton.setOnClickListener(new View.OnClickListener()
    {
            @Override
            public void onClick(View v) {
                String selectedDestination = destinationSpinner.
    getSelectedItem().toString();
                showHotels(selectedDestination);
            }
        });
     }



     public void onSendMessage(View view) {
        EditText messageView = (EditText) findViewById(R.id.message);
        String messageText = messageView.getText().toString();


        Intent intent = new Intent(this, SecondActivity.class);
        intent.putExtra("message", messageText);

        startActivity(intent);
     }

     private void showHotels(String destination) {
        String[] hotels = hotelData.get(destination);
        if (hotels != null) {
            StringBuilder details = new StringBuilder();
            for (String hotel : hotels) {
                details.append(hotel).append("\n\n");
            }
            hotelDetails.setText(details.toString().trim());
        } else {
            hotelDetails.setText("No hotels available for this
    destination.");
        }
     }
}
```

Listing 3: MainActivity.java

## SecondActivity.java

```
package com.example.twoactivity;

import android.content.Intent;
import android.os.Bundle;
import android.widget.TextView;

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;
```

```
public class SecondActivity extends AppCompatActivity {
    public static final String EXTRA_MESSAGE = "message";
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_second);
        Intent intent = getIntent();
        String messageText = intent.getStringExtra(EXTRA_MESSAGE);
        TextView messageView = (TextView)findViewById(R.id.message);
        messageView.setText(messageText);
        ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.
   main), (v, insets) -> {
            Insets systemBars = insets.getInsets(WindowInsetsCompat.
   Type.systemBars());
            v.setPadding(systemBars.left, systemBars.top, systemBars.
   right, systemBars.bottom);
            return insets;
        });

    }
}
```

Listing 4: SecondActivity.java

## strings.xml

```
<resources>
    <string name="app_name">TwoActivity</string>
    <string name="hint">Enter a message</string>
    <string name="send">Send message</string>

    <string name="hotel_app_name">Hotel_Information_System</
       string>
    <string name="show_hotels">Show Hotels</string>
    <string name="hotels">No hotel is selected</string>
    <string name="select_destination">Select a City</string>
    <string name="hotel_list">Available Hotels</string>

    <string-array name="destinations">
        <item>New York</item>
        <item>Paris</item>
        <item>Tokyo</item>
        <item>Dubai</item>
    </string-array>
</resources>
```

Listing 5: strings.xml

## textview_background.xml

```
<shape xmlns:android="http://schemas.android.com/apk/res/android"
   >
    <solid android:color="@android:color/white" />
    <corners android:radius="8dp" />
    <stroke
        android:width="2dp"
        android:color="@android:color/darker_gray" />
</shape>
```

Listing 6: strings.xml

**Output:**

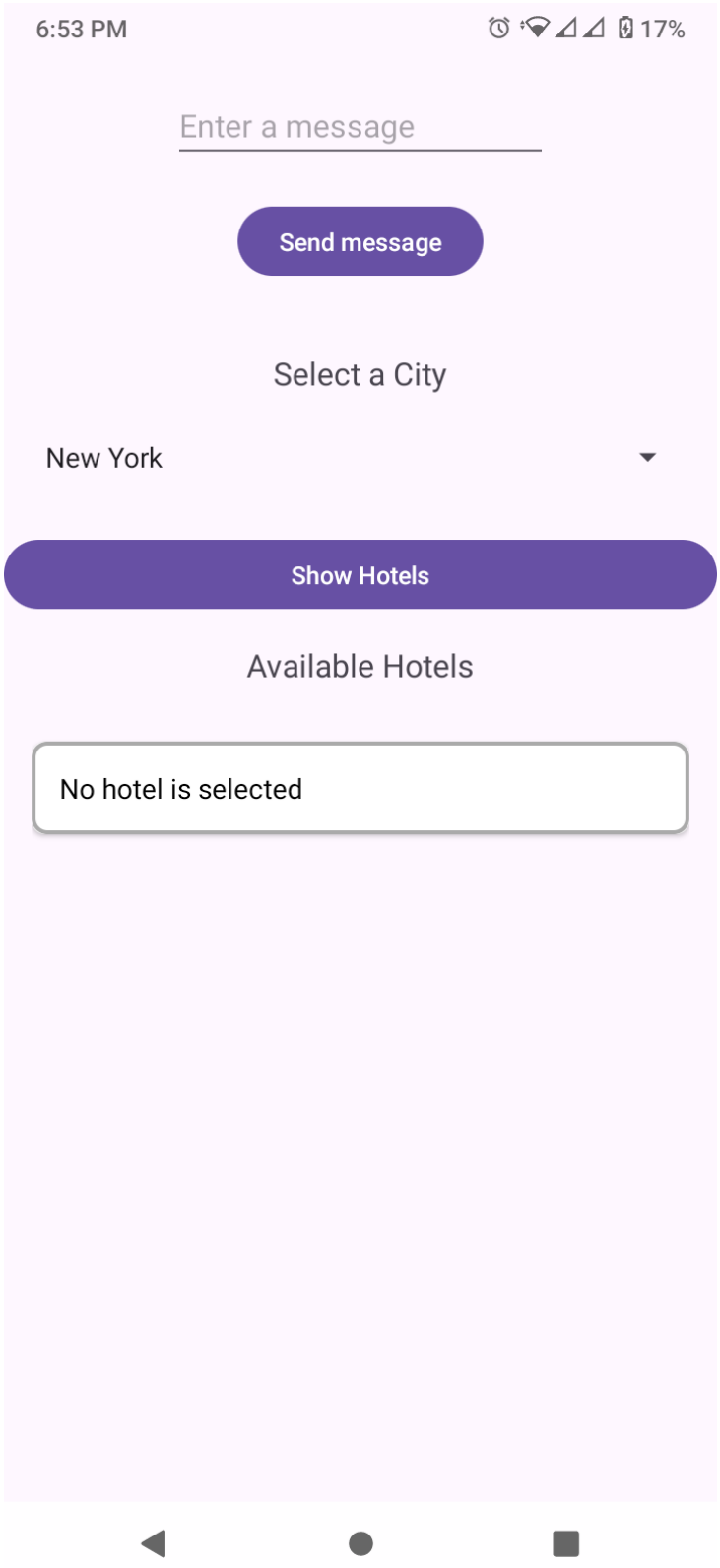


Figure 1: First Look of the app

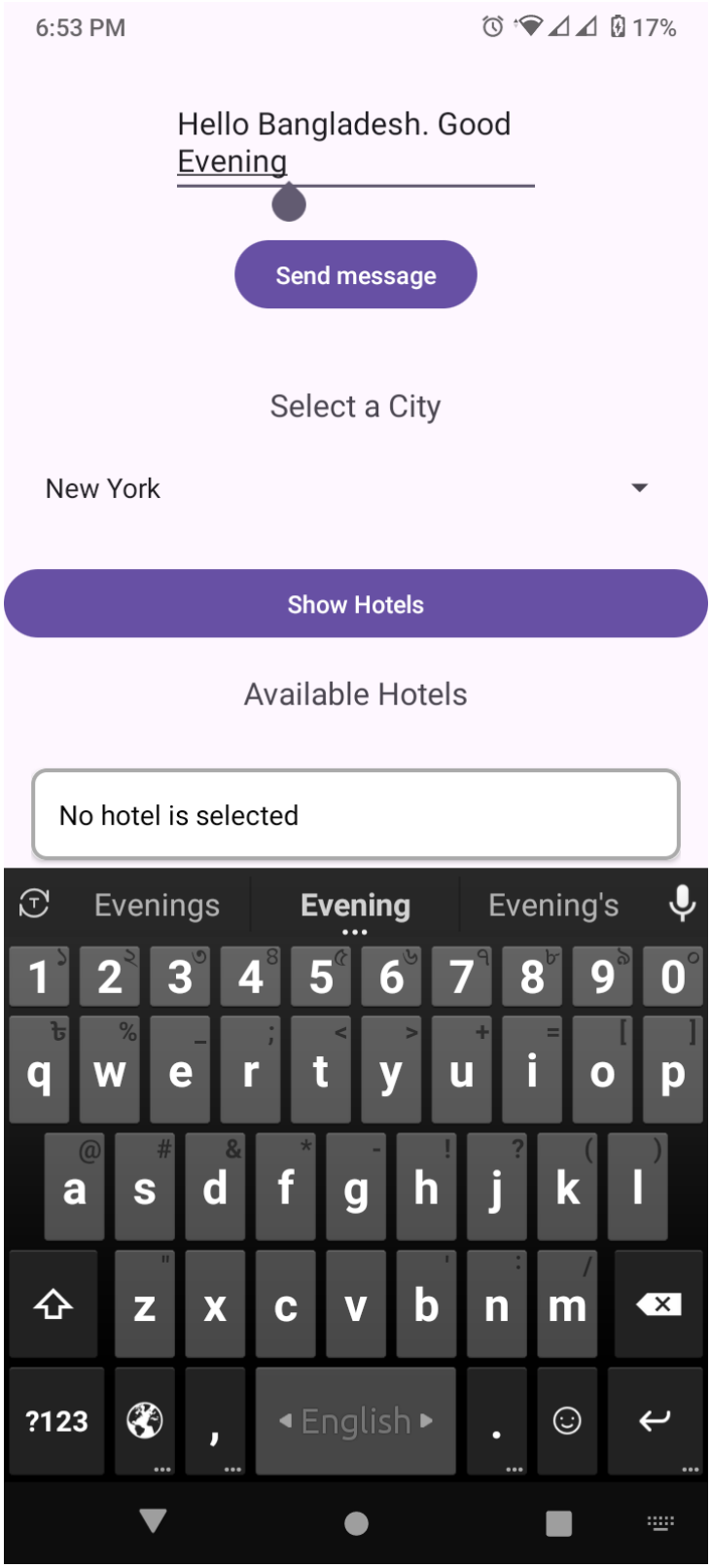


Figure 2: Before sending the message

Figure 3: After sending the message

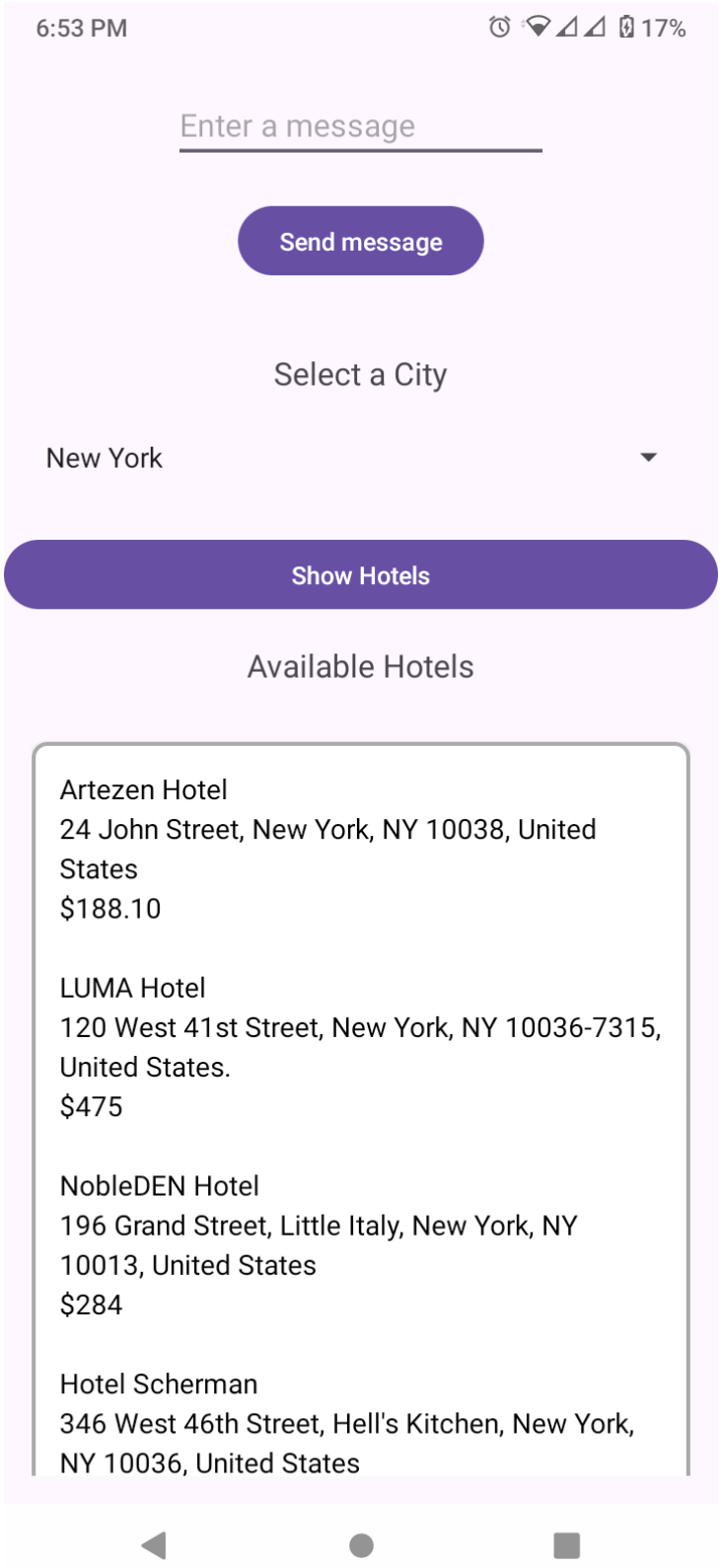


Figure 4: List of New York hotels

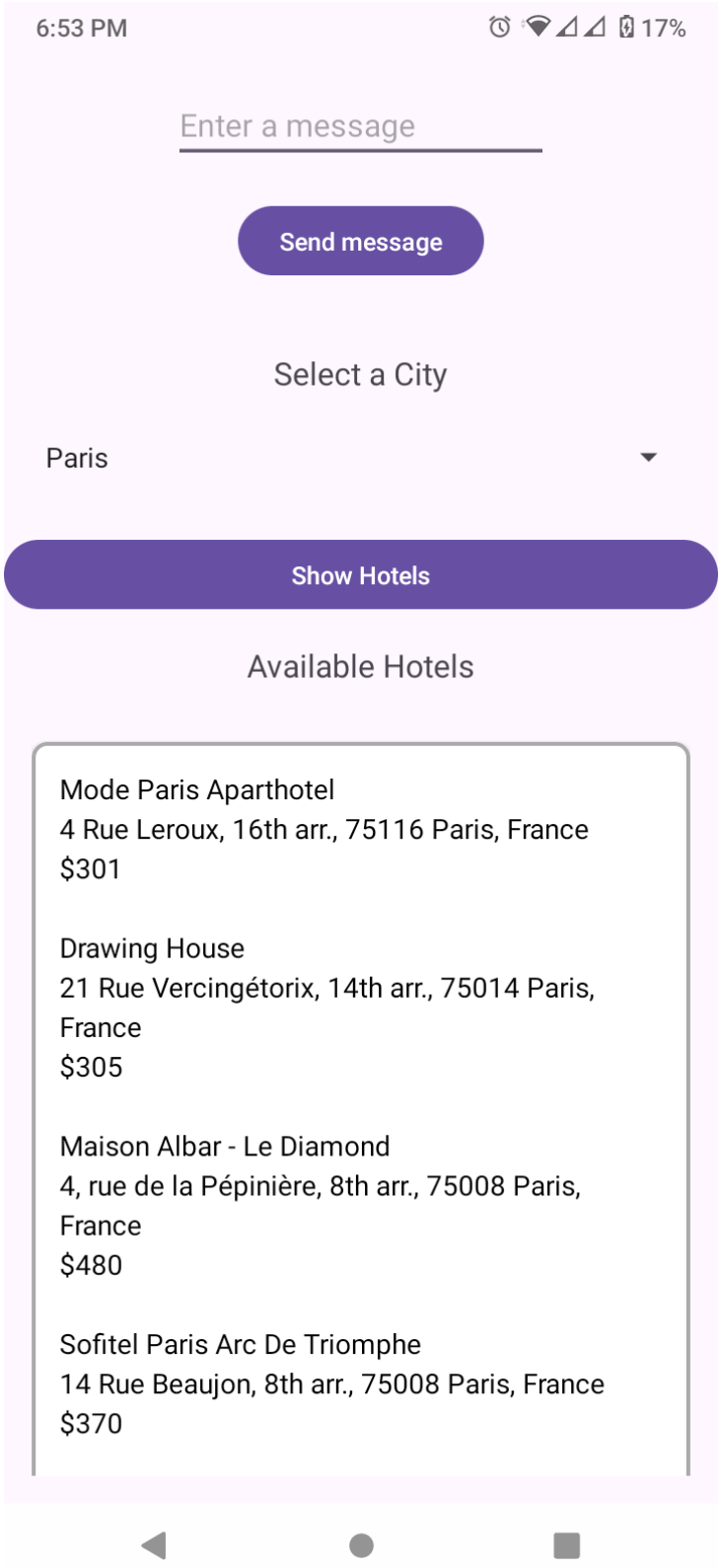


Figure 5: List of Paris hotels

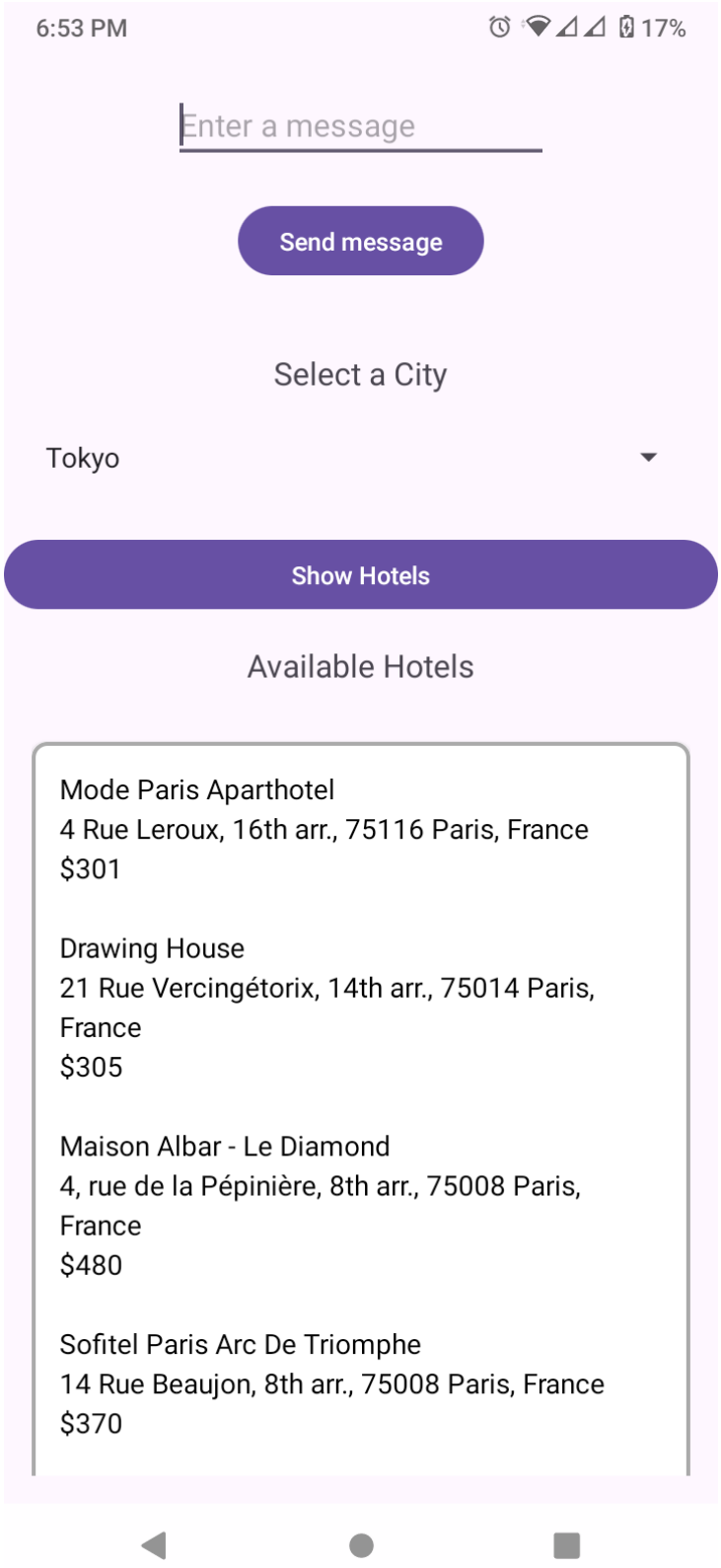


Figure 6: List of Tokyo hotels

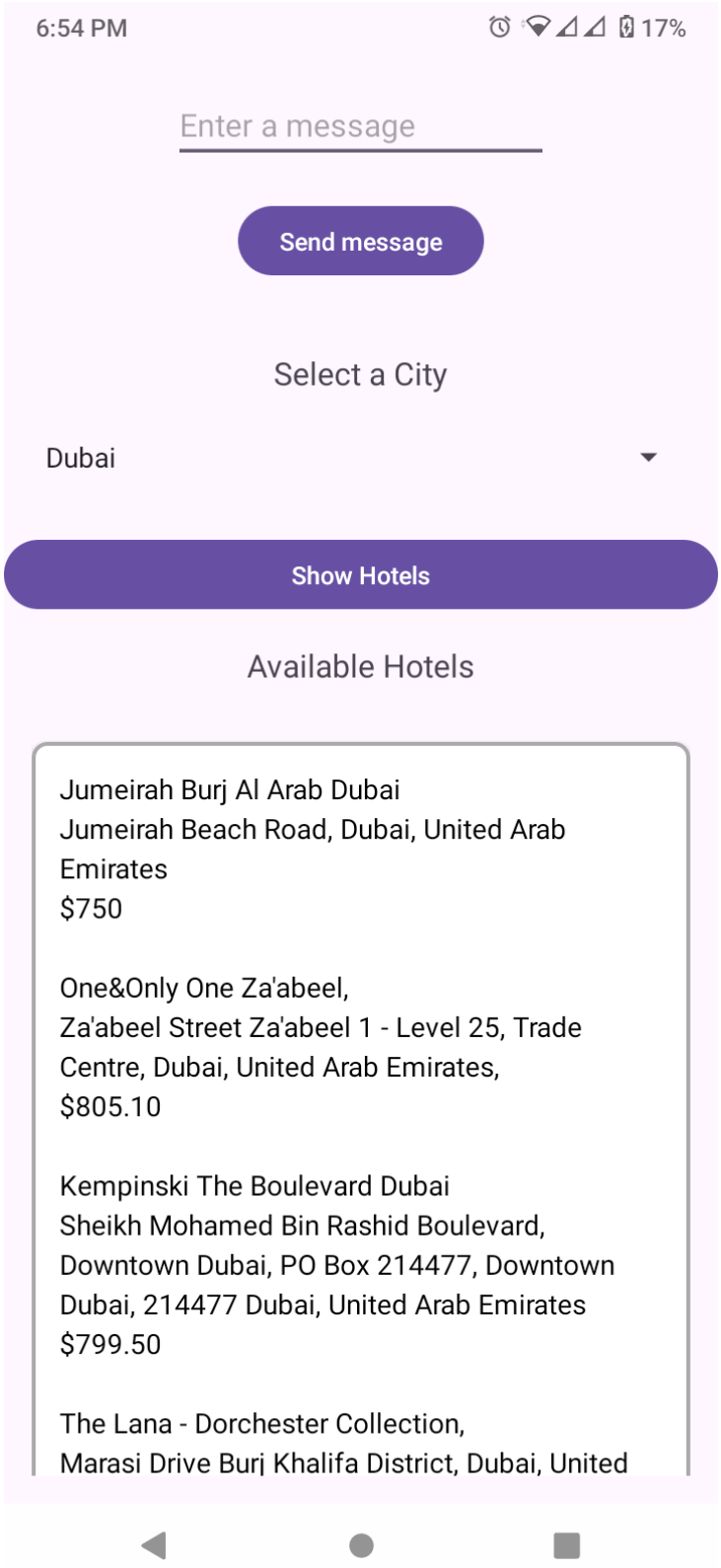


Figure 7: List of Dubai hotels