SECTION-K18NS(KOM54)

ASSIGNMENT
ANDROID DEVELOPMENT
CSE-225

By-

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Set B

Create an Application of time table management system **(look and feel =10 marks)**

1. There is a splash screen which consists of any relevant image icon of the application for 2 seconds. **(5 marks)**
2. A daily study based time table should be made choosing a specific date and time to for each subject . **(5 marks)**
3. Using toolbar in searchbar,You can search the particular subject whose time table you want to alter. **(5 marks)**
4. Alarm should ring and repeat as per the scheduled time table from the user. **(5 marks)**

CODE

MainActivity.java(Screenshot)
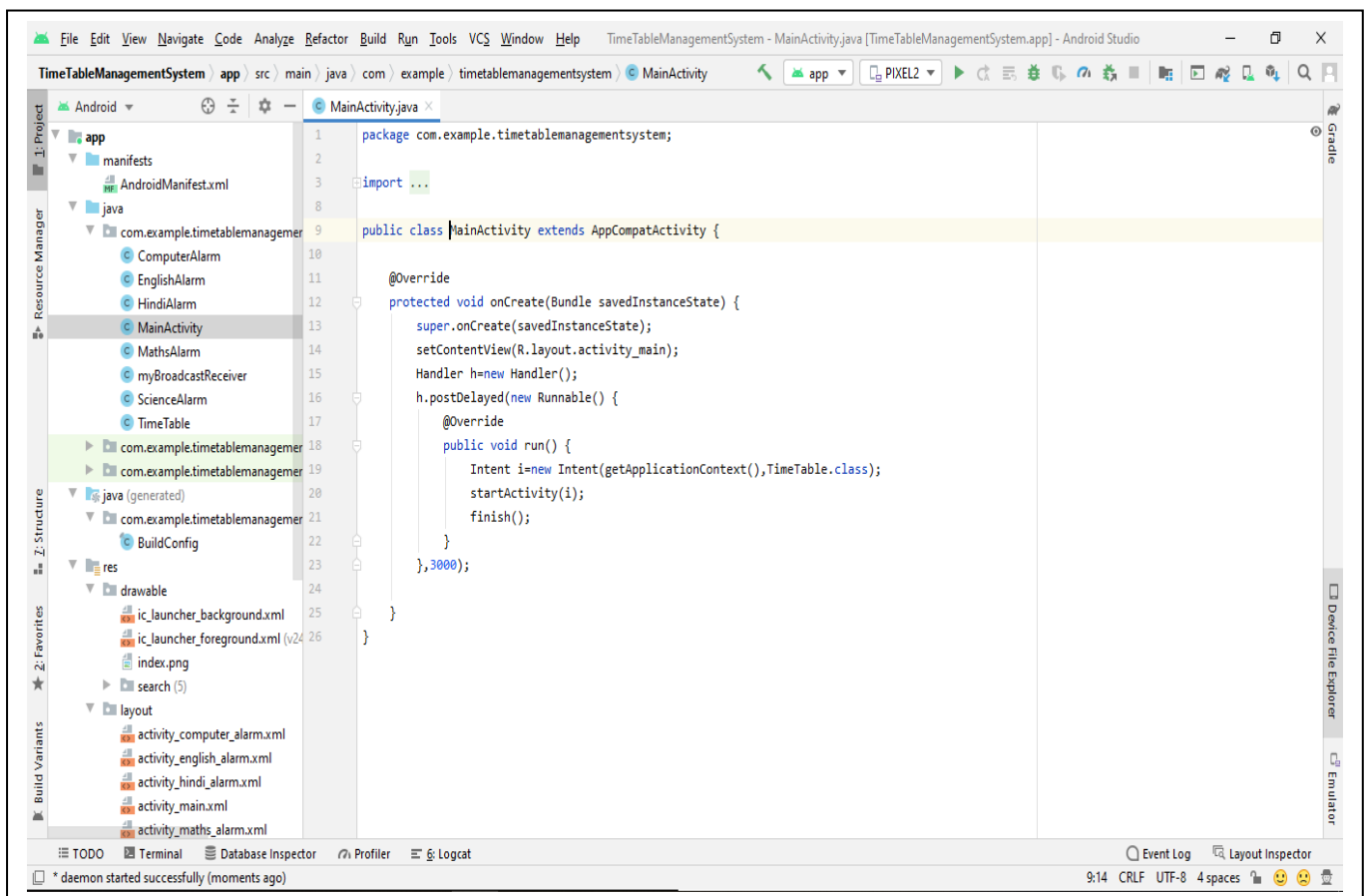
```java
package com.example.timetablemanagementsystem;

import ...

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        Handler h=new Handler();
        h.postDelayed(new Runnable() {
            @Override
            public void run() {
                Intent i=new Intent(getApplicationContext(),TimeTable.class);
                startActivity(i);
                finish();
            }
        },3000);

    }
}
```

Code(MainActivity.java)

```java
package com.example.timetablemanagementsystem;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;
import android.os.Bundle;
import android.os.Handler;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        Handler h=new Handler();
        h.postDelayed(new Runnable() {
            @Override
            public void run() {
                Intent i=new Intent(getApplicationContext(),TimeTable.class);
                startActivity(i);
                finish();
            }
        },2000);

    }
}
```
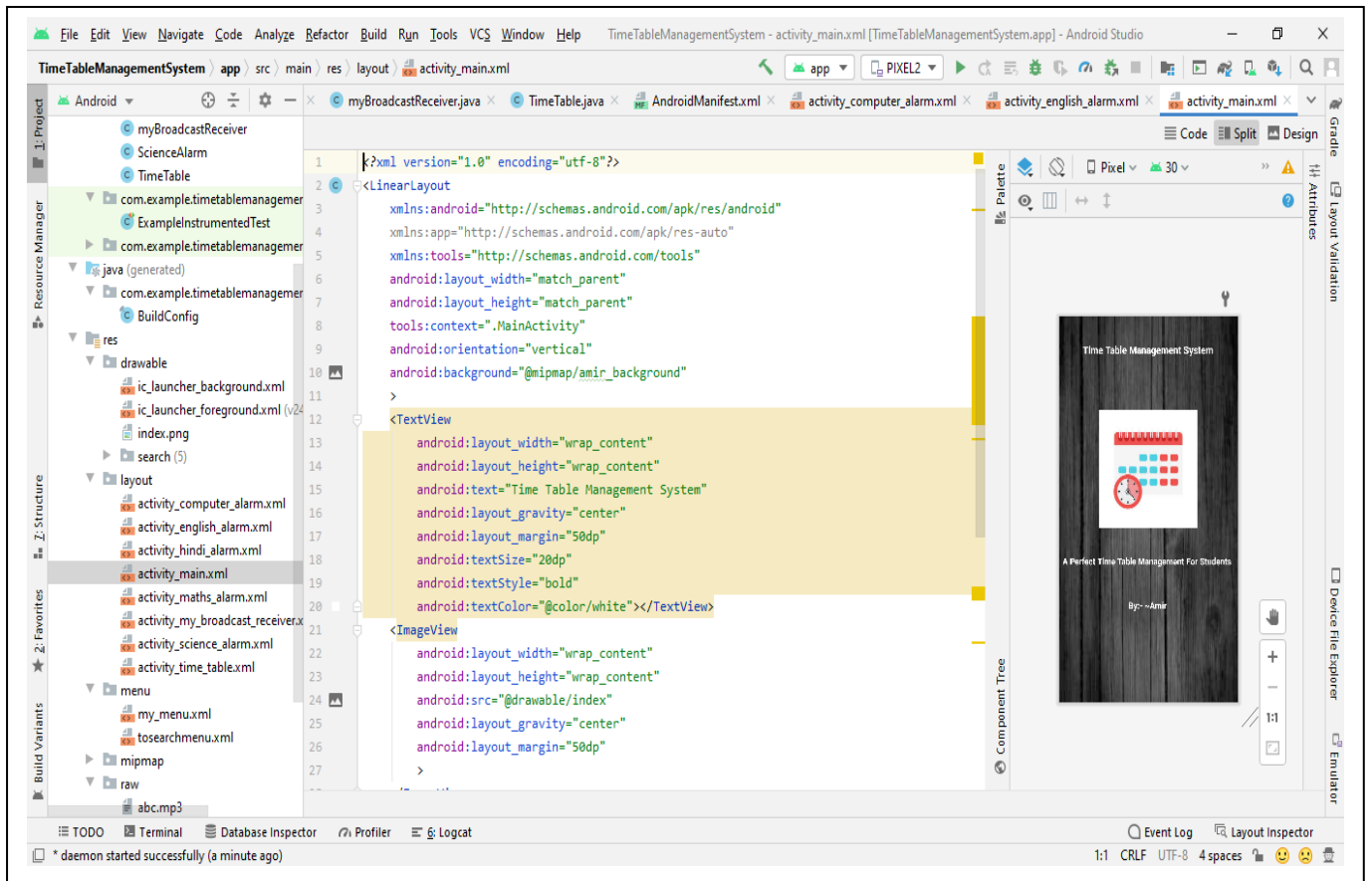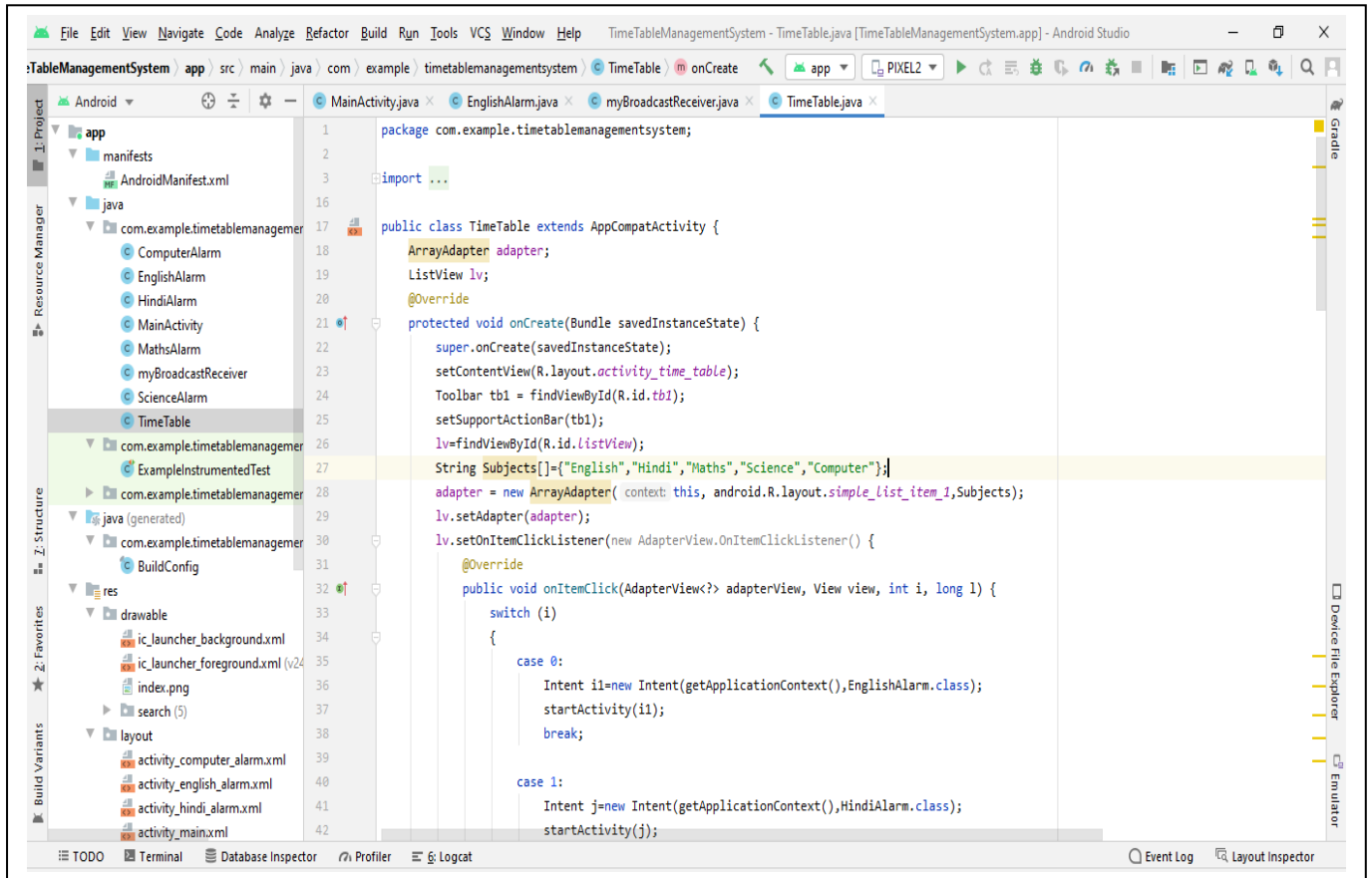
SECTION-K18NS(KOM54)

Screenshot(activity_main.xml)

Code(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"
    tools:context=".MainActivity"
    android:orientation="vertical"
    android:background="@mipmap/amir_background"
    >
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Time Table Management System"
        android:layout_gravity="center"
        android:layout_margin="50dp"
        android:textSize="20dp"
        android:textStyle="bold"
        android:textColor="@color/white"></TextView>
    <ImageView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:src="@drawable/index"
        android:layout_gravity="center"
        android:layout_margin="50dp"
        >
    </ImageView>
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="A Perfect Time Table Management For Students\n\n\n\n\
                        By:- ~Amir"
        android:layout_gravity="center"
        android:textStyle="bold"
        android:textSize="18dp"
        android:textColor="@color/white"
        >

    </TextView>
</LinearLayout>
```

SECTION-K18NS(KOM54)

TimeTable.java(Screenshot)

Code(TimeTable.java)

```java
package com.example.timetablemanagementsystem;

import androidx.appcompat.app.AppCompatActivity;
import androidx.appcompat.widget.Toolbar;

import android.content.Intent;
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuItem;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.ListView;
import android.widget.SearchView;
import android.widget.Toast;

public class TimeTable extends AppCompatActivity {
    ArrayAdapter adapter;
    ListView lv;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_time_table);
        Toolbar tb1 = findViewById(R.id.tb1);
        setSupportActionBar(tb1);
        lv=findViewById(R.id.listView);
        String Subjects[]={"English","Hindi","Maths","Science","Computer"};
        adapter = new ArrayAdapter(this, android.R.layout.simple_list_item_1,Subjects);
        lv.setAdapter(adapter);
        lv.setOnItemClickListener(new AdapterView.OnItemClickListener() {
            @Override
            public void onItemClick(AdapterView<?> adapterView, View view, int i, long l) {
                switch (i)
                {
                    case 0:
                        Intent i1=new Intent(getApplicationContext(),EnglishAlarm.class);
                        startActivity(i1);
                        break;

                    case 1:
                        Intent j=new Intent(getApplicationContext(),HindiAlarm.class);
                        startActivity(j);
                        break;

                    case 2:
                        Intent k=new Intent(getApplicationContext(),MathsAlarm.class);
                        startActivity(k);
                        break;
                    case 3:
                        Intent l1=new Intent(getApplicationContext(),ScienceAlarm.class);
                        startActivity(l1);
                        break;
                    case 4:
                        Intent m=new Intent(getApplicationContext(),ComputerAlarm.class);
                        startActivity(m);
                        break;
                }
            }
        });
    }
```

```java
@Override
    public boolean onCreateOptionsMenu(Menu menu)
        {        getMenuInflater().inflate(R.menu.tosearchmenu,menu);
        MenuItem search = menu.findItem(R.id.search_id);   //from menu file   choosing the item
from options menu on which you will be choosing the search operation to happen

        /*SearchView is the predefined class to perform search operation,it must be declared with
the item of options menu defined in the menu.xml
        file,clicking on which search will happen .It is done using :
app:actionViewClass="android.widget.SearchView"  as in this program it is done
        in tosearchmenu.xml file item named search */
        SearchView sv = (SearchView) search.getActionView();


        /*after connecting the searchview with the item named "search" of menu, apply
setOnQueryTextListener on this,the moment you start typing
        something in the seachView opened in toolbar. It will search the item from listview */
        sv.setOnQueryTextListener(new SearchView.OnQueryTextListener()
        {            @Override
        public boolean onQueryTextSubmit(String query)
        {

            //become active when you click enter after writing something in searchview in toolbar
            Toast.makeText(getApplicationContext(),query,Toast.LENGTH_SHORT).show();
            return true;
        }

            public boolean onQueryTextChange(String newText){
                //becomes active whenver you write any alphabet in the searchview
                adapter.getFilter().filter(newText);  //it will filter out the items from
listview depending on the match with newText.
                return true;
            }
        });
        return super.onCreateOptionsMenu(menu);
    }

    /*onOptionsItemSelected  is a predefined method to perform click
    operations on items of Option menu.*/
    @Override
    public boolean onOptionsItemSelected(MenuItem item)
    {
        int id=item.getItemId();
        switch(id)
        {
            case R.id.english:
                Intent i=new Intent(getApplicationContext(),EnglishAlarm.class);
                startActivity(i);
                break;

            case R.id.hindi:
                Intent j=new Intent(getApplicationContext(),HindiAlarm.class);
                startActivity(j);
                break;

            case R.id.maths:
                Intent k=new Intent(getApplicationContext(),MathsAlarm.class);
                startActivity(k);
                break;
            case R.id.science:
                Intent l=new Intent(getApplicationContext(),ScienceAlarm.class);
                startActivity(l);
                break;
```
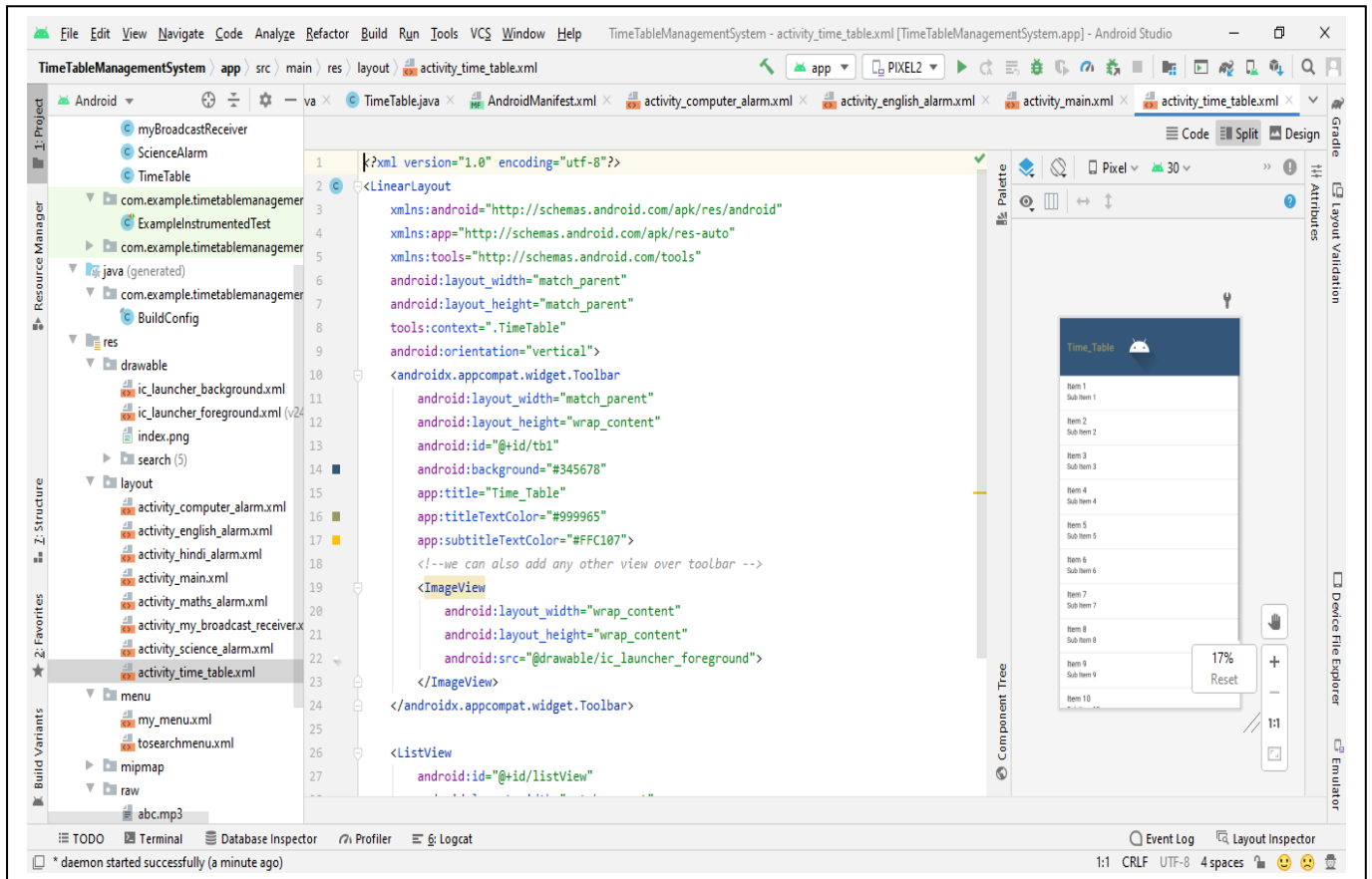
```java
        case R.id.computer:
                Intent m=new Intent(getApplicationContext(),ComputerAlarm.class);
                startActivity(m);
                break;
        }
        return super.onOptionsItemSelected(item);
    }
}
```

Screenshot(activity_time_table.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"
    tools:context=".TimeTable"
    android:orientation="vertical">
    <androidx.appcompat.widget.Toolbar
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:id="@+id/tb1"
        android:background="#345678"
        app:title="Time_Table"
        app:titleTextColor="#999965"
        app:subtitleTextColor="#FFC107">
        <!--we can also add any other view over toolbar -->
        <ImageView
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:src="@drawable/ic_launcher_foreground">
        </ImageView>
    </androidx.appcompat.widget.Toolbar>

    <ListView
        android:id="@+id/listView"
```

Code(myBroadcastReceiver.java)

```java
package com.example.timetablemanagementsystem;

import androidx.appcompat.app.AppCompatActivity;

import android.content.BroadcastReceiver;
import android.content.Context;
import android.content.Intent;
import android.media.MediaPlayer;
import android.os.Bundle;
import android.widget.Toast;

public class myBroadcastReceiver extends BroadcastReceiver {
    MediaPlayer mp;
    @Override
    public void onReceive(Context context, Intent intent) {
        mp=mp.create(context,R.raw.abc2);
        mp.start();
        Toast.makeText(context, "Alarm is Ringing", Toast.LENGTH_LONG).show();
    }
}
```

Screenshot(myBroadcastReceiver.java)
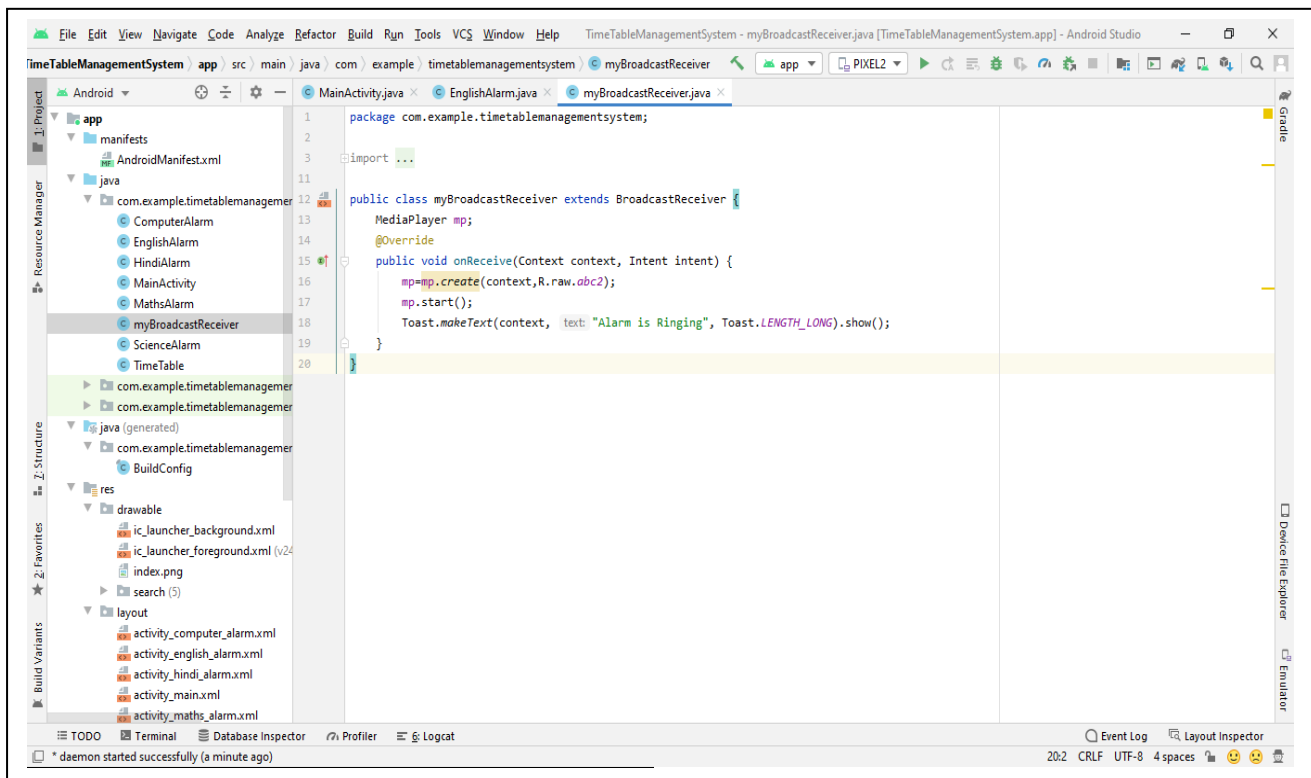
CODE(toSearchMenu.xml)

```xml
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto">
    <item android:title="English" android:id="@+id/english"/>
    <item android:title="Hindi" android:id="@+id/hindi"/>
    <item android:title="Maths" android:id="@+id/maths"/>
    <item android:title="Science" android:id="@+id/science"/>
    <item android:title="Computer" android:id="@+id/computer"/>
    <item android:title="Search" android:id="@+id/search_id" android:icon="@drawable/search"
app:actionViewClass="android.widget.SearchView"
        app:showAsAction="always"/>
</menu>
```

ScreenShot(toSearchMenu.xml)
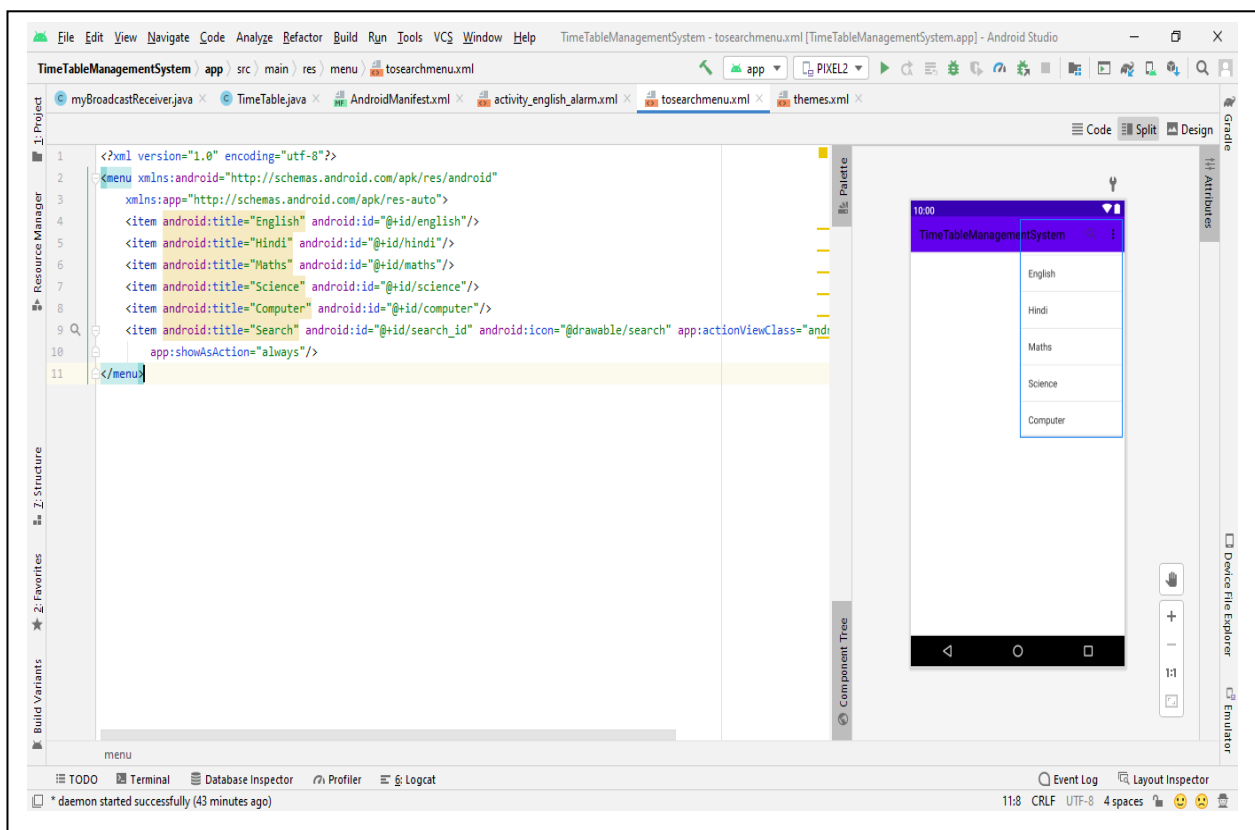
NOW SUBJECT WISE CODE AND SCREENSHOTS

(There are total 5 Subjects in the List So putting the data of only 1 subjects here)

CODE(EnglishAlarm.java)

```java
package com.example.timetablemanagementsystem;

import androidx.appcompat.app.AppCompatActivity;

import android.app.AlarmManager;
import android.app.DatePickerDialog;
import android.app.PendingIntent;
import android.app.TimePickerDialog;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.DatePicker;
import android.widget.EditText;
import android.widget.TimePicker;
import android.widget.Toast;

import java.util.Calendar;

public class EnglishAlarm extends AppCompatActivity {
Button btnDatePicker,btnTimePicker,setAlarm;
EditText txtDate,txtTime;
private int mYear,mMonth,mDay,mHour,mMinute;
Calendar c;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_english_alarm);
        btnDatePicker=(Button)findViewById(R.id.btn_date);
        btnTimePicker=(Button)findViewById(R.id.btn_time);
        setAlarm=findViewById(R.id.btn_Alarm);
        txtDate=(EditText)findViewById(R.id.in_date);
        txtTime=(EditText)findViewById(R.id.in_time);
    }
    public void chooseAction(View v)
    {
        if (v == btnDatePicker)
        {
            // Get Current Date
            c = Calendar.getInstance();
            mYear = c.get(Calendar.YEAR);
            mMonth = c.get(Calendar.MONTH);
            mDay = c.get(Calendar.DAY_OF_MONTH);


  DatePickerDialog datePickerDialog = new DatePickerDialog(this,
            new DatePickerDialog.OnDateSetListener() {

                @Override
                public void onDateSet(DatePicker view, int year,
                                        int monthOfYear, int dayOfMonth) {
```

```java
                                txtDate.setText(dayOfMonth + "-" + (monthOfYear) + "-" + year);

                    }
                }, mYear, mMonth, mDay);
            datePickerDialog.show();
        }
        if (v == btnTimePicker) {

            // Get Current Time
            final Calendar c = Calendar.getInstance();
            mHour = c.get(Calendar.HOUR_OF_DAY);
            mMinute = c.get(Calendar.MINUTE);

            // Launch Time Picker Dialog
            TimePickerDialog timePickerDialog = new TimePickerDialog(this,
                    new TimePickerDialog.OnTimeSetListener() {

                        @Override
                        public void onTimeSet(TimePicker view, int hourOfDay,
                                              int minute) {

                            txtTime.setText(hourOfDay + ":" + minute);
                        }
                    }, mHour, mMinute, false);
            timePickerDialog.show();
        }
        if(v==setAlarm)
        {
            setAlarm(c);
        }
    }
    public void setAlarm(Calendar c)
    {
        long i=c.getTimeInMillis();
        Intent intent = new Intent(this, myBroadcastReceiver.class);
        PendingIntent pendingIntent = PendingIntent.getBroadcast(this.getApplicationContext(),
234324243, intent, 0);
        AlarmManager alarmManager = (AlarmManager) getSystemService(ALARM_SERVICE);
        alarmManager.set(AlarmManager.RTC_WAKEUP, i, pendingIntent);
        Toast.makeText(this, "Alarm set in " + c.getTime() ,Toast.LENGTH_LONG).show();
    }
}
```
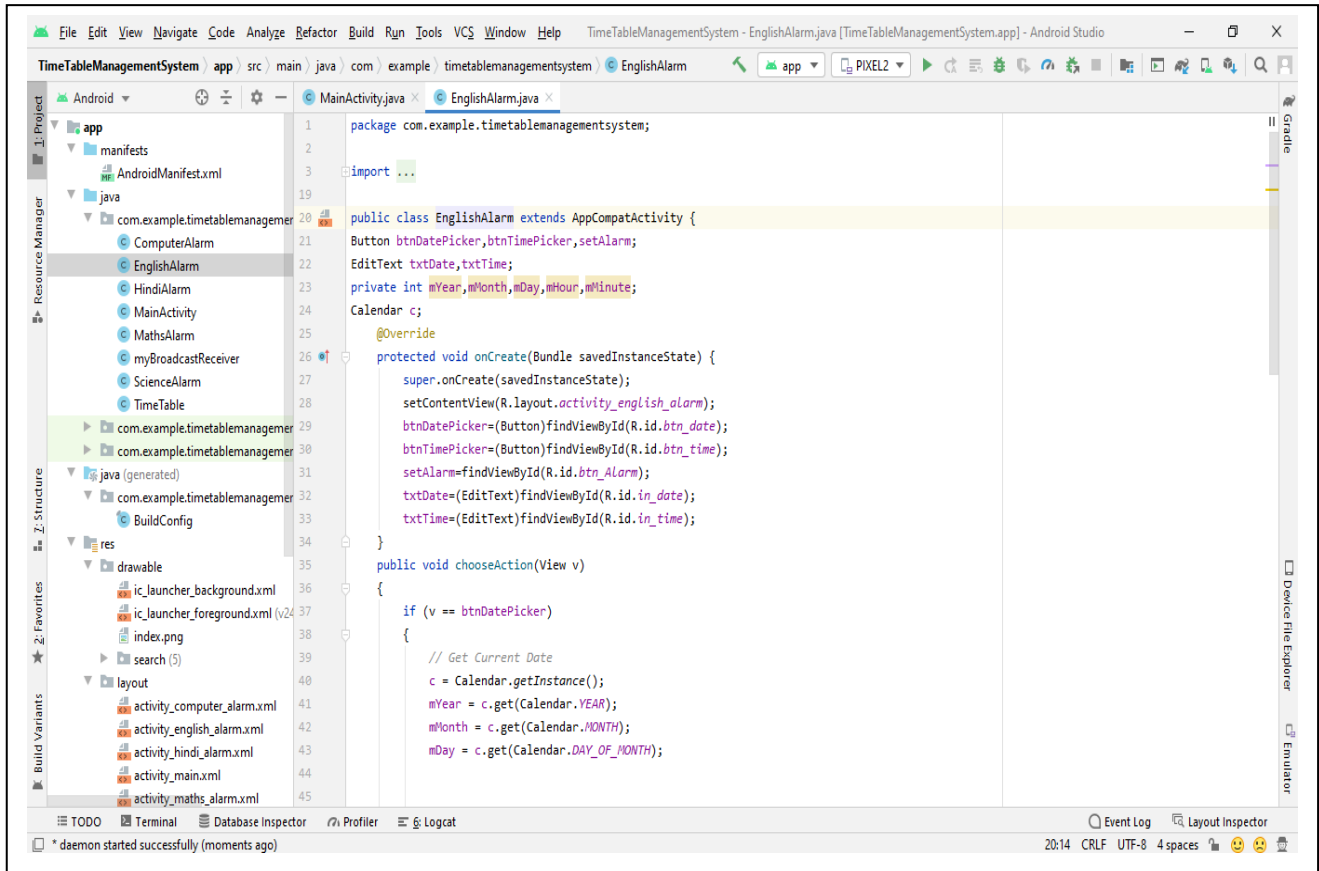
ScreenShot(EnglishAlarm.java)


```java
package com.example.timetablemanagementsystem;

import ...

public class EnglishAlarm extends AppCompatActivity {
    Button btnDatePicker,btnTimePicker,setAlarm;
    EditText txtDate,txtTime;
    private int mYear,mMonth,mDay,mHour,mMinute;
    Calendar c;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_english_alarm);
        btnDatePicker=(Button)findViewById(R.id.btn_date);
        btnTimePicker=(Button)findViewById(R.id.btn_time);
        setAlarm=findViewById(R.id.btn_Alarm);
        txtDate=(EditText)findViewById(R.id.in_date);
        txtTime=(EditText)findViewById(R.id.in_time);
    }
    public void chooseAction(View v)
    {
        if (v == btnDatePicker)
        {
            // Get Current Date
            c = Calendar.getInstance();
            mYear = c.get(Calendar.YEAR);
            mMonth = c.get(Calendar.MONTH);
            mDay = c.get(Calendar.DAY_OF_MONTH);
```

CODE(EnglishAlarm.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"
    tools:context=".EnglishAlarm"
    android:orientation="vertical"
    android:layout_margin="10dp">
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="ENGLISH\n\nSelect Time And Date To Set Alarm \n "
        android:layout_gravity="center"
        android:textAlignment="center"
        android:textSize="20dp"
        android:textStyle="bold|italic"
        android:layout_margin="10dp">
    </TextView>
<ImageView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:src="@drawable/index"
    android:layout_margin="5dp"
    android:layout_gravity="center">
</ImageView>
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal"
        android:layout_margin="10dp">
        <EditText
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:id="@+id/in_date"
            android:hint="Select Date"
            android:textStyle="bold|italic"
            android:layout_margin="10dp">
        </EditText>
        <Button
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="Select Date"
            android:id="@+id/btn_date"
            android:onClick="chooseAction"
            android:textStyle="bold|italic"
            android:layout_margin="10dp"></Button>
    </LinearLayout>
    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal"
        android:layout_margin="10dp">
```

```xml
<EditText
    android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:hint="Select Time"
            android:id="@+id/in_time"
            android:textStyle="bold|italic"
            android:layout_margin="10dp">
        </EditText>
        <Button
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="Select Time"
            android:id="@+id/btn_time"
            android:onClick="chooseAction"
            android:layout_margin="10dp"
            android:textStyle="bold|italic"     ></Button>
    </LinearLayout>
    <Button
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="Set Alarm"
        android:layout_margin="10dp"
        android:layout_gravity="center"
        android:textStyle="bold|italic"
        android:id="@+id/btn_Alarm"
        android:onClick="chooseAction"
        ></Button>
</LinearLayout>
```

SECTION-K18NS(KOM54)

SCREENSHOT(ENGLISH_ALARM.XML)
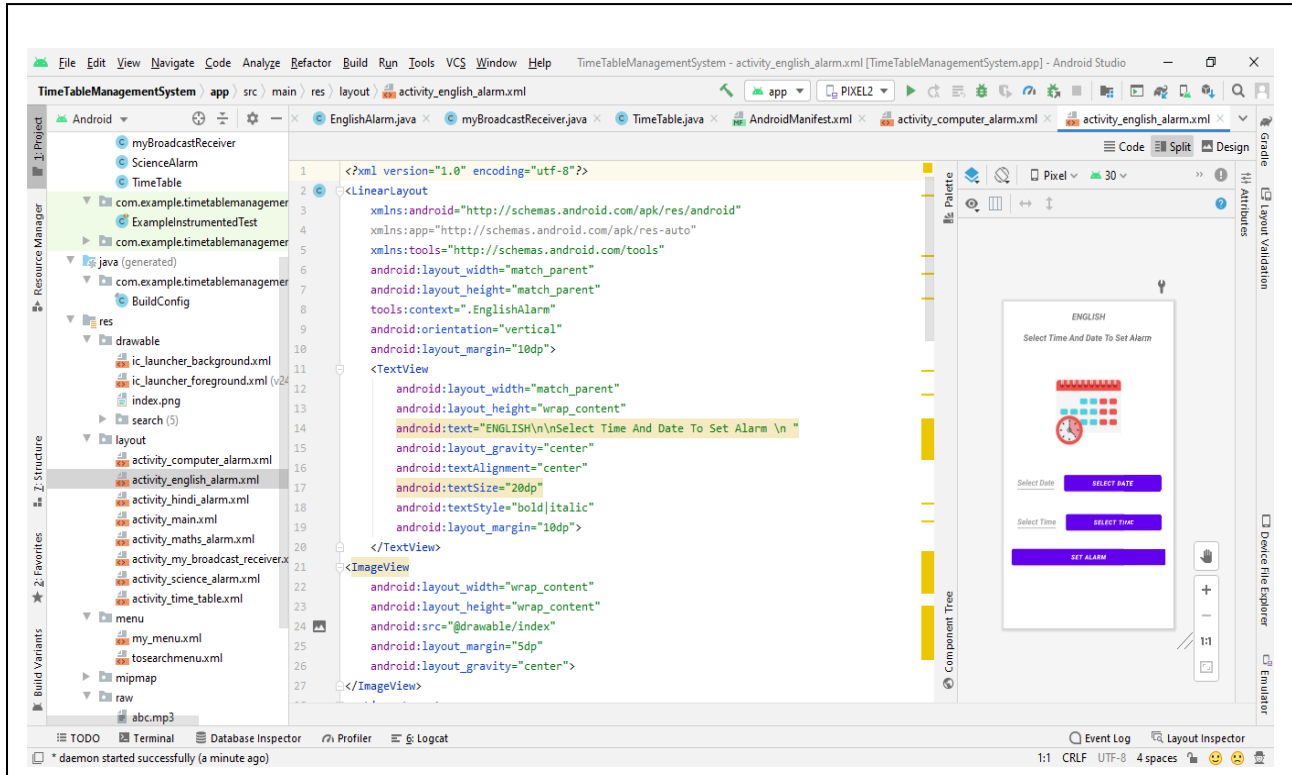
OUTPUT SCREENSHOTS
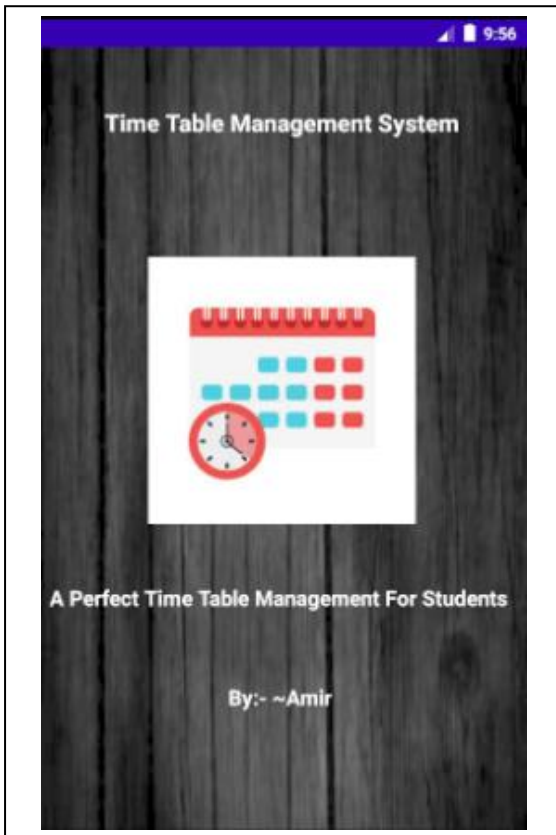
This is the first page i.e. Splash Screen which appears for 2 seconds.
*It consists of logo and the background and the name of developer.*
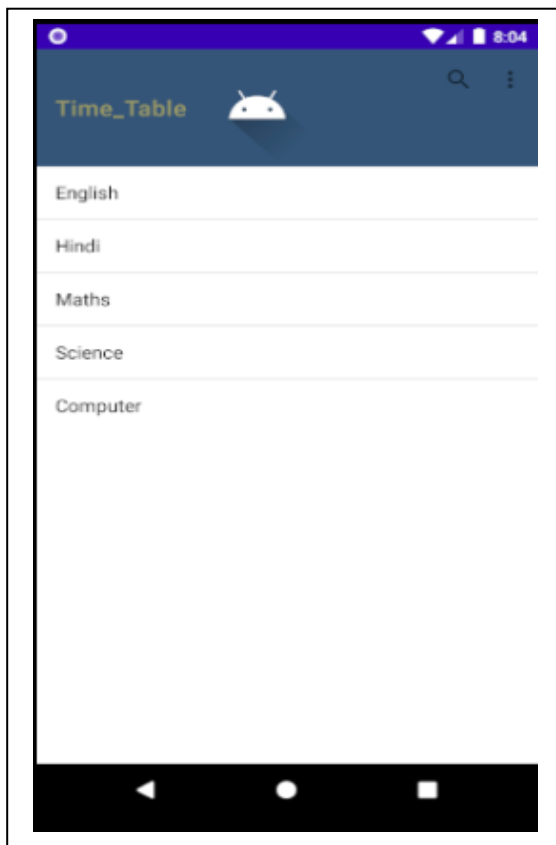
This Is the home Page Which Consist of List of Subjects , A Toolbar which is also having list of subjects. Here we can search from a list of subject.
*After clicking on any of the subjects we can go to the alarm setting page where we can choose the*
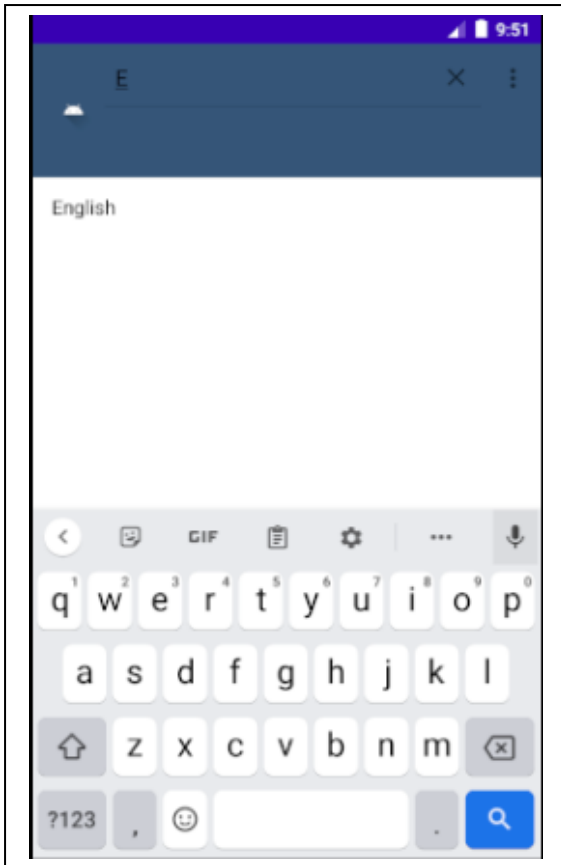
In the Search Bar When we type Any of the alphabets it start searching and also starts to give suggestions from the list of subjects.
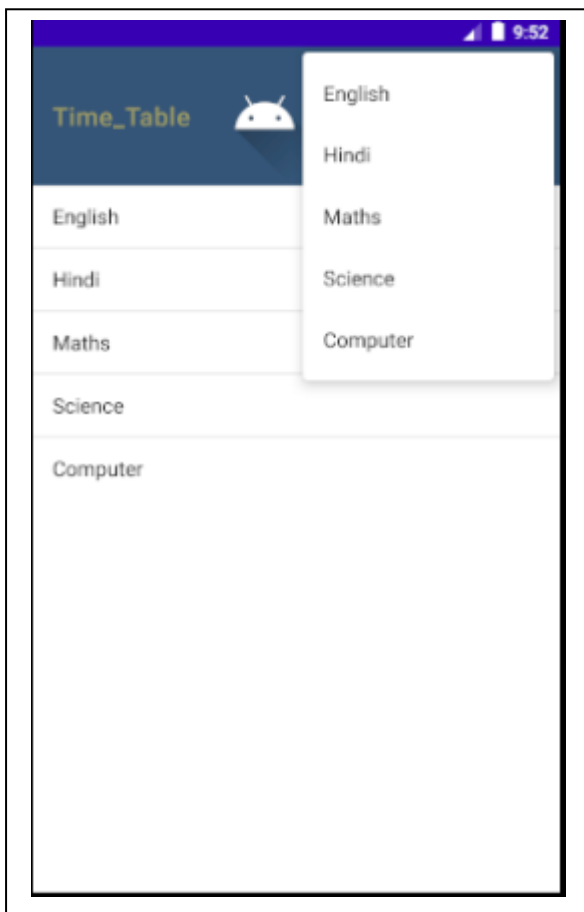
Here is a menu bar where we have the options of choosing the subject when we choose the subjects we go to the alarm setting page where we can choose the date and time and set the alarm.

SECTION-K18NS(KOM54)
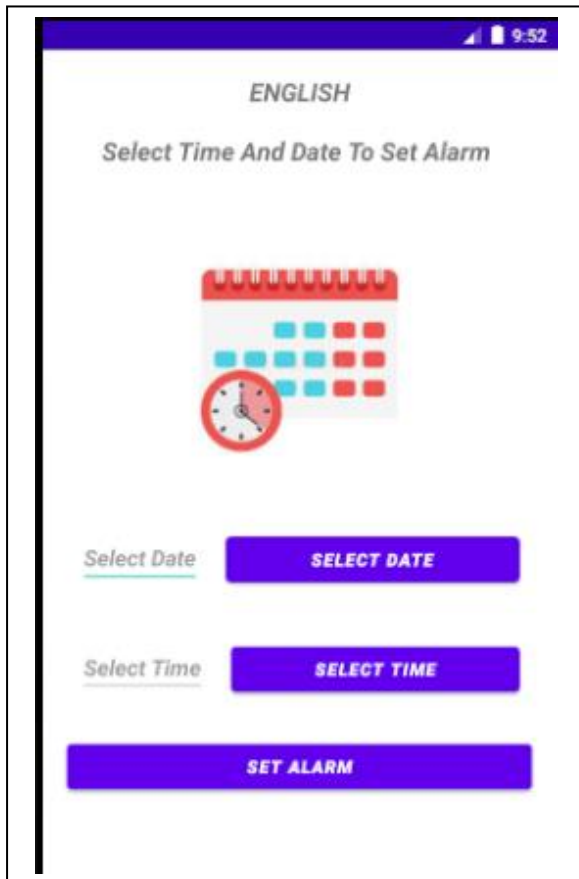
After selecting the English from the list of subjects We come to the alarm setting page of english subjects . Here We have 2 buttons select date and select time after selecting the date and time we press the set alarm button and the alarm is set
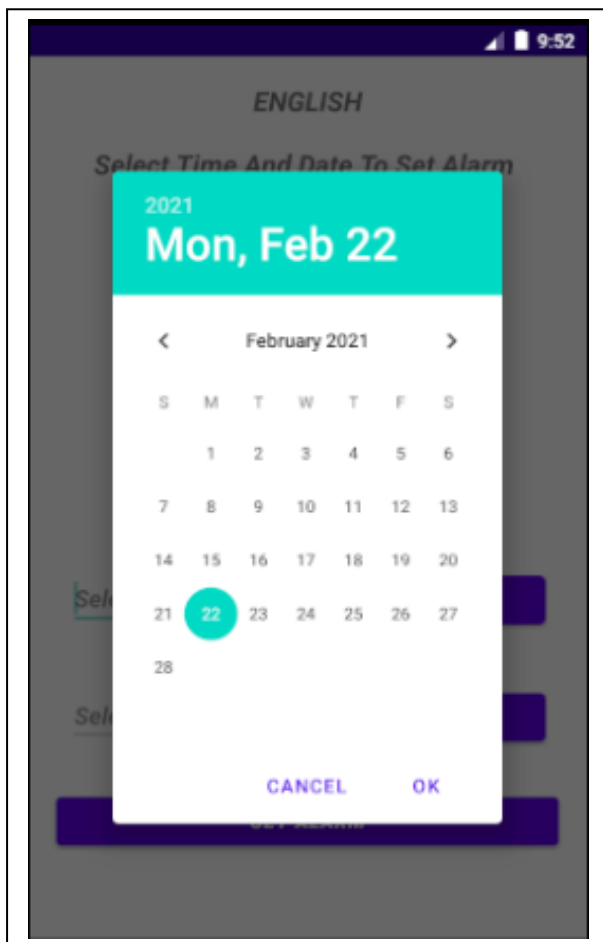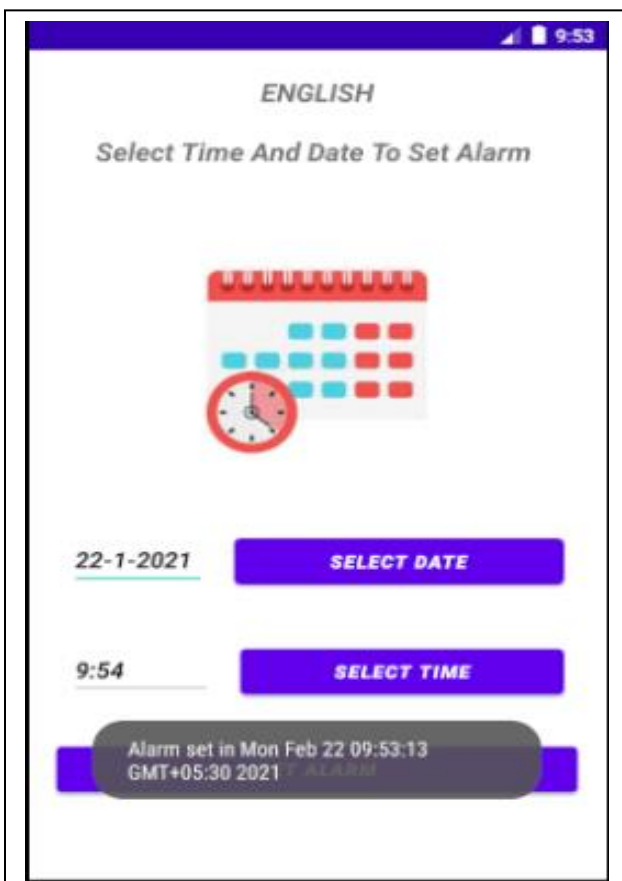

After clicking on the select date button a date picker box is appeared and we can select the date from the date picker.
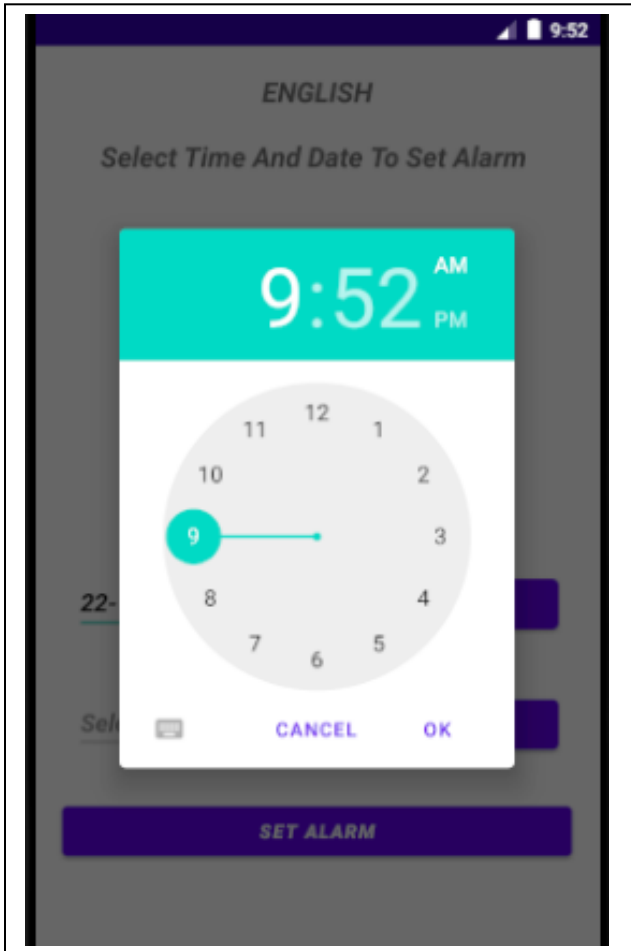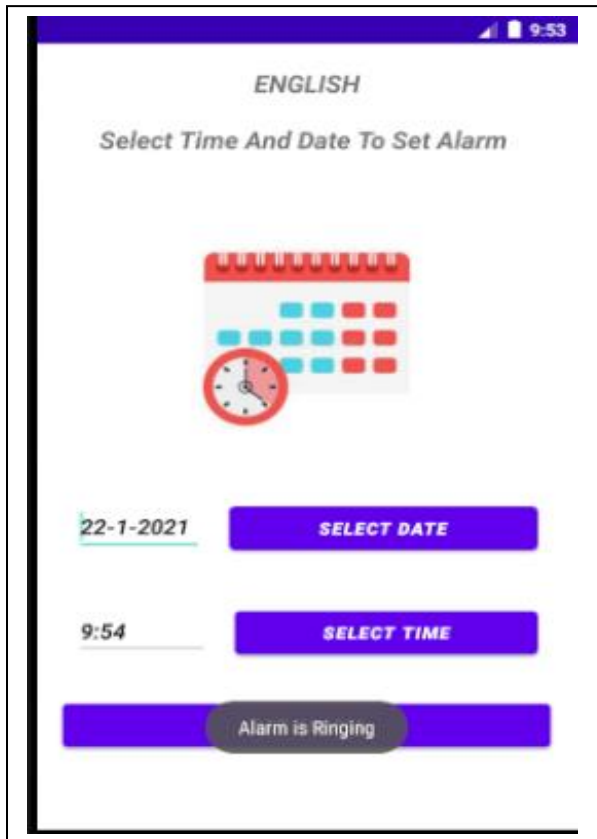
After clicking on the select time button a time picker box is appeared and we can select the time from the time picker.

After selecting the date and time when we click on set Alarm button a toast message appears by giving the message of the selected date and time.

Once the alarm time is there the alarm starts ringing and the song starts playing.

THANK YOU