TheMainActivity.java

```
    package com.example.baltu.myapplication.MainMenu;

import android.app.Activity;
3. import android.content.Context;
4. import android.content.Intent;
5. import android.content.SharedPreferences;
6. import android.database.sqlite.SQLiteDatabase;
7. import android.database.sqlite.SQLiteException;
import android.database.sqlite.SQLiteOpenHelper;
9. import android.graphics.Point;
10. import android.net.ConnectivityManager;
11. import android.net.NetworkInfo;
12. import android.os.Bundle;
13. import android.util.Log;
14. import android.view.Display;
15. import android.view.View;
16. import android.view.WindowManager;
17. import android.view.inputmethod.InputMethodManager;
18. import android.widget.EditText;
19. import android.widget.Toast;
20. import android.widget.ViewSwitcher;
21. import com.example.baltu.myapplication.Buses_Schedules;
22. import com.example.baltu.myapplication.Academic_Calendar;
23. import com.example.baltu.myapplication.DB_Constructor.Local_DB_Helper;
24. import com.example.baltu.myapplication.DB_Constructor.User_DB_Helper;
25. import com.example.baltu.myapplication.GPA_Calculator;
26. import com.example.baltu.myapplication.Information_Activity.InfoListActivity;
27. import com.example.baltu.myapplication.News.News Activity;
28. import com.example.baltu.myapplication.R;
import com.example.baltu.myapplication.Settings.Settings activity;

    import com.example.baltu.myapplication.Map.University Map;

31. import com.example.baltu.myapplication.Map.Offline Map Activity;

    import com.example.baltu.myapplication.TimeTables.All_TimeTables_Activity;

33. import com.example.tomek.notepad.MainActivity;
34. import com.scottyab.aescrypt.AESCrypt;
35. import java.io.File;
36. import java.io.FileOutputStream;
37. import java.io.IOException;
38. import java.io.InputStream;
39. import java.io.OutputStream;
40. import java.security.GeneralSecurityException;
41. /*Unfortunately The code was rushed and implemented by only one student* so the focus was on t
    he functionality and no focus on the documentation*/
42. public class TheMainActivity extends Activity {
43.
        Point sizes = new Point();
44.
        SQLiteDatabase userdatabase;
45.
        SQLiteDatabase localdatabase;
46.
        Integer Tries = 3;
47.
        static String DB PATH = "/data/data/com.example.baltu.myapplication/databases/";
48.
        public static final String DB_FILENAME = "LocalDb.db";
49.
        protected void onCreate(Bundle savedInstanceState) {
50.
            super.onCreate(savedInstanceState);
51.
            setContentView(R.layout.mainmenue2);
52.
            findViewById(R.id.img3).setOnClickListener(new View.OnClickListener() {@
53.
                Override public void onClick(View v) {
54.
                    Intent intents2 = new Intent(TheMainActivity.this, Academic Calendar.class);
55.
                    startActivity(intents2);
56.
57.
            });
58.
            findViewById(R.id.img5).setOnClickListener(new View.OnClickListener() {@
```

```
59.
                Override public void onClick(View v) {
60.
                    Intent calenderintents = new Intent(TheMainActivity.this, Buses_Schedules.clas
   s);
61.
                    startActivity(calenderintents);
62.
63.
            });
            findViewById(R.id.img6).setOnClickListener(new View.OnClickListener() {@
64.
                Override public void onClick(View v) {
65.
                    if (isNetworkAvailable()) {
66.
                        Intent NewsIntent = new Intent(TheMainActivity.this, News Activity.class);
67.
     //News
68.
                        startActivity(NewsIntent);
                    } else Toast.makeText(TheMainActivity.this, "Not Connected To the Internet", T
69.
   oast.LENGTH SHORT).show();
70.
71.
            });
72.
            findViewById(R.id.img7).setOnClickListener(new View.OnClickListener() {@
73.
                Override public void onClick(View v) {
74.
                    Intent NotesIntent = new Intent(TheMainActivity.this, MainActivity.class); //N
   otes
75.
                    startActivity(NotesIntent);
76.
77.
            });
78.
            findViewById(R.id.img8).setOnClickListener(new View.OnClickListener() {@
79.
                Override public void onClick(View v) {
80.
                    Intent InformationIntent = new Intent(TheMainActivity.this, InfoListActivity.c
   lass);
81.
                    startActivity(InformationIntent);
82.
83.
            });
            findViewById(R.id.img11).setOnClickListener(new View.OnClickListener() {@
84.
85.
                Override public void onClick(View v) {
                    Intent SettingsIntent = new Intent(TheMainActivity.this, Settings activity.cla
86.
   ss);
87.
                    startActivity(SettingsIntent);
88.
89.
            });
            findViewById(R.id.img2).setOnClickListener(new View.OnClickListener() {@
90.
91.
                Override public void onClick(View v) {
                    Intent TimetablesIntent = new Intent(TheMainActivity.this, All TimeTables Acti
92.
    vity.class);
93.
                    startActivity(TimetablesIntent);
94.
95.
            });
96.
            findViewById(R.id.img9).setOnClickListener(new View.OnClickListener() {@
97.
                Override public void onClick(View v) {
                    Intent gpaIntent = new Intent(TheMainActivity.this, GPA Calculator.class);
98.
99.
                    startActivity(gpaIntent);
100.
101.
                   });
102.
                   WindowManager wm = (WindowManager) this.getSystemService(Context.WINDOW SERVICE
    );
103.
                   Display display = wm.getDefaultDisplay();
104.
                   display.getSize(sizes);
105.
                   Log.d("MainMenue", "onCreate");
                   final SharedPreferences prefs = getSharedPreferences(getString(R.string.prefere
                   MODE_PRIVATE);
   nce file key),
107.
                   boolean key = prefs.getBoolean("pass on", false);
108.
                   final String password_string = prefs.getString("Password_String", "");
109.
                   final ViewSwitcher vs = (ViewSwitcher) findViewById(R.id.Switcher);
110.
                   if (!key) {
```

```
111.
                        Log.d("Mainmen", "no pass");
112.
                       vs.showNext();
113.
                        if (checkDataBase()) {
114.
                            SQLiteOpenHelper openhelper = new User DB Helper(this);
115.
                            userdatabase = openhelper.getWritableDatabase();
116.
                            userdatabase.close();
117.
                            SQLiteOpenHelper localdbhelper = new Local DB Helper(this);
118.
                            localdatabase = localdbhelper.getWritableDatabase();
                            localdatabase.close();
119.
120.
                            Toast.makeText(this, "not coppied", Toast.LENGTH_SHORT).show();
121.
                        } else {
122.
                            SQLiteOpenHelper openhelper = new User DB Helper(this);
123.
                            userdatabase = openhelper.getWritableDatabase();
124.
                            userdatabase.close();
125.
                            SQLiteOpenHelper localdbhelper = new Local DB Helper(this);
                            localdatabase = localdbhelper.getWritableDatabase();
126.
127.
                            localdatabase.close();
                            try {
128.
129.
                                copyDataBase();
                                Toast.makeText(this, "coppied", Toast.LENGTH_SHORT).show();
130.
131.
                            } catch (IOException e) {
132.
                                e.printStackTrace();
                                Toast.makeText(this, "Error", Toast.LENGTH_SHORT).show();
133.
134.
                        } //Toast.makeText(this, "Created DB", Toast.LENGTH_SHORT).show();
135.
136.
                   } else {
                        findViewById(R.id.unlock bt).setOnClickListener(new View.OnClickListener()
137.
    {@
138.
                            Override public void onClick(View v) {
139.
                                EditText pass = (EditText) findViewById(R.id.password box);
140.
                                if (!pass.getText().toString().equals("")) {
141.
                                    try {
                                        if (AESCrypt.encrypt("CanTheWorldUnderstand?", "TuNiSbYnIgH
142.
   t" + pass.getText().toString()).equals(password string)) {
                                            SharedPreferences.Editor PrefE = prefs.edit();
143.
                                            PrefE.putBoolean("Logged", true);
144.
145.
                                            PrefE.commit();
                                            Log.i("logged", "true");
146.
                                            View view = TheMainActivity.this.getCurrentFocus();
147.
148.
                                            if (view != null) {
149.
                                                InputMethodManager imm = (InputMethodManager) getSy
    stemService(Context.INPUT_METHOD_SERVICE);
150.
                                                imm.hideSoftInputFromWindow(view.getWindowToken(),
    0);
151.
                                            pass.setText("");
152.
                                            vs.showNext();
153.
154.
                                          else {
155.
                                            View view = TheMainActivity.this.getCurrentFocus();
156.
                                            if (view != null) {
                                                InputMethodManager imm = (InputMethodManager) getSy
157.
    stemService(Context.INPUT METHOD SERVICE);
158.
                                                imm.hideSoftInputFromWindow(view.getWindowToken(),
    0);
159.
160.
                                            Tries--;
161.
                                            if (Tries == 0) finish();
162.
                                            else {
163.
                                                Toast.makeText(TheMainActivity.this, "
    sword" + "\nYou Have " + Integer.toString(Tries) + " More Tries", Toast.LENGTH_SHORT).show();
```

```
164.
                                                pass.setText("");
165.
                                            }
166.
167.
                                    } catch (GeneralSecurityException e) {
168.
                                        e.printStackTrace();
169.
170.
                                } else Toast.makeText(TheMainActivity.this, "Enter Password", Toast
    .LENGTH_SHORT).show();
171.
172.
                        });
173.
174.
               }@
               Override protected void onStart() {
175.
176.
                    super.onStart();
177.
                    EditText pass = (EditText) findViewById(R.id.password box);
                    pass.setText("");
178.
179.
180.
               public void clickonMap(View view) {
181.
                    if (isNetworkAvailable()) {
182.
                        Intent intf = new Intent(this, University_Map.class);
                        intf.putExtra("type", 0);
183.
184.
                        startActivity(intf);
185.
                    } else {
                        Toast.makeText(this, "connect to the internet for an interactive map", Toas
186.
   t.LENGTH_LONG).show();
187.
                        Intent offlineMap = new Intent(TheMainActivity.this, Offline_Map_Activity.c
    lass);
188.
                        startActivity(offlineMap);
189.
                    }
190.
191.
               private boolean isNetworkAvailable() {
192.
                    ConnectivityManager connectivityManager = (ConnectivityManager) getSystemServic
    e(Context.CONNECTIVITY SERVICE);
193.
                    NetworkInfo activeNetworkInfo = connectivityManager.getActiveNetworkInfo();
                    return activeNetworkInfo != null && activeNetworkInfo.isConnected();
194.
195.
196.
               private void copyDataBase() throws IOException {
197.
                    try {
198.
                        InputStream mInputStream = this.getAssets().open("firstdb.db");
199.
                        String outFileName = DB PATH + DB FILENAME;
                        OutputStream mOutputStream = new FileOutputStream(outFileName);
200.
201.
                        byte[] buffer = new byte[1024];
202.
                        int length;
203.
                        while ((length = mInputStream.read(buffer)) > 0) {
204.
                            mOutputStream.write(buffer, 0, length);
205.
                        }
                        mOutputStream.flush();
206.
207.
                        mOutputStream.close();
208.
                        mInputStream.close();
209.
                    } catch (Exception e) {
210.
                        e.printStackTrace();
211.
                    }
212.
213.
               private boolean checkDataBase() {
214.
215.
                        final String mPath = DB PATH + DB FILENAME;
216.
                        final File file = new File(mPath);
217.
                        if (file.exists()) return true;
218.
                        else return false;
219.
                    } catch (SQLiteException e) {
220.
                        e.printStackTrace();
```

```
221. return false;
222. }
223. }
224. }
```

All_TimeTables_Activity.java

```
    package com.example.baltu.myapplication.TimeTables;

import android.app.Activity;
3. import android.content.Intent;
import android.os.Bundle;
5. import android.support.annotation.Nullable;
import android.support.v7.widget.RecyclerView;
import android.view.View;
8. import android.widget.AdapterView;
import android.widget.ArrayAdapter;
10. import android.widget.Spinner;
11. import android.widget.TabHost;
12. import com.example.baltu.myapplication.DataTypes.Exam class;
13. import com.example.baltu.myapplication.DataTypes.Tasks Data;
14. import com.example.baltu.myapplication.DataTypes.TimeTable Classes;
15. import com.example.baltu.myapplication.Data Provider.UserDB Provider;
16. import com.example.baltu.myapplication.Data_Provider.Adapters.CoursesItemAdapter;
17. import com.example.baltu.myapplication.Data_Provider.Adapters.ExamsItemsAdapter;
18. import com.example.baltu.myapplication.R;

    import com.example.baltu.myapplication.Data_Provider.Adapters.TasksItemsAdapter;

20. import java.util.List;
21. public class All_TimeTables_Activity extends Activity {
22.
        UserDB Provider mDatasource;
23.
        List < TimeTable Classes > thisdaycourses;
24.
        List < Tasks_Data > allTasks;
25.
        List < Exam class > allExams;@
        Override protected void onCreate(@Nullable Bundle savedInstanceState) {
26.
27.
            super.onCreate(savedInstanceState);
28.
            setContentView(R.layout.timetables);
29.
            mDatasource = new UserDB_Provider(this);
30.
            mDatasource.open();
            final Spinner tabletypes = (Spinner) findViewById(R.id.tablestype);
31.
            ArrayAdapter < CharSequence > items = ArrayAdapter.createFromResource(this, R.array.ti
32.
    metables_types, android.R.layout.simple_spinner_item);
33.
            items.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item);
34.
            tabletypes.setAdapter(items);
35.
            final TabHost th = (TabHost) findViewById(R.id.tabhost);
36.
            th.setup();
            final TabHost.TabSpec spec1 = th.newTabSpec("Mon").setContent(R.id.tab1).setIndicator(
37.
    "Mon");
38.
            th.addTab(spec1);
            TabHost.TabSpec spec2 = th.newTabSpec("Tue").setContent(R.id.tab2).setIndicator("Tue")
39.
40.
            th.addTab(spec2);
            TabHost.TabSpec spec3 = th.newTabSpec("Wed").setContent(R.id.tab3).setIndicator("Wed")
41.
42.
            th.addTab(spec3);
            TabHost.TabSpec spec4 = th.newTabSpec("Thu").setContent(R.id.tab4).setIndicator("Thu")
43.
44
            th.addTab(spec4);
            TabHost.TabSpec spec5 = th.newTabSpec("Fri").setContent(R.id.tab5).setIndicator("Fri")
45.
46.
            th.addTab(spec5);
47.
            TabHost.TabSpec spec6 = th.newTabSpec("Sat").setContent(R.id.tab6).setIndicator("Sat")
48.
            th.addTab(spec6);
```

```
49.
            final TabHost uvo = (TabHost) findViewById(R.id.upcomingvsold2);
50.
            uvo.setup();
51.
            final TabHost.TabSpec spec11 = uvo.newTabSpec("Upcoming").setContent(R.id.tab11).setIn
    dicator("Upcoming");
52.
            uvo.addTab(spec11);
            TabHost.TabSpec spec21 = uvo.newTabSpec("Old").setContent(R.id.tab21).setIndicator("Ol
53.
    d");
54.
            uvo.addTab(spec21);
55.
            findViewById(R.id.addnewbt).setOnClickListener(new View.OnClickListener() {@
                Override public void onClick(View v) {
56.
57.
                    if (tabletypes.getSelectedItemPosition() == 0) {
58.
                        Intent calenderintents = new Intent(All_TimeTables_Activity.this, Courses_
    Viewer_Editor_Activity.class);
59.
                        calenderintents.putExtra("day", th.getCurrentTab());
60.
                        calenderintents.putExtra("name", "");
61.
                        startActivity(calenderintents);
62.
                    } else if (tabletypes.getSelectedItemPosition() == 1) {
                        Intent newtask = new Intent(All_TimeTables_Activity.this, Tasks_Viewer_Edi
63.
    tor_Activity.class);
64.
                        startActivity(newtask);
65.
                    } else if (tabletypes.getSelectedItemPosition() == 2) {
66.
                        Intent newexam = new Intent(All TimeTables Activity.this, Exams Viewer Edi
    tor_Activity.class);
67.
                        startActivity(newexam);
68.
69.
                }
70.
            });
            thisdaycourses = mDatasource.getcourses(th.getCurrentTab());
71.
72.
            courseslistsetup(thisdaycourses);
            th.setOnTabChangedListener(new TabHost.OnTabChangeListener() {@
73.
74.
                Override public void onTabChanged(String tabId) {
75.
                    thisdaycourses = mDatasource.getcourses(th.getCurrentTab());
76.
                    courseslistsetup(thisdaycourses);
77.
                }
78.
            });
            uvo.setOnTabChangedListener(new TabHost.OnTabChangeListener() {@
79.
80.
                Override public void onTabChanged(String tabId) {
                    if (tabletypes.getSelectedItemPosition() == 1) {
81.
82.
                        allTasks = mDatasource.GetTasks(uvo.getCurrentTab());
83.
                        Taskslistsetup(allTasks);
84.
                    } else if (tabletypes.getSelectedItemPosition() == 2) {
85.
                        allExams = mDatasource.GetExams(uvo.getCurrentTab());
86.
                        Examslistsetup(allExams);
87.
                    }
88.
89.
            });
90.
            tabletypes.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener() {@
91.
                Override public void onItemSelected(AdapterView <? > parent, View view, int positi
    on, long id) {
92.
                    View hs = findViewById(R.id.hscrollc);
93.
                    View upvol = findViewById(R.id.upcomingvsold);
94.
                    if (position != 0) {
95.
                        hs.setVisibility(View.GONE);
96.
                        upvol.setVisibility(View.VISIBLE);
97.
98.
                        hs.setVisibility(View.VISIBLE);
99.
                        thisdaycourses = mDatasource.getcourses(th.getCurrentTab());
100.
                                courseslistsetup(thisdaycourses);
101.
                                upvol.setVisibility(View.GONE);
102.
103.
                            if (position == 1) {
```

```
104.
                                allTasks = mDatasource.GetTasks(uvo.getCurrentTab());
105.
                                Taskslistsetup(allTasks);
106.
                            } else if (position == 2) {
107.
                                allExams = mDatasource.GetExams(uvo.getCurrentTab());
108.
                                Examslistsetup(allExams);
109.
                            }
110.
                        }@
111.
                        Override public void onNothingSelected(AdapterView <? > parent) {
112.
                                                                            Random rand = new Random
                            /*long tm=new Date().getTime();
                         int r = rand.nextInt(256);
                                                                      int g = rand.nextInt(256);
    (tm);
                 int b = rand.nextInt(256);
                                                             th.getCurrentTabView().setBackgroundCo
    lor(Color.argb(100,r,g,b));
                                                th.getCurrentView().setBackgroundColor(Color.argb(5
    0,r,g,b));*/
113.
                        }
114.
                   });
115.
               }@
116.
               Override protected void onPause() {
117.
                   super.onPause();
118.
                   mDatasource.close();
119.
               }@
120.
               Override protected void onResume() {
121.
                   super.onResume();
                   TabHost th = (TabHost) findViewById(R.id.tabhost);
122.
123.
                   final TabHost uvo = (TabHost) findViewById(R.id.upcomingvsold2);
124.
                   mDatasource.open();
125.
                   Spinner tabletypes = (Spinner) findViewById(R.id.tablestype);
126.
                   if (tabletypes.getSelectedItemPosition() == 0) {
127.
                        thisdaycourses = mDatasource.getcourses(th.getCurrentTab());
128.
                        courseslistsetup(thisdaycourses);
                   } else if (tabletypes.getSelectedItemPosition() == 1) {
129.
130.
                        allTasks = mDatasource.GetTasks(uvo.getCurrentTab());
131.
                        Taskslistsetup(allTasks);
132.
133.
                        allExams = mDatasource.GetExams(uvo.getCurrentTab());
134.
                        Examslistsetup(allExams);
135.
                   }
136.
               private void courseslistsetup(List < TimeTable_Classes > x) {
137.
138.
                   View v = findViewById(R.id.crecycler);
139.
                   RecyclerView crn = (RecyclerView) v;
140.
                   CoursesItemAdapter cadpter = new CoursesItemAdapter(this, x);
141.
                   crn.setAdapter(cadpter);
142.
143.
               private void Taskslistsetup(List < Tasks Data > x) {
144.
                   View v = findViewById(R.id.crecycler); //assert (v!=null);
145.
                   RecyclerView crn = (RecyclerView) v;
                   TasksItemsAdapter cadpter = new TasksItemsAdapter(this, x);
146.
147.
                   crn.setAdapter(cadpter);
148.
149.
               private void Examslistsetup(List < Exam class > x) {
150.
                   View v = findViewById(R.id.crecycler); //assert (v!=null);
151.
                   RecyclerView crn = (RecyclerView) v;
152.
                   ExamsItemsAdapter cadpter = new ExamsItemsAdapter(this, x);
153.
                   crn.setAdapter(cadpter);
154.
155.
           }
```

Courses_Viewer_Editor_Activity.java

```
    package com.example.baltu.myapplication.TimeTables;
    import android.app.Activity;
    import android.app.Dialog;
```

```
    import android.app.DialogFragment;

import android.app.TimePickerDialog;
import android.content.DialogInterface;

    import android.database.sqlite.SQLiteException;

8. import android.os.Bundle;
9. import android.support.annotation.Nullable;
10. import android.support.v7.app.AlertDialog;
11. import android.view.View;
12. import android.widget.ArrayAdapter;
13. import android.widget.Spinner;
14. import android.widget.TextView;
15. import android.widget.TimePicker;
16. import android.widget.Toast;
17. import android.widget.ViewSwitcher;
18. import com.example.baltu.myapplication.DataTypes.TimeTable Classes;
19. import com.example.baltu.myapplication.Data Provider.UserDB Provider;
20. import com.example.baltu.myapplication.R;
21. import java.text.DateFormat;
22. import java.text.ParseException;
23. import java.text.SimpleDateFormat;
24. import java.util.Calendar;
25. /** * Created by Baltu on 2017-05-07. */
26. public class Courses_Viewer_Editor_Activity extends Activity {
27.
        private UserDB_Provider mDatasource;
28.
        private String Id;
29.
        private TextView vnoc;
       private TextView DofW;
30.
31.
        private TextView vstoc;
32.
       private TextView vetoc;
33.
        private TextView vnoteofc;
34.
        private Spinner tabletypes;
35.
        private TextView noc; //name of course
        private static TextView sth; //start time hours
36.
37.
        private static TextView eth; //end time hours
38.
        private TextView nnc;
39.
        private ViewSwitcher vsc;
40.
        private static DateFormat timeformat = new SimpleDateFormat("HH:mm");@
41.
        Override protected void onCreate(@Nullable Bundle savedInstanceState) {
42.
            super.onCreate(savedInstanceState);
43.
            setContentView(R.layout.new course2);
44.
            vsc = (ViewSwitcher) findViewById(R.id.ViewSwitcherCourses);
45.
            mDatasource = new UserDB Provider(this);
46.
            mDatasource.open();
47.
            vnoc = (TextView) findViewById(R.id.name); //V name of course
48.
            DofW = (TextView) findViewById(R.id.DayOfTheWeek); //V Day of week
            vstoc = (TextView) findViewById(R.id.starttimeee); //V start time
49.
50.
            vetoc = (TextView) findViewById(R.id.endtimeee); //V end time
            vnoteofc = (TextView) findViewById(R.id.notesnewcourseee); //V Notes
51.
52.
            tabletypes = (Spinner) findViewById(R.id.daysofweek);
53.
            noc = (TextView) findViewById(R.id.editText2); //E name
54.
            sth = (TextView) findViewById(R.id.starttime); //E start time
55.
            eth = (TextView) findViewById(R.id.endtime); //E end time
56.
            nnc = (TextView) findViewById(R.id.notesnewcourse); //E Notes
57.
            ArrayAdapter < CharSequence > items = ArrayAdapter.createFromResource(this, R.array.Da
    ys of Week, android.R.layout.simple spinner item);
58.
            items.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item);
59.
            tabletypes.setAdapter(items);
60.
            if (getIntent().getStringExtra("id") == null) {
61.
                vsc.showNext();
62.
            } else {
                vnoc.setText(getIntent().getStringExtra("name"));
63.
```

```
64.
                noc.setText(getIntent().getStringExtra("name"));
65.
                DofW.setText(items.getItem(getIntent().getIntExtra("day", 0)));
                tabletypes.setSelection(getIntent().getIntExtra("day", 0));
66.
67.
                vstoc.setText(getIntent().getStringExtra("start"));
68.
                sth.setText(getIntent().getStringExtra("start"));
69.
                vetoc.setText(getIntent().getStringExtra("end"));
70.
                eth.setText(getIntent().getStringExtra("end"));
71.
                vnoteofc.setText(getIntent().getStringExtra("note"));
72.
                nnc.setText(getIntent().getStringExtra("note"));
73.
74.
            findViewById(R.id.button5).setOnClickListener(new View.OnClickListener() {@
75.
                Override public void onClick(View v) {
76.
                    vsc.showNext();
77.
                }
78.
            });
79.
            findViewById(R.id.button6).setOnClickListener(new View.OnClickListener() {@
80.
                Override public void onClick(View v) {
81.
                    new AlertDialog.Builder(Courses_Viewer_Editor_Activity.this).setTitle("Delete
    ").setMessage("Are you sure you want to delete " + vnoc.getText().toString() + "?").setIcon(an
   droid.R.drawable.ic_dialog_alert).setPositiveButton(android.R.string.yes, new DialogInterface.
   OnClickListener() {
82.
                        public void onClick(DialogInterface dialog, int whichButton) {
83.
                            if (mDatasource.deletecourse(getIntent().getStringExtra("id"))) {
84.
                                Toast.makeText(Courses_Viewer_Editor_Activity.this, "Deleted", Toa
   st.LENGTH_LONG).show();
85.
                                finish();
86.
                            } else {
87.
                                Toast.makeText(Courses Viewer Editor Activity.this, "Error", Toast
    .LENGTH_LONG).show();
88.
                                finish();
89.
                            }
90.
91.
                    }).setNegativeButton(android.R.string.no, null).show();
92.
                }
93.
            });
            findViewById(R.id.starttimelayout).setOnClickListener(new View.OnClickListener() {@
94.
95.
                Override public void onClick(View v) {
96.
                    Bundle g = new Bundle();
97.
                    g.putString("time", sth.getText().toString());
98.
                    DialogFragment df = new timepicker();
99.
                    df.setArguments(g);
100.
                           df.show(getFragmentManager(), "timepicker");
101.
102.
                   });
103.
                   findViewById(R.id.endtimelayout2).setOnClickListener(new View.OnClickListener()
     {@
104.
                       Override public void onClick(View v) {
105.
                           Bundle g = new Bundle();
                           g.putString("time", eth.getText().toString());
106.
                           DialogFragment df = new timepicker();
107.
108.
                           df.setArguments(g);
109.
                            df.show(getFragmentManager(), "timepicker1");
110.
111.
                   });
112.
                   findViewById(R.id.savecourse).setOnClickListener(new View.OnClickListener() {@
113.
                       Override public void onClick(View v) {
114.
                           TimeTable Classes gh;
115.
                           gh = new TimeTable Classes(getIntent().getStringExtra("id"), noc.getTex
   t().toString(), sth.getText().toString(), eth.getText().toString(), tabletypes.getSelectedItem
   Position(), nnc.getText().toString());
```

```
116.
                            if (noc.getText().toString().equals("") || (sth.getText().toString().eq
    uals("00:00") && eth.getText().toString().equals("00:00"))) {
117.
                                Toast.makeText(Courses_Viewer_Editor_Activity.this, "Error: Complet
    e your input", Toast.LENGTH_SHORT).show();
118.
                            } else if (getIntent().getStringExtra("id") == null) {
119.
                                try {
120.
                                    mDatasource.addnewcourse(gh);
121.
                                } catch (SQLiteException e) {
122.
                                    e.printStackTrace();
123.
                                } finally {
124.
                                    Toast.makeText(Courses Viewer Editor Activity.this, "Saved", To
    ast.LENGTH_LONG).show();
125.
                                finish();
126.
127.
                            } else {
128.
                                try {
129.
                                    mDatasource.updatecourse(gh);
130.
                                } catch (SQLiteException e) {
131.
                                    e.printStackTrace();
132.
                                } finally {
                                    Toast.makeText(Courses_Viewer_Editor_Activity.this, "Updated",
133.
    Toast.LENGTH SHORT).show();
134.
                                finish();
135.
136.
137.
                        }
138.
                   });
139.
               }@
140.
               Override protected void onPause() {
                   super.onPause();
141.
142.
                   mDatasource.close();
143.
               public static class timepicker extends DialogFragment implements TimePickerDialog.O
144.
    nTimeSetListener {@
                   Override public Dialog onCreateDialog(Bundle savedInstanceState) {
145.
146.
                        final Calendar c = Calendar.getInstance();
147.
                        final int Hours = c.get(Calendar.HOUR OF DAY);
148.
                        int Minutes = c.get(Calendar.MINUTE);
                        if (sth.getText().toString().equals("00:00") && eth.getText().toString().eq
149.
    uals("00:00")) {
150.
                            return new TimePickerDialog(getActivity(), this, Hours, Minutes, true);
151.
                        } else {
152.
                            DateFormat df = new SimpleDateFormat("HH:mm");
153.
                                return new TimePickerDialog(getActivity(), this, df.parse(getArgume
154.
    nts().getString("time",
                             "00:00")).getHours(), df.parse(getArguments().getString("time", "00:00
    ")).getMinutes(), true);
155.
                            } catch (ParseException e) {
                                e.printStackTrace();
156.
                                return new TimePickerDialog(getActivity(), this, Hours, Minutes, tr
157.
    ue);
158.
159.
                        }
160.
                   Override public void onTimeSet(TimePicker view, int hourOfDay, int minute) {
161.
162.
                        TextView sth = (TextView) getActivity().findViewById(R.id.starttime);
163.
                        TextView eth = (TextView) getActivity().findViewById(R.id.endtime);
164.
                        if (getTag() == "timepicker") {
165.
                            sth.setText(String.valueOf(hourOfDay) + ":" + String.valueOf(minute));
```

```
166.
                           if (eth.getText().toString().equals("00:00")) eth.setText(String.value0
    f((hourOfDay + 2) % 24) + ":" + String.valueOf(minute));
167.
                       } else {
168.
                            eth.setText(String.valueOf(hourOfDay) + ":" + String.valueOf(minute));
169.
                           if (sth.getText().toString().equals("00:00")) sth.setText(String.value0
    f((hourOfDay + 22) % 24) + ":" + String.valueOf(minute));
170.
                       }
171.
                   }
172.
173.
```

Exams_Viewer_Editor_Activity.java

```
    package com.example.baltu.myapplication.TimeTables;

2. import android.content.DialogInterface;
3. import android.content.Intent;

    import android.database.sqlite.SQLiteException;

5. import android.os.Bundle;
import android.provider.CalendarContract;
7. import android.support.annotation.Nullable;
8. import android.support.v4.app.FragmentActivity;
import android.support.v7.app.AlertDialog;
10. import android.view.View;
11. import android.widget.TextView;
12. import android.widget.Toast;
13. import android.widget.ViewFlipper;
14. import com.example.baltu.myapplication.DataTypes.Exam_class;
15. import com.example.baltu.myapplication.Data_Provider.UserDB_Provider;
16. import com.example.baltu.myapplication.R;
17. import com.github.jjobes.slidedatetimepicker.SlideDateTimeListener;
18. import com.github.jjobes.slidedatetimepicker.SlideDateTimePicker;
19. import java.text.DateFormat;
20. import java.text.ParseException;
21. import java.text.SimpleDateFormat;
22. import java.util.Date;
23. /** * Created by Baltu on 2017-05-09. */
24. public class Exams_Viewer_Editor_Activity extends FragmentActivity {
25.
        UserDB Provider msource;@
26.
        Override protected void onCreate(@Nullable Bundle savedInstanceState) {
27.
            super.onCreate(savedInstanceState);
28.
            setContentView(R.layout.new_exam);
            final ViewFlipper vf = (ViewFlipper) findViewById(R.id.viewFlipper);
29.
30.
            final String id = getIntent().getStringExtra("id");
31.
            final TextView cname2 = (TextView) findViewById(R.id.newtaskcn2); //view task name
32.
            final TextView cdesc2 = (TextView) findViewById(R.id.newtaskscd2); // new task descrip
    tion
33.
            final TextView Datet2 = (TextView) findViewById(R.id.newtaskdate2); //new task date
34.
            final TextView ntn2 = (TextView) findViewById(R.id.newtasksnote2); //new task note
35.
            final DateFormat all2 = new SimpleDateFormat("dd/MM/yyyy hh:mm aaa");
36.
            findViewById(R.id.Editebuttun2).setOnClickListener(new View.OnClickListener() {@
37.
                Override public void onClick(View v) {
38.
                    vf.showNext();
39.
40.
41.
            msource = new UserDB Provider(this);
42.
            msource.open();
43.
            final Date nowd = new Date();
44.
            final TextView cname = (TextView) findViewById(R.id.newtaskcn); //new task name
45.
            final TextView cdesc = (TextView) findViewById(R.id.newtaskscd); // new task descripti
    on
            final TextView Timet = (TextView) findViewById(R.id.newtasktime); //new task time
46.
```

```
47.
            final TextView Datet = (TextView) findViewById(R.id.newtaskdate); //new task date
48.
            final TextView ntn = (TextView) findViewById(R.id.newtasksnote); //new task note
49.
            final DateFormat tt = new SimpleDateFormat("hh:mm aaa");
50.
            final DateFormat dd = new SimpleDateFormat("dd/MM/yyyy");
51.
            final DateFormat all = new SimpleDateFormat("dd/MM/yyyyhh:mm aaa");
52.
            Timet.setText(tt.format(nowd));
53.
            Datet.setText(dd.format(nowd));
54.
            if (id != null) {
55.
                vf.showNext();
                cname2.setText(getIntent().getStringExtra("name"));
56.
57.
                cname.setText(getIntent().getStringExtra("name"));
58.
                cdesc2.setText(getIntent().getStringExtra("desc"));
59.
                cdesc.setText(getIntent().getStringExtra("desc"));
60.
                Datet2.setText(all2.format(new Date(getIntent().getLongExtra("date", 0))));
61.
                Datet.setText(dd.format(new Date(getIntent().getLongExtra("date", 0))));
62.
                Timet.setText(tt.format(new Date(getIntent().getLongExtra("date", 0))));
63.
                ntn2.setText(getIntent().getStringExtra("notes"));
64.
                ntn.setText(getIntent().getStringExtra("notes"));
65.
            findViewById(R.id.newtasktime).setOnClickListener(new View.OnClickListener() {@
66.
                Override public void onClick(View v) {
67.
                    SlideDateTimeListener listner = new SlideDateTimeListener() {@
68.
69.
                        Override public void onDateTimeSet(Date date) {
70.
                            Timet.setText(tt.format(date));
71.
                            Datet.setText(dd.format(date));
72.
73.
                    };
74.
                    Date nowtime = new Date();
75.
                    try {
                        nowtime = all.parse(Datet.getText().toString() + Timet.getText().toString(
76.
    ));
77.
                    } catch (ParseException e) {
78.
                        e.printStackTrace();
79.
                    }
80.
                    new SlideDateTimePicker.Builder(getSupportFragmentManager()).setListener(listn
    er).setInitialDate(nowtime).setMaxDate(new Date(nowtime.getTime() + (long) 315360000000.0)).se
    tMinDate(new Date(nowtime.getTime() - (long) 315360000000.0)).setCurrentd or t(1).build().show
    ();
81.
82.
            });
            findViewById(R.id.alarm).setOnClickListener(new View.OnClickListener() {@
83.
84.
                Override public void onClick(View v) {
85.
                    Intent intent = new Intent(Intent.ACTION INSERT);
86.
                    intent.setType("vnd.android.cursor.item/event");
87.
                    intent.putExtra(CalendarContract.Events.TITLE, cname2.getText().toString());
                    intent.putExtra(CalendarContract.Events.DESCRIPTION, cdesc2.getText().toString
88.
    ());
89.
                    Date taskdate = new Date(); // Setting dates
90.
91.
                        taskdate = all2.parse(Datet2.getText().toString());
92.
                    } catch (ParseException e) {
93.
                        e.printStackTrace();
94.
95.
                    intent.putExtra(CalendarContract.EXTRA EVENT BEGIN TIME, taskdate.getTime());
96.
                    intent.putExtra(CalendarContract.EXTRA EVENT END TIME, taskdate.getTime());
97.
                    startActivity(intent); // make it a full day event // intent.putExtra(Calendar
    Contract.EXTRA EVENT ALL DAY, true); // make it a recurring Event //intent.putExtra(CalendarCo
    ntract.Events.RRULE, "FREQ=WEEKLY;COUNT=11;WKST=SU;BYDAY=TU,TH"); // Making it private and sho
    wn as busy // intent.putExtra(CalendarContract.Events.ACCESS_LEVEL, CalendarContract.Events.AC
```

```
CESS_PRIVATE); // intent.putExtra(CalendarContract.Events.AVAILABILITY, CalendarContract.Event
   s.AVAILABILITY BUSY);
98.
                }
99.
            });
100.
                   findViewById(R.id.newtaskdate).setOnClickListener(new View.OnClickListener() {@
101.
                       Override public void onClick(View v) {
102.
                            SlideDateTimeListener listner = new SlideDateTimeListener() {@
103.
                                Override public void onDateTimeSet(Date date) {
104.
                                    Timet.setText(tt.format(date));
105.
                                    Datet.setText(dd.format(date));
106.
107.
                            };
108.
                           Date nowtime = new Date();
109.
                            try {
110.
                                nowtime = all.parse(Datet.getText().toString() + Timet.getText().to
   String());
                            } catch (ParseException e) {
111.
112.
                                e.printStackTrace();
113.
114.
                            new SlideDateTimePicker.Builder(getSupportFragmentManager()).setListene
   r(listner).setInitialDate(nowtime).setMaxDate(new Date(nowtime.getTime() + (long) 3153600000000
    .0)).setMinDate(new Date(nowtime.getTime() - (long) 315360000000.0)).setCurrentd_or_t(0).build
    ().show();
115.
116.
                   });
                   findViewById(R.id.newtasksaveb).setOnClickListener(new View.OnClickListener() {
117.
   @
118.
                       Override public void onClick(View v) {
119.
                            Exam class gh = new Exam class();
120.
                            Date isitold = new Date();
121.
                            try {
                                isitold = all.parse(Datet.getText().toString() + Timet.getText().to
122.
   String());
123.
                            } catch (ParseException e) {
124.
                                e.printStackTrace();
125.
                            if (!cname.getText().toString().isEmpty() && isitold.getTime() > new Da
126.
   te().getTime()) {
                                gh.setCourse(cname.getText().toString());
127.
128.
                                gh.setExam Date(isitold.getTime());
129.
                                gh.setDiscription(cdesc.getText().toString());
130.
                                gh.setNotes(ntn.getText().toString());
131.
                                if (id == null) {
132.
133.
                                        msource.addnewExam(gh);
134.
                                    } catch (SQLiteException e) {
135.
                                        e.printStackTrace();
136.
                                    Toast.makeText(Exams_Viewer_Editor_Activity.this, "saved", Toas
137.
   t.LENGTH LONG).show();
138.
                                    finish();
139.
                                } else {
140.
                                    gh.setID(id);
141.
142.
                                        msource.updateExam(gh);
143.
                                    } catch (SQLiteException e) {
144.
                                        e.printStackTrace();
145.
146.
                                    Toast.makeText(Exams_Viewer_Editor_Activity.this, "updated", To
   ast.LENGTH_LONG).show();
```

```
147.
                                    finish();
148.
                                }
149.
                            } else {
150.
                                Toast.makeText(Exams_Viewer_Editor_Activity.this, "Error\ncheck you
    r Inputs", Toast.LENGTH_LONG).show();
151.
152.
153.
                   });
154.
                   findViewById(R.id.deleteb).setOnClickListener(new View.OnClickListener() {@
155.
                        Override public void onClick(View v) {
                            new AlertDialog.Builder(Exams_Viewer_Editor_Activity.this).setTitle("De
156.
    lete ").setMessage("Are you sure you want to delete " + cname2.getText().toString() + "?").set
    Icon(android.R.drawable.ic_dialog_alert).setPositiveButton(android.R.string.yes, new DialogInt
    erface.OnClickListener() {
157.
                                public void onClick(DialogInterface dialog, int whichButton) {
158.
                                    if (msource.DeleteExam(id) == 1) {
159.
                                        Toast.makeText(Exams_Viewer_Editor_Activity.this, "Deleted"
     Toast.LENGTH_LONG).show();
                                        finish();
160.
161.
                                    } else {
162.
                                        Toast.makeText(Exams_Viewer_Editor_Activity.this, "Error",
    Toast.LENGTH_LONG).show();
163.
                                        finish();
164.
165.
166.
                           }).setNegativeButton(android.R.string.no, null).show();
167.
168.
                   });
169.
               }@
               Override protected void onPause() {
170.
171.
                   super.onPause();
172.
                   msource.close();
173.
174.
```

Tasks_Viewer_Editor_Activity.java

```
    package com.example.baltu.myapplication.TimeTables;

import android.content.DialogInterface;
3. import android.content.Intent;

    import android.database.sqlite.SQLiteException;

import android.os.Bundle;
import android.provider.CalendarContract;
7. import android.support.annotation.Nullable;
import android.support.v4.app.FragmentActivity;
import android.support.v7.app.AlertDialog;
10. import android.view.View;
11. import android.widget.TextView;
12. import android.widget.Toast;
13. import android.widget.ViewFlipper;
14. import com.example.baltu.myapplication.DataTypes.Tasks_Data;
15. import com.example.baltu.myapplication.Data Provider.UserDB Provider;
16. import com.example.baltu.myapplication.R;
17. import com.github.jjobes.slidedatetimepicker.SlideDateTimeListener;
18. import com.github.jjobes.slidedatetimepicker.SlideDateTimePicker;
19. import java.text.DateFormat;
20. import java.text.ParseException;
21. import java.text.SimpleDateFormat;
22. import java.util.Date;
23. /** * Created by Baltu on 2017-05-09. */
24. public class Tasks_Viewer_Editor_Activity extends FragmentActivity {
25.
       UserDB_Provider msource;@
```

```
26.
       Override protected void onCreate(@Nullable Bundle savedInstanceState) {
27.
           super.onCreate(savedInstanceState);
28.
           setContentView(R.layout.newtasks);
29.
            final ViewFlipper vf = (ViewFlipper) findViewById(R.id.viewFlipper);
           final String id = getIntent().getStringExtra("id");
30.
            final TextView cname2 = (TextView) findViewById(R.id.newtaskcn2); //view task name
31.
           final TextView cdesc2 = (TextView) findViewById(R.id.newtaskscd2); // new task descrip
32.
   tion
33.
            final TextView Datet2 = (TextView) findViewById(R.id.newtaskdate2); //new task date
34.
           final TextView ntn2 = (TextView) findViewById(R.id.newtasksnote2); //new task note
35.
            final DateFormat all2 = new SimpleDateFormat("dd/MM/yyyy hh:mm aaa");
36.
           findViewById(R.id.Editebuttun2).setOnClickListener(new View.OnClickListener() {@
37.
               Override public void onClick(View v) {
38.
                   vf.showNext();
39.
               }
40.
           });
41.
            findViewById(R.id.alarm).setOnClickListener(new View.OnClickListener() {@
42.
               Override public void onClick(View v) {
                    Intent intent = new Intent(Intent.ACTION INSERT);
43.
                    intent.setType("vnd.android.cursor.item/event");
44.
45.
                    intent.putExtra(CalendarContract.Events.TITLE, cname2.getText().toString());
                    intent.putExtra(CalendarContract.Events.DESCRIPTION, cdesc2.getText().toString
46.
    ());
                    Date taskdate = new Date(); // Setting dates
47.
48.
49.
                        taskdate = all2.parse(Datet2.getText().toString());
50.
                    } catch (ParseException e) {
51.
                        e.printStackTrace();
52.
                    intent.putExtra(CalendarContract.EXTRA EVENT BEGIN TIME, taskdate.getTime());
53.
54.
                    intent.putExtra(CalendarContract.EXTRA EVENT END TIME, taskdate.getTime());
                    startActivity(intent); // make it a full day event // intent.putExtra(Calendar
55.
   Contract.EXTRA EVENT ALL DAY, true); // make it a recurring Event //intent.putExtra(CalendarCo
   ntract.Events.RRULE, "FREQ=WEEKLY;COUNT=11;WKST=SU;BYDAY=TU,TH"); // Making it private and sho
   wn as busy // intent.putExtra(CalendarContract.Events.ACCESS LEVEL, CalendarContract.Events.AC
   CESS PRIVATE); // intent.putExtra(CalendarContract.Events.AVAILABILITY, CalendarContract.Event
   s.AVAILABILITY BUSY);
56.
               }
57.
           });
58.
           msource = new UserDB Provider(this);
59.
           msource.open();
60.
           final Date nowd = new Date();
61.
            final TextView cname = (TextView) findViewById(R.id.newtaskcn); //new task name
62.
           final TextView cdesc = (TextView) findViewById(R.id.newtaskscd); // new task descripti
   on
            final TextView Timet = (TextView) findViewById(R.id.newtaskdate); //new task time
63.
64.
           final TextView Datet = (TextView) findViewById(R.id.newtasktime); //new task date
            final TextView ntn = (TextView) findViewById(R.id.newtasksnote); //new task note
65.
            final DateFormat tt = new SimpleDateFormat("hh:mm aaa");
66.
67.
            final DateFormat dd = new SimpleDateFormat("dd/MM/yyyy");
68.
           final DateFormat all = new SimpleDateFormat("dd/MM/yyyyhh:mm aaa");
69.
            Timet.setText(tt.format(nowd));
70.
           Datet.setText(dd.format(nowd));
71.
            if (id != null) {
72.
               vf.showNext();
73.
               cdesc2.setText(getIntent().getStringExtra("desc"));
74.
                cdesc.setText(getIntent().getStringExtra("desc"));
75.
               Datet2.setText(all2.format(new Date(getIntent().getLongExtra("date", 0))));
76.
               Datet.setText(dd.format(new Date(getIntent().getLongExtra("date", 0))));
77.
               Timet.setText(tt.format(new Date(getIntent().getLongExtra("date", 0))));
```

```
78.
                ntn2.setText(getIntent().getStringExtra("notes"));
79.
                ntn.setText(getIntent().getStringExtra("notes"));
80.
                cname2.setText(getIntent().getStringExtra("name"));
81.
                cname.setText(getIntent().getStringExtra("name"));
82.
            findViewById(R.id.newtasktime).setOnClickListener(new View.OnClickListener() {@
83.
84.
                Override public void onClick(View v) {
85.
                    SlideDateTimeListener listner = new SlideDateTimeListener() {@
                        Override public void onDateTimeSet(Date date) {
86.
87.
                            Timet.setText(tt.format(date));
88.
                            Datet.setText(dd.format(date));
89.
                        }
90.
                    };
91.
                    Date nowtime = new Date();
92.
                    try {
93.
                        nowtime = all.parse(Datet.getText().toString() + Timet.getText().toString(
   ));
94.
                    } catch (ParseException e) {
95.
                        e.printStackTrace();
96.
97.
                    new SlideDateTimePicker.Builder(getSupportFragmentManager()).setListener(listn
   er).setInitialDate(nowtime).setMaxDate(new Date(nowtime.getTime() + (long) 315360000000.0)).se
   tMinDate(new Date(nowtime.getTime() - (long) 315360000000.0)).setCurrentd_or_t(0).build().show
    ();
98.
                }
99.
            });
100.
                   findViewById(R.id.newtaskdate).setOnClickListener(new View.OnClickListener() {@
101.
                       Override public void onClick(View v) {
                           SlideDateTimeListener listner = new SlideDateTimeListener() {@
102.
103.
                               Override public void onDateTimeSet(Date date) {
104.
                                    Timet.setText(tt.format(date));
105.
                                    Datet.setText(dd.format(date));
106.
107.
                           };
108.
                           Date nowtime = new Date();
109.
                           try {
                               nowtime = all.parse(Datet.getText().toString() + Timet.getText().to
110.
   String());
111.
                           } catch (ParseException e) {
112.
                               e.printStackTrace();
113.
                            }
114.
                           new SlideDateTimePicker.Builder(getSupportFragmentManager()).setListene
   r(listner).setInitialDate(nowtime).setMaxDate(new Date(nowtime.getTime() + (long) 315360000000
    .0)).setMinDate(new Date(nowtime.getTime() - (long) 315360000000.0)).setCurrentd or t(1).build
    ().show();
115.
116.
                   });
                   findViewById(R.id.newtasksaveb).setOnClickListener(new View.OnClickListener() {
117.
   @
118.
                       Override public void onClick(View v) {
                           Tasks Data gh = new Tasks Data();
119.
120.
                           Date isitold = new Date();
121.
                           try {
122.
                               isitold = all.parse(Datet.getText().toString() + Timet.getText().to
   String());
123.
                           } catch (ParseException e) {
124.
                               e.printStackTrace();
125.
126.
                           if (!cname.getText().toString().isEmpty() && isitold.getTime() > new Da
   te().getTime()) {
```

```
127.
                                gh.setDeadline_Date(isitold.getTime());
128.
                                gh.setDiscription(cdesc.getText().toString());
129.
                                gh.setNotes(ntn.getText().toString());
130.
                                gh.setCourse(cname.getText().toString());
131.
                                if (id == null) {
132.
                                    try {
133.
                                        msource.addnewTask(gh);
134.
                                    } catch (SQLiteException e) {
135.
                                        e.printStackTrace();
136.
137.
                                    Toast.makeText(Tasks_Viewer_Editor_Activity.this, "saved", Toas
    t.LENGTH_LONG).show();
138.
                                    finish();
139.
                                } else {
140.
                                    gh.setID(id);
141.
                                    try {
142.
                                        msource.updateTask(gh);
143.
                                    } catch (SQLiteException e) {
144.
                                        e.printStackTrace();
145.
146.
                                    Toast.makeText(Tasks_Viewer_Editor_Activity.this, "updated", To
    ast.LENGTH LONG).show();
147.
                                    finish();
148.
                                }
                            } else {
149.
150.
                                Toast.makeText(Tasks_Viewer_Editor_Activity.this, "Error\ncheck you
    r Inputs", Toast.LENGTH_LONG).show();
151.
152.
153.
                    });
                    findViewById(R.id.deleteb).setOnClickListener(new View.OnClickListener() {@
154.
155.
                        Override public void onClick(View v) {
                            new AlertDialog.Builder(Tasks Viewer Editor Activity.this).setTitle("De
156.
    lete ").setMessage("Are you sure you want to delete " + cname2.getText().toString() + "?").set
    Icon(android.R.drawable.ic dialog alert).setPositiveButton(android.R.string.yes, new DialogInt
    erface.OnClickListener() {
157.
                                public void onClick(DialogInterface dialog, int whichButton) {
158.
                                    if (msource.DeleteTask(id) == 1) {
                                        Toast.makeText(Tasks_Viewer_Editor_Activity.this, "Deleted"
159.
     Toast.LENGTH LONG).show();
160.
                                        finish();
161.
                                    } else {
162.
                                        Toast.makeText(Tasks Viewer Editor Activity.this, "Error",
    Toast.LENGTH LONG).show();
163.
                                         finish();
164.
165.
166.
                            }).setNegativeButton(android.R.string.no, null).show();
                        }
167.
168.
                   });
               }@
169.
170.
               Override protected void onPause() {
171.
                    super.onPause();
172.
                    msource.close();
173.
               }
174.
```

Academic_Calendar.java

```
    package com.example.baltu.myapplication;

import android.app.Activity;
import android.app.Fragment;
```

```
    import android.os.Bundle;

5. import android.support.design.widget.FloatingActionButton;
import android.support.design.widget.Snackbar;
7. import android.support.v7.app.AppCompatActivity;
8. import android.support.v7.widget.RecyclerView;
import android.support.v7.widget.Toolbar;
10. import android.view.View;
11. import com.example.baltu.myapplication.DataTypes.Calender_Data;
12. import com.example.baltu.myapplication.Data Provider.Adapters.CalendarItemsAdapter;

    import com.example.baltu.myapplication.Data_Provider.Local_DB_Main_Provider;

14. import java.util.List;
15. public class Academic_Calendar extends Activity {
16.
        Local DB Main Provider mSource;
17.
        List < Calender_Data > allevents;@
18.
        Override protected void onCreate(Bundle savedInstanceState) {
19.
            super.onCreate(savedInstanceState);
20.
            mSource = new Local_DB_Main_Provider(this);
21.
            setContentView(R.layout.activity calender);
22.
            RecyclerView crv = (RecyclerView) findViewById(R.id.calendar_recycler);
23.
            allevents = mSource.GetCalendarItems();
24.
            CalendarItemsAdapter cda = new CalendarItemsAdapter(this, allevents);
25.
            crv.setAdapter(cda);
26.
27. }
```

University Map.java

```
    package com.example.baltu.myapplication.Map;

import android.content.Intent;
import android.support.design.widget.FloatingActionButton;

    import android.support.v4.app.FragmentActivity;

5. import android.os.Bundle;
import android.support.v4.widget.DrawerLayout;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
10. import android.widget.ListView;
11. import com.example.baltu.myapplication.DataTypes.University_Locations;
12. import com.example.baltu.myapplication.Data_Provider.Local_DB_Main_Provider;
13. import com.example.baltu.myapplication.Data_Provider.JsonHelper;
14. import com.example.baltu.myapplication.R;
15. import com.google.android.gms.maps.CameraUpdateFactory;
16. import com.google.android.gms.maps.GoogleMap;
17. import com.google.android.gms.maps.OnMapReadyCallback;
18. import com.google.android.gms.maps.SupportMapFragment;
19. import com.google.android.gms.maps.model.LatLng;
20. import com.google.android.gms.maps.model.LatLngBounds;
21. import com.google.android.gms.maps.model.MarkerOptions;
22. import com.google.maps.android.data.Feature;
23. import com.google.maps.android.data.kml.KmlLayer;
24. import org.xmlpull.v1.XmlPullParserException;
25. import java.io.IOException;
26. import java.util.ArrayList;
27. import java.util.HashMap;
28. import java.util.List;
29. import java.util.Map;
30. public class University Map extends FragmentActivity implements OnMapReadyCallback {
        private Map < String, Places_on_map > all_places = new HashMap < > ();
31.
32.
        private Map < String, University_Locations > all_Locations = new HashMap < > ();
33.
        private static final String File_Name = "mapplaces.json";
34.
       private GoogleMap mMap;
35.
        static final int MY_REQUEST_CODE = 5584;
```

```
36.
       private String[] mPlanetTitles;
37.
       private DrawerLayout mDrawerLayout;
38.
       private ListView mDrawerList;
39.
       private FloatingActionButton myfab;
40.
       private Local_DB_Main_Provider mSource;;@
       Override protected void onCreate(Bundle savedInstanceState) {
41.
42.
                super.onCreate(savedInstanceState);
43.
                setContentView(R.layout.activity un map);
44.
                mSource = new Local DB Main Provider(this);
45.
                final List < University Locations > AllLocations = mSource.GetMapLocations();
46.
                mPlanetTitles = getResources().getStringArray(R.array.Credits);
47.
                mDrawerLayout = (DrawerLayout) findViewById(R.id.drawer_layout);
                mDrawerList = (ListView) findViewById(R.id.left drawer);
48.
49.
                myfab = (FloatingActionButton) findViewById(R.id.floatingActionButtonmap);
50.
                mDrawerList.setAdapter(new ArrayAdapter < String > (this, android.R.layout.simple
   list_item_1, mPlanetTitles));
51.
                mDrawerList.setOnItemClickListener(new AdapterView.OnItemClickListener() {@
52.
                    Override public void onItemClick(AdapterView <? > parent, View view, int posit
   ion, long id) {
53.
                        University Locations item = AllLocations.get(position);
54.
                        Intent loc info = new Intent(University Map.this, Locations on Map Details
    .class);
55.
                        loc_info.putExtra("Location", item.getShortName());
                        loc info.putExtra("Full Name", item.getLongName());
56.
57.
                        loc_info.putExtra("url", item.getImage_Url());
58.
                        loc_info.putExtra("Info", item.getInformation());
59.
                        loc_info.putExtra("Longt", item.getLongitude());
                        loc_info.putExtra("Lat", item.getLatitude());
60.
61.
                        mDrawerLayout.closeDrawers();
                        startActivityForResult(loc info, MY REQUEST CODE);
62.
63.
                    }
64.
                });
                myfab.setOnClickListener(new View.OnClickListener() {@
65.
                    Override public void onClick(View v) {
66.
67.
                        mDrawerLayout.openDrawer(mDrawerList);
68.
69.
                });
70.
                List < String > ListString = new ArrayList < > ();
71.
                if (AllLocations != null) {
72.
                    for (University Locations n: AllLocations) {
73.
                        ListString.add(n.getLongName());
74.
                        all Locations.put(n.getShortName(), n);
75.
                    mDrawerList.setAdapter(new ArrayAdapter < String > (this, android.R.layout.sim
76.
   ple list item 1, ListString));
77.
                }
                List < Places on map > myplaces = JsonHelper.Importer(University Map.this);
78.
79.
                if (myplaces != null) {
80.
                    for (Places on map pl: myplaces) {
81.
                        all_places.put(pl.getPlace_Name(), pl);
82.
83.
                } // Obtain the SupportMapFragment and get notified when the map is ready to be us
84.
                SupportMapFragment mapFragment = (SupportMapFragment) getSupportFragmentManager().
   findFragmentById(R.id.map);
                mapFragment.getMapAsync(this);
85.
86.
87.
           /**
                    * Manipulates the map once available.
                                                               * This callback is triggered when th
   e map is ready to be used.
                                   * This is where we can add markers or lines, add listeners or m
   ove the camera. In this case,
                                   * we just add a marker near Sydney, Australia.
                                                                                          * If Goog
   le Play services is not installed on the device, the user will be prompted to install
```

```
inside the SupportMapFragment. This method will only be triggered once the user has
                                                                                                * ins
    talled Google Play services and returned to the app.
88.
89.
        Override public void onMapReady(GoogleMap googleMap) {
90.
            mMap = googleMap;
91.
            int maptype = getIntent().getIntExtra("type", 0);
92.
            try {
93.
                if (maptype == 0) {
94.
                    KmlLayer layer = new KmlLayer(mMap, R.raw.campusmap, getApplicationContext());
95.
                    layer.addLayerToMap();
96.
                    layer.setOnFeatureClickListener(new KmlLayer.OnFeatureClickListener() {@
97.
                        Override public void onFeatureClick(Feature feature) {
98.
                            String namec = null;
99.
                             try {
                                        namec = feature.getProperty("name").toString();
100.
101.
                                    } catch (Exception e) {
102.
                                        e.printStackTrace();
103.
104.
                                    if (all Locations.containsKey(namec)) {
105.
                                        Intent loc info = new Intent(University Map.this, Locations
    on Map Details.class);
                                        loc_info.putExtra("Location", all_Locations.get(namec).getS
106.
    hortName());
                                        loc_info.putExtra("Full_Name", all_Locations.get(namec).get
107.
    LongName());
                                        loc_info.putExtra("url", all_Locations.get(namec).getImage_
108.
    Url());
109.
                                        loc_info.putExtra("Info", all_Locations.get(namec).getInfor
    mation());
                                        loc_info.putExtra("Longt", all_Locations.get(namec).getLong
110.
    itude());
                                        loc info.putExtra("Lat", all Locations.get(namec).getLatitu
111.
    de());
                                        startActivityForResult(loc info, MY REQUEST CODE);
112.
                                    } else if (all_places.containsKey(namec)) {
113.
114.
                                        Intent loc info = new Intent(University Map.this, Locations
    on Map Details.class);
115.
                                        loc info.putExtra("Location", namec);
                                        loc_info.putExtra("Full_Name", all_places.get(namec).getFul
116.
    1_Name());
                                        loc_info.putExtra("imagename", all_places.get(namec).getIma
    ge_Name());
118.
                                        startActivityForResult(loc info, MY REQUEST CODE);
119.
                                    }
120.
                                }
121.
                            });
122.
                        } else {
123.
                            int line = getIntent().getIntExtra("line", 0);
124.
                            switch (line) {
125.
                                case 0:
                                    KmlLayer layer = new KmlLayer(mMap, R.raw.emubusall, getApplica
126.
    tionContext());
127.
                                    layer.addLayerToMap();
                                    layer.setOnFeatureClickListener(new KmlLayer.OnFeatureClickList
128.
    ener() {@
129.
                                        Override public void onFeatureClick(Feature feature) {
130.
                                            String namec = feature.getProperty("name").toString();
131.
                                        }
132.
```

```
133.
                                     break;
134.
                                case 1:
135.
                                     KmlLayer layer2 = new KmlLayer(mMap, R.raw.emubus1, getApplicat
    ionContext());
136.
                                     layer2.addLayerToMap();
137.
                                     layer2.setOnFeatureClickListener(new KmlLayer.OnFeatureClickLis
    tener() {@
138.
                                         Override public void onFeatureClick(Feature feature) {
139.
                                             String namec = feature.getProperty("name").toString();
140.
141.
                                     });
142.
                                     break;
143.
                                case 2:
144.
                                     KmlLayer layer3 = new KmlLayer(mMap, R.raw.emubus2, getApplicat
    ionContext());
145.
                                     layer3.addLayerToMap();
                                     layer3.setOnFeatureClickListener(new KmlLayer.OnFeatureClickLis
146.
    tener() {@
                                         Override public void onFeatureClick(Feature feature) {
147.
148.
                                             String namec = feature.getProperty("name").toString();
149.
150.
                                     });
                                     break;
151.
152.
                                 case 3:
153.
                                     KmlLayer layer4 = new KmlLayer(mMap, R.raw.emubus3, getApplicat
    ionContext());
154.
                                     layer4.addLayerToMap();
                                     layer4.setOnFeatureClickListener(new KmlLayer.OnFeatureClickLis
155.
    tener() {@
156.
                                         Override public void onFeatureClick(Feature feature) {
                                             String namec = feature.getProperty("name").toString();
157.
158.
159.
                                     });
160.
                                     break;
161.
                                case 4:
162.
                                     KmlLayer layer5 = new KmlLayer(mMap, R.raw.emubus4, getApplicat
    ionContext());
                                     layer5.addLayerToMap();
163.
164
                                     layer5.setOnFeatureClickListener(new KmlLayer.OnFeatureClickLis
    tener() {@
165.
                                         Override public void onFeatureClick(Feature feature) {
166.
                                             String namec = feature.getProperty("name").toString();
167.
168.
                                     });
169.
                                     break;
170.
                                 case 5:
171.
                                     KmlLayer layer6 = new KmlLayer(mMap, R.raw.emubus5, getApplicat
    ionContext());
172.
                                     layer6.addLayerToMap();
173.
                                     break;
174.
175.
176.
                      catch (XmlPullParserException e) {
177.
                        e.printStackTrace();
178.
                      catch (IOException e) {
179.
                        e.printStackTrace();
180.
```

```
181.
                   LatLng emu = new LatLng(35.14328, 33.9102722);
182.
                   mMap.moveCamera(CameraUpdateFactory.newLatLngZoom(emu, 16));
                   mMap.setMinZoomPreference(14);
183.
184.
                   LatLng emua = new LatLng(35.0749442, 33.8914845); //SW
185.
                   LatLng emub = new LatLng(35.2309717, 33.9522488); //NE
186.
                   LatLngBounds emuc = new LatLngBounds(emua, emub);
187.
                   mMap.setLatLngBoundsForCameraTarget(emuc);
188.
189.
               Override protected void onActivityResult(int requestCode, int resultCode, Intent da
    ta) {
190.
                   super.onActivityResult(requestCode, resultCode, data);
191.
                   if (requestCode == resultCode) {
192.
                       MarkerOptions g = new MarkerOptions();
193.
                       g.position(new LatLng(data.getDoubleExtra("Lati", 33.9085024), data.getDoub
    leExtra("longt", 35.1460493)));
194.
                       g.title(data.getStringExtra("Title"));
195.
                       mMap.addMarker(g);
196.
                       mMap.moveCamera(CameraUpdateFactory.newLatLngZoom(g.getPosition(), 16));
197.
198.
199.
           }
```

Offline_Map_Activity.java

```
    package com.example.baltu.myapplication.Map;

import android.app.Activity;
import android.os.Bundle;

    import android.support.annotation.Nullable;

5. import android.support.v7.app.AppCompatActivity;
import com.example.baltu.myapplication.R;

    import com.github.chrisbanes.photoview.PhotoView;

8. /** * Created by Baltu on 2017-04-05. */
9. public class Offline Map Activity extends Activity {@
10.
        Override protected void onCreate(@Nullable Bundle savedInstanceState) {
11.
            super.onCreate(savedInstanceState);
12.
            setContentView(R.layout.offlinemap);
13.
            PhotoView gh = (PhotoView) findViewById(R.id.zoomablemap);
14.
            gh.setMaximumScale(6);
15.
            gh.setMediumScale((float) 3);
16.
17. }
18. Places_on_map.java package com.example.baltu.myapplication.Map;
19. /** * Created by Baltu on 2017-04-03. */
20. public class Places on map {
21.
        private String Place_Name;
22.
        private String Full_Name;
23.
        private String Image_Name;
24.
        public String getPlace_Name() {
25.
            return Place_Name;
26.
27.
        public String getFull_Name() {
28.
            return Full_Name;
29.
        public Places_on_map() {}
30.
31.
        public void setPlace_Name(String place_Name) {
32.
            Place Name = place Name;
33.
34.
        public void setFull_Name(String full_Name) {
35.
            Full_Name = full_Name;
36.
37.
        public String getImage_Name() {
38.
           return Image_Name;
```

```
39.
40.
        public void setImage_Name(String image_Name) {
41.
            Image_Name = image_Name;
42.
43.
        public Places_on_map(String place_Name, String full_Name, String image_Name) {
44.
            Place Name = place Name;
            Full Name = full Name;
45.
46.
            Image Name = image Name;
47.
48.}
```

Locations_on_Map_Details.java

```
    package com.example.baltu.myapplication.Map;

import android.app.Activity;
3. import android.app.Instrumentation;
4. import android.content.Intent;
import android.graphics.Bitmap;
import android.graphics.BitmapFactory;
7. import android.graphics.drawable.Drawable;
import android.os.AsyncTask;
9. import android.os.Bundle;
10. import android.support.annotation.Nullable;
11. import android.util.Log;
12. import android.view.Display;
13. import android.view.View;
14. import android.webkit.WebView;
15. import android.widget.ImageView;
16. import android.widget.TextView;
17. import android.widget.Toast;
18. import com.example.baltu.myapplication.R;
19. import java.io.IOException;
20. import java.io.InputStream;
21. /** * Created by Baltu on 2017-04-09. */
22. public class Locations on Map Details extends Activity {
23.
        String url;
24.
        private String name;
25.
        private Double longt;
        private Double Lati;
26.
27.
        private ImageView mv;@
28.
        Override protected void onCreate(@Nullable Bundle savedInstanceState) {
29.
            super.onCreate(savedInstanceState);
30.
            setContentView(R.layout.map_location);
31.
            Intent k = getIntent();
32.
            name = k.getStringExtra("Full Name");
33.
            url = k.getStringExtra("url");
34.
            if (url != null) {
35.
                AsyncTask sk = new DownloadImageTask(((ImageView) findViewById(R.id.Location_Image
    )));
                sk.execute(new String[] {
36.
                    url
37.
38.
                });
39.
            } else {
40.
                String ImageS = getIntent().getStringExtra("imagename");
41.
                if (ImageS != null) try {
                    InputStream imagei = getAssets().open("images/" + ImageS);
42.
43.
                    Drawable imagef = Drawable.createFromStream(imagei, null);
44.
                    ((ImageView) findViewById(R.id.Location_Image)).setImageDrawable(imagef);
45.
                } catch (IOException e) {
46.
                    e.printStackTrace();
47.
48.
            }((TextView) findViewById(R.id.Place_full_name)).setText(name);
```

```
49.
            ((TextView) findViewById(R.id.Place_Info)).setText(getIntent().getStringExtra("Info"))
            longt = k.getDoubleExtra("Longt", 33.9085024);
50.
51.
            Lati = k.getDoubleExtra("Lat", 35.1460493);
            findViewById(R.id.Cloase_Location).setOnClickListener(new View.OnClickListener() {@
52.
                Override public void onClick(View v) {
53.
54.
                    finish();
55.
                }
56.
            });
57.
            findViewById(R.id.Location Location).setOnClickListener(new View.OnClickListener() {@
58.
                Override public void onClick(View v) {
59.
                    Intent data = new Intent();
60.
                    data.putExtra("longt", longt);
61.
                    data.putExtra("Lati", Lati);
62.
                    data.putExtra("Title", name);
63.
                    setResult(5584, data);
64.
                    finish();
65.
66.
            });
67.
        private class DownloadImageTask extends AsyncTask < String, Void, Bitmap > {
68.
69.
            ImageView mMyImageView;
70.
            public DownloadImageTask(ImageView MyImageView) {
71.
                this.mMyImageView = MyImageView;
72.
73.
            protected Bitmap doInBackground(String...urls) {
74.
                String urldisplay = urls[0];
75.
                Bitmap mIcon11 = null;
76.
                try {
                    InputStream in = new java.net.URL(urldisplay).openStream();
77.
78.
                    mIcon11 = BitmapFactory.decodeStream( in );
79.
                } catch (Exception e) {
80.
                    Log.e("Error", e.getMessage());
81.
                    e.printStackTrace();
82.
83.
                return mIcon11;
84.
85.
            protected void onPostExecute(Bitmap result) {
86.
                mMyImageView.setImageBitmap(result);
87.
88.
89. }
                                           Buses Schedules.java
```

```
    package com.example.baltu.myapplication;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;

    import android.support.v7.widget.RecyclerView;

import android.view.GestureDetector;
import android.view.MotionEvent;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
10. import android.widget.Spinner;
11. import android.widget.TabHost;
12. import android.widget.ViewAnimator;
13. import com.example.baltu.myapplication.Data_Provider.Adapters.BusItemsAdapter;
14. import com.example.baltu.myapplication.DataTypes.Bus_Data;
15. import com.example.baltu.myapplication.Data_Provider.Adapters.BusItemsAdapterweekend;
16. import com.example.baltu.myapplication.Data_Provider.Local_DB_Main_Provider;
```

```
17. import com.github.jjobes.slidedatetimepicker.TimeFragment;
18. import java.util.List;
19. import java.util.Timer;
20. import java.util.TimerTask;
21. public class Buses_Schedules extends AppCompatActivity {
22.
        Local_DB_Main_Provider mSource;
23.
        List < Bus Data > allbuses;
24.
        List < Bus Data > allbuses2;@
25.
        Override protected void onCreate(Bundle savedInstanceState) {
            super.onCreate(savedInstanceState);
26.
27.
            setContentView(R.layout.activity bus sche);
28.
            mSource = new Local_DB_Main_Provider(this);
29.
            final Spinner lineNumber = (Spinner) findViewById(R.id.buses lines);
30.
            ArrayAdapter < CharSequence > items = ArrayAdapter.createFromResource(this, R.array.bu
    ses_lines, android.R.layout.simple_spinner_item);
31.
            items.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item);
32.
            lineNumber.setAdapter(items);
33.
            final TabHost th = (TabHost) findViewById(R.id.To_From_Tab);
34.
            th.setup();
            final TabHost.TabSpec spec1 = th.newTabSpec("To").setContent(R.id.tab1).setIndicator("
35.
    To");
36.
            th.addTab(spec1);
            TabHost.TabSpec spec2 = th.newTabSpec("From").setContent(R.id.tab2).setIndicator("From")
37.
    ");
38.
            th.addTab(spec2);
39.
            final ViewAnimator ani = (ViewAnimator) findViewById(R.id.viewanimator);
            final ViewAnimator anit = (ViewAnimator) findViewById(R.id.busestitle);
40.
41.
            View leftb = findViewById(R.id.leftArrow);
42.
            View rightb = findViewById(R.id.rightArrow);
            allbuses = mSource.GetAllBus(th.getCurrentTab(), 1);
43.
44.
            allbuses2 = mSource.GetAllBus(th.getCurrentTab(), 0);
45.
            Buseslistsetup(allbuses, allbuses2);
            lineNumber.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener() {@
46.
                Override public void onItemSelected(AdapterView <? > parent, View view, int positi
47.
    on, long id) {
48.
                    if (position == 0) {
49.
                        allbuses = mSource.GetAllBus((th.getCurrentTab() + 1) % 2, 1);
                        allbuses2 = mSource.GetAllBus((th.getCurrentTab() + 1) % 2, 0);
50.
51.
                        Buseslistsetup(allbuses, allbuses2);
52.
                    } else {
53.
                        allbuses = mSource.Get1lineBus(position, (th.getCurrentTab() + 1) % 2, 1);
54.
                        allbuses2 = mSource.Get1lineBus(position, (th.getCurrentTab() + 1) % 2, 0)
55.
                        Buseslistsetup(allbuses, allbuses2);
56.
                }@
57.
58.
                Override public void onNothingSelected(AdapterView <? > parent) {}
59.
            });
            th.setOnTabChangedListener(new TabHost.OnTabChangeListener() {@
60.
                Override public void onTabChanged(String tabId) {
61.
62.
                    if (lineNumber.getSelectedItemPosition() == 0) {
63.
                        allbuses = mSource.GetAllBus((th.getCurrentTab() + 1) % 2, 1);
64.
                        allbuses2 = mSource.GetAllBus((th.getCurrentTab() + 1) % 2, 0);
65.
                        Buseslistsetup(allbuses, allbuses2);
66.
                    } else {
                        allbuses = mSource.Get1lineBus(lineNumber.getSelectedItemPosition(), (th.g
67.
    etCurrentTab() + 1) % 2, 1);
68.
                        allbuses2 = mSource.Get1lineBus(lineNumber.getSelectedItemPosition(), (th.
    getCurrentTab() + 1) % 2, 0);
69.
                        Buseslistsetup(allbuses, allbuses2);
```

```
70.
71.
                }
72.
            });
73.
            leftb.setOnClickListener(new View.OnClickListener() {@
74.
                Override public void onClick(View v) {
75.
                    ani.showPrevious();
76.
                    anit.showPrevious();
77.
78.
            });
79.
            rightb.setOnClickListener(new View.OnClickListener() {@
80.
                Override public void onClick(View v) {
81.
                    ani.showNext();
82.
                    anit.showNext();
83.
                }
84.
            });
85.
        private void Buseslistsetup(List < Bus_Data > x, List < Bus_Data > y) {
86.
87.
            View v = findViewById(R.id.buscyc1);
88.
            View v2 = findViewById(R.id.buscyc2); //assert (v!=null);
89.
            RecyclerView crn = (RecyclerView) v;
90.
            RecyclerView crn2 = (RecyclerView) v2;
91.
            BusItemsAdapter cadpter = new BusItemsAdapter(x);
92.
            BusItemsAdapterweekend cadpter2 = new BusItemsAdapterweekend(y);
93.
            crn.setAdapter(cadpter);
94.
            crn2.setAdapter(cadpter2);
95.
96.}
```

News_Activity.java

```
    package com.example.baltu.myapplication.News;

import android.os.AsyncTask;
import android.support.v7.app.AppCompatActivity;

    import android.os.Bundle;

import android.support.v7.widget.RecyclerView;
import android.widget.TabHost;
7. import com.example.baltu.myapplication.DataTypes.News_Class;
8. import com.example.baltu.myapplication.R;
import org.xmlpull.v1.XmlPullParserException;
10. import java.io.IOException;
11. import java.io.InputStream;
12. import java.net.HttpURLConnection;
13. import java.net.URL;
14. import java.util.List;
15. public class News Activity extends AppCompatActivity {
        String urlString = "http://ww1.emu.edu.tr/rss/en/21";
16.
17.
        String EventsurlString = "http://ww1.emu.edu.tr/rss/en/33";
18.
        String AnnurlString = "http://ww1.emu.edu.tr/rss/en/32";
19.
        List < News_Class > news;
20.
        List < News_Class > Events;
        List < News_Class > Announcments;
21.
22.
        InputStream stream;
23.
        InputStream stream2;
24.
        InputStream stream3;@
25.
        Override protected void onCreate(Bundle savedInstanceState) {
26.
            super.onCreate(savedInstanceState);
27.
            setContentView(R.layout.activity news);
28.
            TabHost NTH = (TabHost) findViewById(R.id.news tab);
29.
            NTH.setup();
30.
            final TabHost.TabSpec spec1 = NTH.newTabSpec("News").setContent(R.id.tab1).setIndicato
    r("News");
            NTH.addTab(spec1);
31.
```

```
TabHost.TabSpec spec2 = NTH.newTabSpec("Events").setContent(R.id.tab2).setIndicator("E
   vents");
33.
           NTH.addTab(spec2);
34.
           TabHost.TabSpec spec3 = NTH.newTabSpec("Announ").setContent(R.id.tab3).setIndicator("A
   nnoun.");
35.
           NTH.addTab(spec3);
36.
           RSSFEED d = new RSSFEED();
37.
            d.execute(new String[] {
38.
                urlString, EventsurlString, AnnurlString
39.
            });
            if (news != null) {
40.
41.
                RecyclerView nr = (RecyclerView) findViewById(R.id.news_recycler);
42.
                NewsItemsAdapter NRA = new NewsItemsAdapter(this, news);
43.
                nr.setAdapter(NRA);
44.
45.
46.
        private class RSSFEED extends AsyncTask < String, Void, String > {@
           Override protected String doInBackground(String...urls) {
47.
48.
                try {
                    stream = downloadUrl(urls[0]);
49.
50.
                    news = NewsRssParser.parse(stream);
51.
                    stream2 = downloadUrl(urls[1]);
52.
                    Events = NewsRssParser.parse(stream2);
53.
                    stream3 = downloadUrl(urls[2]);
                    Announcments = NewsRssParser.parse(stream3);
54.
55.
                } catch (XmlPullParserException e) {
56.
                    e.printStackTrace();
57.
                } catch (IOException e) {
58.
                    e.printStackTrace();
59.
                if (stream != null) {
60.
61.
                    try {
                        stream.close();
62.
                    } catch (IOException e) {
63.
64.
                        e.printStackTrace();
65.
                    }
66.
                }
67.
                if (stream2 != null) {
68.
                    try {
69.
                        stream2.close();
                    } catch (IOException e) {
70.
71.
                        e.printStackTrace();
72.
73.
                if (stream3 != null) {
74.
75.
                    try {
                        stream3.close();
76.
77.
                    } catch (IOException e) {
78.
                        e.printStackTrace();
79.
                    }
80.
81.
                return "y";
82.
83.
            Override protected void onPostExecute(String s) {
84.
                super.onPostExecute(s);
85.
                if (news != null) {
86.
                    RecyclerView nr = (RecyclerView) findViewById(R.id.news recycler);
87.
                    NewsItemsAdapter NRA = new NewsItemsAdapter(News Activity.this, news);
88.
                    nr.setAdapter(NRA);
                    RecyclerView nr2 = (RecyclerView) findViewById(R.id.Events_recycler);
89.
90.
                    NewsItemsAdapter NRA2 = new NewsItemsAdapter(News_Activity.this, Events);
```

```
91.
                    nr2.setAdapter(NRA2);
92.
                    RecyclerView nr3 = (RecyclerView) findViewById(R.id.Anno_recycler);
93.
                    NewsItemsAdapter NRA3 = new NewsItemsAdapter(News_Activity.this, Announcments)
94.
                    nr3.setAdapter(NRA3);
95.
                }
96.
97.
98.
        private InputStream downloadUrl(String urlString) throws IOException {
99.
            URL url = new URL(urlString);
100.
                   HttpURLConnection conn = (HttpURLConnection) url.openConnection();
                   conn.setReadTimeout(10000 /* milliseconds */ );
101.
102.
                   conn.setConnectTimeout(15000 /* milliseconds */ );
103.
                   conn.setRequestMethod("GET");
104.
                   conn.setDoInput(true); // Starts the query
105.
                   conn.connect();
106.
                   return conn.getInputStream();
107.
108.
```

NewsRssParser.java

```
    package com.example.baltu.myapplication.News;

import android.util.Xml;
import com.example.baltu.myapplication.DataTypes.News_Class;

    import org.xmlpull.v1.XmlPullParser;

import org.xmlpull.v1.XmlPullParserException;
import java.io.IOException;
import java.io.InputStream;
import java.text.DateFormat;
import java.text.ParseException;
10. import java.text.SimpleDateFormat;
11. import java.util.ArrayList;
12. import java.util.Date;
13. import java.util.List;
14. /** * Created by Baltu on 2017-05-19. */
15. public class NewsRssParser {
        private static final String ns = null;
17.
        private static final String ns2 = null;
18.
        public static List parse(InputStream in ) throws XmlPullParserException, IOException {
19.
            try {
20.
                XmlPullParser parser = Xml.newPullParser();
                parser.setFeature(XmlPullParser.FEATURE_PROCESS_NAMESPACES, false);
21.
22.
                parser.setInput( in , null);
23.
                parser.nextTag();
24.
                return readRSS(parser);
25.
            } finally { in .close();
26.
27.
28.
        private static List readRSS(XmlPullParser parser) throws XmlPullParserException, IOExcepti
    on {
29.
            List entries = new ArrayList();
30.
            parser.require(XmlPullParser.START TAG, ns, "rss");
31.
            while (parser.next() != XmlPullParser.END TAG) {
32.
                if (parser.getEventType() != XmlPullParser.START TAG) {
33.
                    continue:
34.
35.
                String name = parser.getName();
36.
                if (name.equals("item")) {
37.
                    entries.add(readItem(parser));
38.
                } else if (name.equals("channel")) {
39.
                    continue;
```

```
40.
                } else {
41.
                    skip(parser);
42.
43.
44.
            return entries;
45.
46.
        private static News Class readItem(XmlPullParser parser) throws XmlPullParserException, IO
    Exception {
47.
            parser.require(XmlPullParser.START TAG, ns, "item");
48.
            String Title = null;
49.
            String Link = null;
50.
            String Description = null;
51.
            Date Date = null;
52.
            while (parser.next() != XmlPullParser.END TAG) {
53.
                if (parser.getEventType() != XmlPullParser.START_TAG) {
54.
                    continue:
55.
                }
56.
                String name = parser.getName();
57.
                if (name.equals("title")) {
                    Title = readTitle(parser);
58.
59.
                } else if (name.equals("link")) {
60.
                    Link = readLink(parser);
                } else if (name.equals("description")) {
61.
62.
                    Description = readDes(parser);
63.
                } else if (name.equals("pubDate")) {
64.
                    Date = readDate(parser);
65.
                } else {
66.
                    skip(parser);
67.
                }
68.
            return new News Class(Title, Link, Description, Date);
69.
70.
        private static String readTitle(XmlPullParser parser) throws IOException, XmlPullParserExc
71.
    eption {
72.
            parser.require(XmlPullParser.START TAG, ns, "title");
73.
            String title = readText(parser);
74.
            parser.require(XmlPullParser.END TAG, ns, "title");
75.
            return title;
76.
        private static String readLink(XmlPullParser parser) throws IOException, XmlPullParserExce
77.
    ption {
78.
            parser.require(XmlPullParser.START TAG, ns, "link");
79.
            String title = readText(parser);
80.
            parser.require(XmlPullParser.END TAG, ns, "link");
81.
            return title;
82.
        private static String readDes(XmlPullParser parser) throws IOException, XmlPullParserExcep
83.
    tion {
84.
            parser.require(XmlPullParser.START_TAG, ns, "description");
85.
            String title = readText(parser);
            parser.require(XmlPullParser.END TAG, ns, "description");
86.
87.
            return title;
88.
89.
        private static Date readDate(XmlPullParser parser) throws IOException, XmlPullParserExcept
    ion {
90.
            parser.require(XmlPullParser.START TAG, ns, "pubDate");
91.
            String title = readText(parser);
92.
            parser.require(XmlPullParser.END TAG, ns, "pubDate");
93.
            DateFormat df = new SimpleDateFormat("E, dd MMM yyyy hh:mm");
94.
            Date dt = new Date();
95.
            try {
```

```
96.
                dt = df.parse(title);
97.
            } catch (ParseException e) {
98.
                e.printStackTrace();
99.
            }
100.
                    return dt;
101.
102.
               private static String readText(XmlPullParser parser) throws IOException, XmlPullPar
    serException {
103.
                    String result = "";
104.
                    if (parser.next() == XmlPullParser.TEXT) {
105.
                        result = parser.getText();
106.
                        parser.nextTag();
107.
108.
                    return result;
109.
110.
               private static void skip(XmlPullParser parser) throws XmlPullParserException, IOExc
    eption {
111.
                    if (parser.getEventType() != XmlPullParser.START_TAG) {
112.
                        throw new IllegalStateException();
113.
114.
                    int depth = 1:
115.
                    while (depth != 0) {
116.
                        switch (parser.next()) {
117.
                            case XmlPullParser.END_TAG:
118.
                                depth--;
119.
                                break;
120.
                            case XmlPullParser.START_TAG:
121.
                                depth++;
122.
                                break;
123.
                        }
124.
                   }
125.
               }
126.
           NewsItemsAdapter.java package com.example.baltu.myapplication.News;
127.
128.
           import android.content.Context;
           import android.content.Intent;
129.
130.
           import android.support.v7.widget.RecyclerView;
131.
           import android.view.LayoutInflater;
132.
           import android.view.View;
133.
           import android.view.ViewGroup;
134.
           import android.widget.TextView;
135.
           import com.example.baltu.myapplication.DataTypes.News Class;
136.
           import com.example.baltu.myapplication.MyWebViwer;
137.
           import com.example.baltu.myapplication.R;
138.
           import java.text.DateFormat;
139.
           import java.text.SimpleDateFormat;
140.
           import java.util.Date;
141.
           import java.util.List;
142.
           public class NewsItemsAdapter extends RecyclerView.Adapter < NewsItemsAdapter.ViewHolde
    r > {
143.
                private List < News Class > mItems;
144.
               private Context mContext;
145.
146.
               public NewsItemsAdapter(Context context, List < News Class > items) {
147.
                    this.mContext = context;
148.
                    this.mItems = items;
149.
150.
               Override public NewsItemsAdapter.ViewHolder onCreateViewHolder(ViewGroup parent, in
   t viewType) {
151.
                    LayoutInflater inflater = LayoutInflater.from(mContext);
152.
                    View itemView = inflater.inflate(R.layout.news_layout, parent, false);
```

```
153.
                   ViewHolder viewHolder = new ViewHolder(itemView);
154.
                   return viewHolder;
155.
156.
               Override public void onBindViewHolder(final NewsItemsAdapter.ViewHolder holder, int
     position) {
157.
                   final News Class item = mItems.get(position);
158.
                   holder.Title.setText(item.getTitle());
159.
                   holder.TDescription.setText(item.getDescription());
160.
                   Date d = item.getDate();
161.
                   DateFormat dtd = new SimpleDateFormat("EEE dd MMM yyyy hh:mm");
162.
                   holder.DATE.setText(dtd.format(d));
163.
                   holder.mView.setOnClickListener(new View.OnClickListener() {@
164.
                        Override public void onClick(View v) {
165.
                            Intent newsintent = new Intent(holder.mView.getContext(), MyWebViwer.cl
    ass);
                            newsintent.putExtra("URL", item.getLink());
166.
167.
                            holder.mView.getContext().startActivity(newsintent);
168.
169.
                   });
170.
               }@
171.
               Override public int getItemCount() {
172.
                   return mItems.size();
173.
174.
               public static class ViewHolder extends RecyclerView.ViewHolder {
175.
                   public TextView Title;
176.
                   public TextView TDescription;
177.
                   public TextView DATE;
178.
                   public View mView;
179.
                   public ViewHolder(View itemView) {
180.
                        super(itemView);
                        Title = (TextView) itemView.findViewById(R.id.News Title);
181.
182.
                        TDescription = (TextView) itemView.findViewById(R.id.News Desc);
183.
                        DATE = (TextView) itemView.findViewById(R.id.News Date);
184.
                       mView = itemView;
185.
                   }
186.
187.
           }
```

InfoListActivity.java

```
    package com.example.baltu.myapplication.Information_Activity;

import android.content.Context;
import android.content.Intent;

    import android.os.Bundle;

5. import android.support.annotation.NonNull;
import android.support.v7.app.AppCompatActivity;

    import android.support.v7.widget.RecyclerView;

8. import android.support.v7.widget.Toolbar;
import android.view.LayoutInflater;
10. import android.view.View;
11. import android.view.ViewGroup;
12. import android.widget.TextView;
13. import com.example.baltu.myapplication.DataTypes.InfoContent;
14. import com.example.baltu.myapplication.Information Activity.InfoDetailActivity;
15. import com.example.baltu.myapplication.Information_Activity.InfoDetailFragment;
16. import com.example.baltu.myapplication.R;
17. import java.util.List;
18. /** * An activity representing a list of Items. This activity * has different presentations fo
   r handset and tablet-
   size devices. On * handsets, the activity presents a list of items, which when touched, * lead
    to a {@link InfoDetailActivity} representing * item details. On tablets, the activity present
   s the list of items and * item details side-by-side using two vertical panes. */
```

```
19. public class InfoListActivity extends AppCompatActivity {
20.
        /**
                * Whether or not the activity is in two-
    pane mode, i.e. running on a tablet
                                           * device.
21.
        private boolean mTwoPane;@
22.
        Override protected void onCreate(Bundle savedInstanceState) {
23.
            super.onCreate(savedInstanceState);
24.
            setContentView(R.layout.activity_info_list);
25.
            Toolbar toolbar = (Toolbar) findViewById(R.id.toolbar);
26.
            setSupportActionBar(toolbar);
27.
            toolbar.setTitle(getTitle());
28.
            View recyclerView = findViewById(R.id.info list);
29.
            assert recyclerView != null;
            setupRecyclerView((RecyclerView) recyclerView);
30.
31.
            if (findViewById(R.id.info_detail_container) != null) { // The detail container view w
    ill be present only in the // large-screen layouts (res/values-
    w900dp). // If this view is present, then the // activity should be in two-pane mode.
32.
                mTwoPane = true;
33.
            }
34.
35.
        private void setupRecyclerView(@NonNull RecyclerView recyclerView) {
36.
            recyclerView.setAdapter(new SimpleItemRecyclerViewAdapter(InfoContent.ITEMS));
37.
        public class SimpleItemRecyclerViewAdapter extends RecyclerView.Adapter < SimpleItemRecycl</pre>
38.
    erViewAdapter.ViewHolder > {
            private final List < InfoContent.InfoItem > mValues;
39.
40.
            public SimpleItemRecyclerViewAdapter(List < InfoContent.InfoItem > items) {
41.
                mValues = items;
42.
            }@
43.
            Override public ViewHolder onCreateViewHolder(ViewGroup parent, int viewType) {
                View view = LayoutInflater.from(parent.getContext()).inflate(R.layout.info list co
44
    ntent, parent, false);
45.
                return new ViewHolder(view);
46.
47.
            Override public void onBindViewHolder(final ViewHolder holder, int position) {
48.
                holder.mItem = mValues.get(position); //holder.mIdView.setText(mValues.get(positio
    n).id);
49.
                holder.mContentView.setText(mValues.get(position).content);
                holder.mView.setOnClickListener(new View.OnClickListener() {@
50.
51.
                    Override public void onClick(View v) {
52.
                        if (mTwoPane) {
53.
                            Bundle arguments = new Bundle();
54.
                            arguments.putString(InfoDetailFragment.ARG ITEM ID, holder.mItem.id);
55.
                            InfoDetailFragment fragment = new InfoDetailFragment();
                            fragment.setArguments(arguments);
56.
                            getSupportFragmentManager().beginTransaction().replace(R.id.info detai
57.
    1 container, fragment).commit();
58.
                        } else {
                            Context context = v.getContext();
59.
60.
                            Intent intent = new Intent(context, InfoDetailActivity.class);
                            intent.putExtra(InfoDetailFragment.ARG ITEM ID, holder.mItem.id);
61.
62.
                            context.startActivity(intent);
63.
                        }
64.
                    }
65.
                });
66.
            }@
67.
            Override public int getItemCount() {
68.
                return mValues.size();
69.
70.
            public class ViewHolder extends RecyclerView.ViewHolder {
71.
                public final View mView; //public final TextView mIdView;
```

```
72.
                public final TextView mContentView;
73.
                public InfoContent.InfoItem mItem;
74.
                public ViewHolder(View view) {
75.
                    super(view);
76.
                    mView = view; //mIdView = (TextView) view.findViewById(R.id.id);
77.
                    mContentView = (TextView) view.findViewById(R.id.content);
78.
                Override public String toString() {
79.
                    return super.toString() + " '" + mContentView.getText() + "'";
80.
81.
                }
82.
83.
84. }
```

InfoDetailActivity.java

```
    package com.example.baltu.myapplication.Information Activity;

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

    import android.support.design.widget.FloatingActionButton;

import android.support.design.widget.Snackbar;
import android.support.v7.widget.Toolbar;
import android.view.View;
import android.support.v7.app.AppCompatActivity;
import android.support.v7.app.ActionBar;
10. import android.view.MenuItem;
11. import com.example.baltu.myapplication.R;
12. /** * An activity representing a single Info detail screen. This * activity is only used narro
   w width devices. On tablet-size devices, * item details are presented side-by-
   side with a list of items * in a {@link InfoListActivity}. */
13. public class InfoDetailActivity extends AppCompatActivity {@
       Override protected void onCreate(Bundle savedInstanceState) {
15.
            super.onCreate(savedInstanceState);
            setContentView(R.layout.activity_info_detail);
16.
17.
            Toolbar toolbar = (Toolbar) findViewById(R.id.detail_toolbar);
18.
            setSupportActionBar(toolbar);
19.
            FloatingActionButton fab = (FloatingActionButton) findViewById(R.id.fab);
           fab.setOnClickListener(new View.OnClickListener() {@
20.
21.
                Override public void onClick(View view) {
22.
                    Snackbar.make(view, "Replace with your own detail action", Snackbar.LENGTH_LON
   G).setAction("Action", null).show();
23.
24.
            }); // Show the Up button in the action bar.
25.
            ActionBar actionBar = getSupportActionBar();
26.
           if (actionBar != null) {
                actionBar.setDisplayHomeAsUpEnabled(true);
27.
28.
            } // savedInstanceState is non-
   null when there is fragment state // saved from previous configurations of this activity // (e
    .g. when rotating the screen from portrait to landscape). // In this case, the fragment will a
   utomatically be re-
   added // to its container so we don't need to manually add it. // For more information, see th
   e Fragments API guide at: // // http://developer.android.com/guide/components/fragments.html /
29.
            if (savedInstanceState == null) { // Create the detail fragment and add it to the acti
   vity // using a fragment transaction.
                Bundle arguments = new Bundle();
30.
                arguments.putString(InfoDetailFragment.ARG ITEM ID, getIntent().getStringExtra(Inf
31.
   oDetailFragment.ARG ITEM ID));
                InfoDetailFragment fragment = new InfoDetailFragment();
32.
33.
                fragment.setArguments(arguments);
                getSupportFragmentManager().beginTransaction().add(R.id.info_detail_container, fra
34.
   gment).commit();
```

```
35.
36.
        }@
        Override public boolean onOptionsItemSelected(MenuItem item) {
37.
38.
            int id = item.getItemId();
39.
            if (id == android.R.id.home) { // This ID represents the Home or Up button. In the cas
    e of this // activity, the Up button is shown. For // more details, see the Navigation pattern
    on Android Design: // // http://developer.android.com/design/patterns/navigation.html#up-vs-
    back //
40.
                navigateUpTo(new Intent(this, InfoListActivity.class));
41.
                return true:
42.
43.
            return super.onOptionsItemSelected(item);
44.
45.}
```

InfoDetailFragment.java

```
    package com.example.baltu.myapplication.Information Activity;

import android.app.Activity;
import android.support.design.widget.CollapsingToolbarLayout;

    import android.os.Bundle;

5. import android.support.v4.app.Fragment;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.TextView;
10. import com.example.baltu.myapplication.DataTypes.InfoContent;
11. import com.example.baltu.myapplication.R;
12. /** * A fragment representing a single Info detail screen. * This fragment is either contained
    in a {@link InfoListActivity} * in two-
    pane mode (on tablets) or a {@link InfoDetailActivity} * on handsets. */
13. public class InfoDetailFragment extends Fragment {
       /**
14.
               * The fragment argument representing the item ID that this fragment
        public static final String ARG ITEM ID = "item id";
15.
               * The dummy content this fragment is presenting.
16.
17.
        private InfoContent.InfoItem mItem;
       /**
18.
               * Mandatory empty constructor for the fragment manager to instantiate the
   agment (e.g. upon screen orientation changes). */
19.
        public InfoDetailFragment() {}@
        Override public void onCreate(Bundle savedInstanceState) {
20.
21.
            super.onCreate(savedInstanceState);
22.
            if (getArguments().containsKey(ARG_ITEM_ID)) { // Load the dummy content specified by
   the fragment // arguments. In a real-
   world scenario, use a Loader // to load content from a content provider.
23.
                mItem = InfoContent.ITEM_MAP.get(getArguments().getString(ARG_ITEM_ID));
24.
                Activity activity = this.getActivity();
                CollapsingToolbarLayout appBarLayout = (CollapsingToolbarLayout) activity.findView
25.
   ById(R.id.toolbar_layout);
                if (appBarLayout != null) {
26.
27.
                    appBarLayout.setTitle(mItem.content);
28.
29.
30.
        }@
        Override public View onCreateView(LayoutInflater inflater, ViewGroup container, Bundle sav
31.
    edInstanceState) {
32.
           View rootView = inflater.inflate(R.layout.info detail, container, false); // Show the
   dummy content as text in a TextView.
            if (mItem != null) {
33.
                ((TextView) rootView.findViewById(R.id.info_detail)).setText(mItem.details);
34.
35.
36.
           return rootView;
```

```
37. }
38. }
GPA_Calculator.java
```

```
    package com.example.baltu.myapplication;

import android.support.v7.app.AppCompatActivity;
3. import android.os.Bundle;
4. import android.view.View;
import android.widget.ArrayAdapter;
import android.widget.Spinner;
7. import android.widget.TextView;
8. import android.widget.Toast;
9. import java.text.DecimalFormat;
10. import java.util.ArrayList;
11. import java.util.List;
12. public class GPA_Calculator extends AppCompatActivity {
13.
        private Spinner s11;
14.
        TextView result;
15.
        private Spinner s12;
16.
        private Spinner s13;
17.
        private Spinner s14;
18.
        private Spinner s15;
19.
        private Spinner s16;
20.
        private Spinner s17;
21.
        private Spinner s21;
22.
        private Spinner s22;
23.
        private Spinner s23;
        private Spinner s24;
24.
25.
        private Spinner s25;
26.
        private Spinner s26;
27.
        private Spinner s27;
        List < grades > allgrades = new ArrayList < > ();
28.
29.
        TextView semsterc;
30.
        TextView semstergpa;
31.
        TextView totalc;
32.
       TextView cgpatext;
33.
        TextView newCGPA;@
        Override protected void onCreate(Bundle savedInstanceState) {
34.
35.
            super.onCreate(savedInstanceState);
36.
            setContentView(R.layout.activity_gpa__calculator);
37.
            s11 = (Spinner) findViewById(R.id.spinner111);
38.
            s12 = (Spinner) findViewById(R.id.spinner12);
39.
            s13 = (Spinner) findViewById(R.id.spinner13);
40.
            s14 = (Spinner) findViewById(R.id.spinner14);
41.
            s15 = (Spinner) findViewById(R.id.spinner15);
42.
            s16 = (Spinner) findViewById(R.id.spinner16);
43.
            s17 = (Spinner) findViewById(R.id.spinner17);
44.
            s21 = (Spinner) findViewById(R.id.spinner21);
45.
            s22 = (Spinner) findViewById(R.id.spinner22);
46.
            s23 = (Spinner) findViewById(R.id.spinner23);
47.
            s24 = (Spinner) findViewById(R.id.spinner24);
48.
            s25 = (Spinner) findViewById(R.id.spinner25);
49.
            s26 = (Spinner) findViewById(R.id.spinner26);
50.
            s27 = (Spinner) findViewById(R.id.spinner27);
            result = (TextView) findViewById(R.id.GPAResult);
51.
52.
            semsterc = (TextView) findViewById(R.id.semesterCredits);
53.
            semstergpa = (TextView) findViewById(R.id.yourGPA);
54.
            totalc = (TextView) findViewById(R.id.TotalOldCredits);
55.
            cgpatext = (TextView) findViewById(R.id.yourCGPA);
            newCGPA = (TextView) findViewById(R.id.new_CGPA);
56.
57.
            setall1spinners();
```

```
58.
            setall2spinners();
59.
            View caculate = findViewById(R.id.calculat_bt);
            caculate.setOnClickListener(new View.OnClickListener() {@
60.
61.
                Override public void onClick(View v) {
62.
                    allgrades.clear();
63.
                    int allmycredits = 0;
64.
                    double allmygrades = 0;
65.
                    double gpa = 0;
                    if (s11.getSelectedItemPosition() != 0 && s21.getSelectedItemPosition() != 0)
66.
   addgrade(s11.getSelectedItemPosition(), s21.getSelectedItemPosition());
67.
                    if (s12.getSelectedItemPosition() != 0 && s22.getSelectedItemPosition() != 0)
    addgrade(s12.getSelectedItemPosition(), s22.getSelectedItemPosition());
                    if (s13.getSelectedItemPosition() != 0 && s23.getSelectedItemPosition() != 0)
68.
    addgrade(s13.getSelectedItemPosition(), s23.getSelectedItemPosition());
69.
                    if (s14.getSelectedItemPosition() != 0 && s24.getSelectedItemPosition() != 0)
    addgrade(s14.getSelectedItemPosition(), s24.getSelectedItemPosition());
70.
                    if (s15.getSelectedItemPosition() != 0 && s25.getSelectedItemPosition() != 0)
    addgrade(s15.getSelectedItemPosition(), s25.getSelectedItemPosition());
71.
                    if (s16.getSelectedItemPosition() != 0 && s26.getSelectedItemPosition() != 0)
    addgrade(s16.getSelectedItemPosition(), s26.getSelectedItemPosition());
72.
                    if (s17.getSelectedItemPosition() != 0 && s27.getSelectedItemPosition() != 0)
   addgrade(s17.getSelectedItemPosition(), s27.getSelectedItemPosition());
73.
                    if (allgrades.size() != 0) {
74.
                        for (grades item: allgrades) {
75.
                            allmycredits += item.getCredit();
                            allmygrades += ((item.getGrade() / 4.0) * (double) item.getCredit());
76.
77.
78.
                        gpa = (allmygrades / (double) allmycredits) * 4.0;
                        DecimalFormat df = new DecimalFormat("0.00");
79.
                        result.setText(df.format(gpa));
80.
81.
                        semstergpa.setText(df.format(gpa));
                        semsterc.setText(Integer.toString(allmycredits));
82.
                    } else Toast.makeText(GPA Calculator.this, "Error", Toast.LENGTH SHORT).show()
83.
84.
85.
            });
            View caculatecgpa = findViewById(R.id.CalculateCGPA);
86.
            caculatecgpa.setOnClickListener(new View.OnClickListener() {@
87.
88.
                Override public void onClick(View v) {
89.
                    if (!semstergpa.getText().toString().equals("") && !semsterc.getText().toStrin
   g().equals("") && !totalc.getText().toString().equals("") && !cgpatext.getText().toString().eq
    uals("")) {
90.
                        int sc = Integer.parseInt(semsterc.getText().toString());
91.
                        double sgpa = Double.parseDouble(semstergpa.getText().toString());
92.
                        int tc = Integer.parseInt(totalc.getText().toString());
93.
                        double cgpa = Double.parseDouble(cgpatext.getText().toString());
94.
                        if (sgpa > 4 || cgpa > 4) {
                            Toast.makeText(GPA Calculator.this, "Gpa and CGPA should be less than
95.
      , Toast.LENGTH LONG).show();
96.
                            return;
97.
98.
                        if (sc == 0) {
99.
                            Toast.makeText(GPA Calculator.this, "semester credits can't be 0", Toa
    st.LENGTH LONG).show();
100.
                                    return;
101.
102.
                                   (sc > 30) {
                                    Toast.makeText(GPA Calculator.this, "semester credits are too 1
   arge", Toast.LENGTH_LONG).show();
104.
                                    return;
```

```
105.
                                 double ncgpa = ((((sgpa / 4.0) * (double) sc) + ((cgpa / 4.0) * (do
106.
    uble) tc)) / (sc + tc)) * 4;
107.
                                 DecimalFormat df = new DecimalFormat("0.00");
108.
                                 newCGPA.setText(df.format(ncgpa));
109.
                            } else {
110.
                                 Toast.makeText(GPA_Calculator.this, "Enter All Required Details", T
    oast.LENGTH_SHORT).show();
111.
112.
                        }
113.
                    });
114.
                }
115.
                private void addgrade(int x, int y) {
116.
                    double mygrade = 0;
117.
                    switch (y) {
118.
                        case 1:
119.
                            mygrade = 4;
120.
                            break;
121.
                        case 2:
122.
                            mygrade = 3.7;
123.
                            break;
124.
                        case 3:
125.
                            mygrade = 3.3;
126.
                            break;
127.
                        case 4:
128.
                            mygrade = 3;
129.
                            break;
130.
                        case 5:
131.
                            mygrade = 2.7;
132.
                            break:
133.
                        case 6:
134.
                            mygrade = 2.3;
135.
                            break:
136.
                        case 7:
137.
                            mygrade = 2;
138.
                            break;
139.
140.
                            mygrade = 1.7;
141.
                            break;
142.
143.
                            mygrade = 1.3;
144.
                            break;
145.
146.
                            mygrade = 1;
147.
                            break;
148.
                        case 11:
149.
                            mygrade = 0.7;
150.
                            break;
151.
                        case 12:
                            mygrade = 0;
152.
153.
154.
155.
                    allgrades.add(new grades(x, mygrade));
156.
157.
                private void setall1spinners() {
158.
                    ArrayAdapter < CharSequence > items = ArrayAdapter.createFromResource(this, R.a
    rray.Credits, android.R.layout.simple spinner item);
159.
                    items.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item);
160.
                    s11.setAdapter(items);
161.
                    s12.setAdapter(items);
162.
                    s13.setAdapter(items);
```

```
163.
                    s14.setAdapter(items);
164.
                    s15.setAdapter(items);
                    s16.setAdapter(items);
165.
166.
                    s17.setAdapter(items);
167.
               private void setall2spinners() {
168.
169.
                    ArrayAdapter < CharSequence > items = ArrayAdapter.createFromResource(this, R.a
    rray.Grades, android.R.layout.simple_spinner_item);
170.
                    items.setDropDownViewResource(android.R.layout.simple spinner dropdown item);
171.
                    s21.setAdapter(items);
172.
                    s22.setAdapter(items);
173.
                    s23.setAdapter(items);
174.
                    s24.setAdapter(items);
175.
                    s25.setAdapter(items);
176.
                    s26.setAdapter(items);
177.
                    s27.setAdapter(items);
178.
               private class grades {
179.
180.
                    private int credit;
181.
                    private double grade;
182.
                    public grades(int credit, double grade) {
183.
                        this.credit = credit;
184.
                        this.grade = grade;
185.
186.
                    public int getCredit() {
187.
                        return credit;
188.
189.
                    public void setCredit(int credit) {
190.
                        this.credit = credit;
191.
                    }
192.
                    public double getGrade() {
193.
                        return grade;
194.
                    public void setGrade(double grade) {
195.
196.
                        this.grade = grade;
197.
                    }
198.
199.
           }
```

Settings_activity.java

```
    package com.example.baltu.myapplication.Settings;

import android.app.Activity;
import android.content.Context;

    import android.content.Intent;

5. import android.net.ConnectivityManager;
import android.net.NetworkInfo;
import android.os.Bundle;
import android.view.View;
import android.widget.Toast;
10. import com.example.baltu.myapplication.R;
11. import com.example.baltu.myapplication.Updater.Main Updator2;
12. public class Settings_activity extends Activity {@
        Override protected void onCreate(Bundle savedInstanceState) {
13.
14.
            super.onCreate(savedInstanceState);
15.
            setContentView(R.layout.settings);
           findViewById(R.id.button4).setOnClickListener(new View.OnClickListener() {@
16.
17.
               Override public void onClick(View v) {
18.
                   if (isNetworkAvailable()) {
19.
                        new Main_Updator2(Settings_activity.this);
                    } else Toast.makeText(Settings_activity.this, "Connect To the Internet", Toast
20.
    .LENGTH_SHORT).show();
```

```
21.
22.
           });
23.
24.
        public void pass(View view) {
25.
            Intent calenderintents2 = new Intent(Settings_activity.this, Password_Settings.class);
26.
            startActivity(calenderintents2);
27.
28.
        private boolean isNetworkAvailable() {
29.
            ConnectivityManager connectivityManager = (ConnectivityManager) getSystemService(Conte
    xt.CONNECTIVITY_SERVICE);
30.
            NetworkInfo activeNetworkInfo = connectivityManager.getActiveNetworkInfo();
            return activeNetworkInfo != null && activeNetworkInfo.isConnected();
31.
32.
33. }
```

Password_Settings.java

```
    package com.example.baltu.myapplication.Settings;

import android.app.Activity;
import android.app.AlertDialog;
4. import android.content.DialogInterface;
5. import android.content.SharedPreferences;
import android.os.Bundle;
7. import android.support.v7.widget.SwitchCompat;
import android.text.InputType;
import android.util.Log;
10. import android.widget.CompoundButton;
11. import android.widget.EditText;
12. import com.example.baltu.myapplication.R;
13. import com.scottyab.aescrypt.AESCrypt;
14. public class Password Settings extends Activity {
15.
        private String m Text = "";@
        Override protected void onCreate(Bundle savedInstanceState) {
16.
17.
            super.onCreate(savedInstanceState);
18.
            setContentView(R.layout.activity_password__settings);
19.
            SharedPreferences prefs = getSharedPreferences(getString(R.string.preference_file_key)
    , MODE_PRIVATE);
20.
            boolean key = prefs.getBoolean("pass_on", false);
21.
            final SwitchCompat witch = (SwitchCompat) findViewById(R.id.switchpass);
22.
            witch.setChecked(key);
            witch.setOnCheckedChangeListener(new SwitchCompat.OnCheckedChangeListener() {@
23.
24.
                Override public void onCheckedChanged(CompoundButton switchCompat, boolean isCheck
    ed) {
                    SharedPreferences prefs = getSharedPreferences(getString(R.string.preference f
25.
    ile_key), MODE_PRIVATE);
                    boolean key = prefs.getBoolean("pass_on", false);
26.
27.
                    final SharedPreferences.Editor prefsE = prefs.edit();
28.
                    if (!isChecked) {
29.
                        prefsE.putBoolean("pass_on", false);
30.
                        prefsE.commit();
                        prefsE.putString("Password_String", "");
31.
32.
                        Log.d("Pass_On", "null");
33.
                        AlertDialog.Builder builder = new AlertDialog.Builder(Password Settings.th
34.
    is);
                        builder.setTitle("Enter New Password"); // Set up the input
35.
                        final EditText input = new EditText(Password Settings.this); // Specify th
36.
    e type of input expected; this, for example, sets the input as a password, and will mask the t
                        input.setInputType(InputType.TYPE_CLASS_NUMBER | InputType.TYPE_NUMBER_VAR
37.
    IATION_PASSWORD);
```

```
38.
                         builder.setView(input); // Set up the buttons
                         builder.setPositiveButton("OK", new DialogInterface.OnClickListener() {@
39.
40.
                             Override public void onClick(DialogInterface dialog, int which) {
41.
                                 m Text = input.getText().toString();
42.
                                 if (m_Text.isEmpty()) {
43.
                                     witch.setChecked(false);
44.
                                     return:
45.
                                 } else {
46.
                                     try {
47.
                                         prefsE.putBoolean("pass on", true);
48.
                                         prefsE.putString("Password_String", AESCrypt.encrypt("CanT
    heWorldUnderstand?", "TuNiSbYnIgHt" + m Text));
49.
                                          prefsE.commit();
50.
                                     } catch (Exception e) {
51.
                                          e.printStackTrace();
52.
53.
                                 }
54.
                             }
55.
                         });
                         builder.setNegativeButton("Cancel", new DialogInterface.OnClickListener()
56.
    {@
57.
                             Override public void onClick(DialogInterface dialog, int which) {
58.
                                 dialog.cancel();
59.
                                 witch.setChecked(false);
60.
61.
                         });
62.
                         builder.show(); //while(m_Text == "***"){}
63.
                    }
64.
                }
65.
            });
66.
67. }
                                               Bus_Data.java
```

```
    package com.example.baltu.myapplication.DataTypes;

import android.content.ContentValues;
3. import com.example.baltu.myapplication.DB Constructor.Local DB.Buss Table;
4. import com.example.baltu.myapplication.DB_Constructor.User_DB.TasksTable;
5. import java.util.UUID;
6. /** * Created by Baltu on 2017-04-24. */
7. public class Bus Data {@
8.
        com.google.gson.annotations.SerializedName("id") private String ID;
9.
        private Integer Line Number;
10.
        private Integer Weekday;
11.
        private Integer To_from;@
12.
        com.google.gson.annotations.SerializedName("time") private String Time;
13.
        public Bus_Data(String ID, Integer line_Number, Integer weekday, Integer to_from, String t
    ime) {
14.
            if (ID == null) ID = UUID.randomUUID().toString();
15.
            this.ID = ID;
16.
            Line Number = line Number;
17.
            Weekday = weekday;
18.
            To from = to from;
19.
            Time = time;
20.
21.
        public Bus Data() {
            if (ID == null) ID = UUID.randomUUID().toString();
22.
23.
24.
        public void setTime(String time) {
25.
            Time = time;
26.
```

```
27.
        public String getID() {
28.
            return ID;
29.
30.
        public void setID(String ID) {
31.
            this.ID = ID;
32.
33.
        public Integer getLine_Number() {
34.
            return Line Number;
35.
36.
        public void setLine_Number(Integer line_Number) {
37.
            Line Number = line Number;
38.
39.
        public Integer getWeekday() {
40.
            return Weekday;
41.
        public void setWeekday(Integer weekday) {
42.
43.
            Weekday = weekday;
44.
45.
        public Integer getTo_from() {
            return To_from;
46.
47.
        public void setTo_from(Integer to_from) {
48.
            To_from = to_from;
49.
50.
        public String getTime() {
51.
52.
            return Time;
53.
        public ContentValues toValues() {
54.
55.
            ContentValues values = new ContentValues(5);
            values.put(Buss Table.COLUMN ID, ID);
56.
            values.put(Buss Table.COLUMN LINE NUMBER, Line Number);
57.
58.
            values.put(Buss Table.COLUMN WEEKDAY, Weekday);
            values.put(Buss Table.COLUMN TO FROM, To from);
59.
            values.put(Buss Table.COLUMN TIME, Time);
60.
            return values;
61.
62.
63.}
```

Calender_Data.java

```
    package com.example.baltu.myapplication.DataTypes;

2. import android.content.ContentValues;
3. import com.example.baltu.myapplication.DB_Constructor.Local_DB.Calender_Table;
4. import java.util.Calendar;
5. import java.util.Date;
6. /** * Created by Baltu on 2017-04-24. */
7. public class Calender_Data {
8.
        private String ID;
9.
        private String Event_Name;
        private Long StartDate;
10.
        private Long EndDate;
11.
        public Calender Data() {}
12.
13.
        public Calender_Data(String ID, String event_Name, Long startDate, Long endDate) {
14.
            this.ID = ID;
15.
            Event_Name = event_Name;
           StartDate = startDate;
16.
            EndDate = endDate;
17.
18.
19.
        public String getID() {
20.
           return ID;
```

```
21.
22.
        public void setID(String ID) {
23.
            this.ID = ID;
24.
25.
        public String getEvent_Name() {
26.
            return Event Name;
27.
28.
        public void setEvent_Name(String event_Name) {
29.
            Event Name = event Name;
30.
31.
        public Long getStartDate() {
32.
            return StartDate;
33.
        public void setStartDate(Long startDate) {
34.
35.
            StartDate = startDate;
36.
37.
        public Long getEndDate() {
38.
            return EndDate;
39.
        public void setEndDate(Long endDate) {
40.
41.
            EndDate = endDate:
42.
        public ContentValues toValues() {
43.
            ContentValues values = new ContentValues(4);
44.
45.
            values.put(Calender_Table.COLUMN_ID, ID);
46.
            values.put(Calender_Table.COLUMN_Event_Name, Event_Name);
47.
            values.put(Calender_Table.COLUMN_SDATE, StartDate);
48.
            values.put(Calender_Table.COLUMN_EDATE, EndDate);
49.
            return values;
50.
51.}
                                              Exam_class.java

    package com.example.baltu.myapplication.DataTypes;
```

```
2. import android.content.ContentValues;
import com.example.baltu.myapplication.DB_Constructor.User_DB.ExamsTable;
4. import java.util.UUID;
5. /** * Created by Baltu on 2017-04-24. */
6. public class Exam_class {
7.
       private String ID;
       private String Course;
8.
9.
       private String discription;
10.
       private long Exam_Date;
11.
       private String Notes;
12.
       public String getID() {
13.
           return ID;
14.
15.
       public void setID(String ID) {
16.
           this.ID = ID;
17.
18.
       public String getCourse() {
19.
           return Course;
20.
       public void setCourse(String course) {
21.
22.
           Course = course;
23.
24.
       public String getDiscription() {
25.
           return discription;
26.
27.
       public void setDiscription(String discription) {
28.
           this.discription = discription;
```

```
29.
30.
        public long getExam_Date() {
31.
            return Exam_Date;
32.
33.
        public void setExam_Date(long deadline_Date) {
34.
            Exam Date = deadline Date;
35.
36.
        public String getNotes() {
37.
            return Notes;
38.
        public void setNotes(String notes) {
39.
40.
            Notes = notes;
41.
        public Exam_class(String ID, String course, String discription, long deadline_Date, String
42.
     notes) {
43.
            if (ID == null) {
44.
                ID = UUID.randomUUID().toString();
45.
46.
            this.ID = ID;
47.
            Course = course:
48.
            this.discription = discription;
49.
            Exam Date = deadline Date;
50.
            Notes = notes;
51.
52.
        public Exam class() {
53.
            ID = UUID.randomUUID().toString();
54.
        public ContentValues toValues() {
55.
56.
            ContentValues values = new ContentValues(5);
            values.put(ExamsTable.COLUMN ID, ID);
57.
            values.put(ExamsTable.COLUMN CourseNAME, Course);
58.
59.
            values.put(ExamsTable.COLUMN Discription, discription);
            values.put(ExamsTable.COLUMN EXAMDATE, Exam Date);
60.
            values.put(ExamsTable.COLUMN NOTES, Notes);
61.
62.
            return values;
63.
64.}
```

InfoContent.java

```
    package com.example.baltu.myapplication.DataTypes;

import java.util.ArrayList;
import java.util.HashMap;
4. import java.util.List;
5. import java.util.Map;
6. /** * Helper class for providing sample content for user interfaces created by * Android templ
   ate wizards. *  * TODO: Replace all uses of this class before publishing your app. */
   public class InfoContent {
7.
               * An array of sample (dummy) items. */
8.
        public static final List < InfoItem > ITEMS = new ArrayList < InfoItem > ();
9.
10.
               * A map of sample (dummy) items, by ID. */
        public static final Map < String, InfoItem > ITEM_MAP = new HashMap < String, InfoItem > (
11.
   );
12.
        private static final int COUNT = 15;
13.
        static { // Add some sample items.
14.
            for (int i = 1; i <= COUNT; i++) {</pre>
15.
                addItem(createDummyItem(i));
16.
17.
18.
        private static void addItem(InfoItem item) {
19.
            ITEMS.add(item);
20.
           ITEM_MAP.put(item.id, item);
```

```
21.
22.
        private static InfoItem createDummyItem(int position) {
23.
            return new InfoItem(String.valueOf(position), "Info For Students No" + position, makeD
    etails(position));
24.
       }
        private static String makeDetails(int position) {
25.
                StringBuilder builder = new StringBuilder();
26.
27.
                builder.append("Details about Item: ").append(position);
                builder.append("\nTimeTables or Phone Number here");
28.
29.
                return builder.toString();
30.
            /**
31.
                    * A dummy item representing a piece of content.
        public static class InfoItem {
32.
33.
            public final String id;
34.
            public final String content;
35.
            public final String details;
36.
            public InfoItem(String id, String content, String details) {
37.
                this.id = id:
38.
                this.content = content;
39.
                this.details = details:
40.
            }@
            Override public String toString() {
41.
42.
                return content;
43.
            }
44.
45.}
```

Information.java

```
    package com.example.baltu.myapplication.DataTypes;

2. /** * Created by Baltu on 2017-05-20. */
3. public class Information {
4.
        String ID;
5.
        String Title;
        String Content;
6.
7.
        String Image;
        public Information(String ID, String title, String content, String image) {
8.
            this.ID = ID;
9.
10.
            Title = title;
11.
            Content = content;
12.
            Image = image;
13.
14.
        public String getID() {
15.
            return ID;
16.
17.
        public void setID(String ID) {
18.
            this.ID = ID;
19.
20.
        public String getTitle() {
21.
            return Title;
22.
23.
        public void setTitle(String title) {
24.
            Title = title;
25.
26.
        public String getContent() {
27.
            return Content;
28.
29.
        public void setContent(String content) {
30.
            Content = content;
31.
32.
        public String getImage() {
33.
            return Image;
```

```
34.  }
35.  public void setImage(String image) {
36.    Image = image;
37.  }
38. }
```

News_Class.java

```
    package com.example.baltu.myapplication.DataTypes;

2. import java.util.Date;
3. /** * Created by Baltu on 2017-04-24. */
4. public class News Class {
5.
        private String Title;
        private String Link;
6.
7.
        private String Description;
8.
        private Date mDate;
        public News_Class(String title, String link, String description, java.util.Date date) {
9.
10.
            Title = title;
11.
            Link = link;
12.
            Description = description;
13.
            mDate = date;
14.
15.
        public String getTitle() {
16.
            return Title;
17.
18.
        public void setTitle(String title) {
19.
            Title = title;
20.
21.
        public String getLink() {
22.
           return Link;
23.
24.
        public void setLink(String link) {
25.
            Link = link;
26.
        public String getDescription() {
27.
28.
           return Description;
29.
30.
        public void setDescription(String description) {
            Description = description;
31.
32.
33.
        public java.util.Date getDate() {
34.
            return mDate;
35.
        public void setDate(java.util.Date date) {
36.
            mDate = date;
37.
38.
39. }
```

Tasks_Data.java

```
    package com.example.baltu.myapplication.DataTypes;

import android.content.ContentValues;
3. import com.example.baltu.myapplication.DB_Constructor.User_DB.TasksTable;
4. import java.util.UUID;
5. /** * Created by Baltu on 2017-04-24. */
6. public class Tasks_Data {
       private String ID;
7.
8.
       private String Course;
       private String discription;
9.
       private long Deadline_Date;
10.
       private String Notes;
11.
12.
       public String getID() {
13.
           return ID;
```

```
14.
       }
15.
        public void setID(String ID) {
16.
            this.ID = ID;
17.
18.
        public String getCourse() {
19.
            return Course;
20.
21.
        public void setCourse(String course) {
22.
            Course = course;
23.
24.
        public String getDiscription() {
25.
            return discription;
26.
        public void setDiscription(String discription) {
27.
28.
            this.discription = discription;
29.
30.
        public long getDeadline Date() {
31.
            return Deadline Date;
32.
        public void setDeadline Date(long deadline Date) {
33.
34.
            Deadline Date = deadline Date;
35.
        public String getNotes() {
36.
37.
            return Notes;
38.
39.
        public void setNotes(String notes) {
40.
            Notes = notes;
41.
42.
        public Tasks_Data(String ID, String course, String discription, long deadline_Date, String
     notes) {
43.
            if (ID == null) {
44.
                ID = UUID.randomUUID().toString();
45.
            this.ID = ID;
46.
47.
            Course = course;
48.
            this.discription = discription;
49.
            Deadline Date = deadline Date;
50.
            Notes = notes;
51.
52.
        public Tasks Data() {
53.
            ID = UUID.randomUUID().toString();
54.
55.
        public ContentValues toValues() {
56.
            ContentValues values = new ContentValues(5);
57.
            values.put(TasksTable.COLUMN ID, ID);
58.
            values.put(TasksTable.COLUMN CourseNAME, Course);
59.
            values.put(TasksTable.COLUMN Discription, discription);
60.
            values.put(TasksTable.COLUMN ENDDATE, Deadline Date);
61.
            values.put(TasksTable.COLUMN_NOTES, Notes);
62.
            return values;
63.
64.}
```

TimeTable_Classes.java

```
    package com.example.baltu.myapplication.DataTypes;

2. import android.content.ContentValues;
import com.example.baltu.myapplication.DB_Constructor.User_DB.Courses_Table;
4. import java.util.UUID;
5. /** * Created by Baltu on 2017-04-04. */
6. public class TimeTable_Classes {
        private String ID;
7.
```

```
private String Course;
9.
       private String starting_time;
       private String finishing_time;
10.
11.
       private int Day_of_week;
12.
       private String Notes;
13.
       public TimeTable_Classes() {
14.
            if (ID == null) {
                ID = UUID.randomUUID().toString();
15.
16.
17.
18.
       public TimeTable_Classes(String ID, String course, String starting_time, String finishing_
   time, int day_of_week, String notes) {
19.
            if (ID == null) {
               ID = UUID.randomUUID().toString();
20.
21.
           this.ID = ID;
22.
23.
            Course = course;
24.
            this.starting_time = starting_time;
25.
            this.finishing_time = finishing_time;
26.
           Day_of_week = day_of_week;
27.
           Notes = notes;
28.
29.
       public String getID() {
30.
           return ID;
31.
32.
       public String getCourse() {
33.
            return Course;
34.
35.
       public String getStarting_time() {
           return starting time;
36.
37.
38.
       public String getFinishing time() {
39.
            return finishing time;
40.
41.
       public int getDay of week() {
42.
           return Day_of_week;
43.
44.
       public String getNotes() {
45.
            return Notes;
46.
47.
       public void setID(String ID) {
48.
           this.ID = ID;
49.
50.
       public void setCourse(String course) {
51.
            Course = course;
52.
53.
       public void setStarting time(String starting time) {
54.
           this.starting_time = starting_time;
55.
56.
       public void setFinishing_time(String finishing_time) {
57.
            this.finishing time = finishing time;
58.
59.
       public void setDay_of_week(int day_of_week) {
60.
           Day of week = day of week;
61.
62.
       public void setNotes(String notes) {
63.
           Notes = notes;
64.
65.
       public ContentValues toValues() {
66.
            ContentValues values = new ContentValues(6);
67.
            values.put(Courses_Table.COLUMN_ID, ID);
```

```
68. values.put(Courses_Table.COLUMN_DAY, Day_of_week);
69. values.put(Courses_Table.COLUMN_NAME, Course);
70. values.put(Courses_Table.COLUMN_NOTES, Notes);
71. values.put(Courses_Table.COLUMN_STARTTIME, starting_time);
72. values.put(Courses_Table.COLUMN_ENDTIME, finishing_time);
73. return values;
74. }
75. }
```

University_Locations.java

```
    package com.example.baltu.myapplication.DataTypes;

import android.content.ContentValues;
3. import android.content.pm.LabeledIntent;
4. import com.example.baltu.myapplication.DB Constructor.Local DB.MapLocations Table;
5. /** * Created by Baltu on 2017-05-23. */
6. public class University Locations {
7.
        private String ID;
8.
        private String ShortName;
9.
        private String LongName;
10.
        private String Information;
11.
        private Double Latitude;
12.
        private Double Longitude;@
        com.google.gson.annotations.SerializedName("ImageUrl") private String Image_Url;
13.
14.
        public String getID() {
15.
            return ID;
16.
17.
        public void setID(String ID) {
18.
            this.ID = ID;
19.
20.
        public String getShortName() {
21.
            return ShortName;
22.
        public void setShortName(String shortName) {
23.
            ShortName = shortName;
24.
25.
26.
        public String getLongName() {
27.
            return LongName;
28.
29.
        public void setLongName(String longName) {
30.
            LongName = longName;
31.
32.
        public String getInformation() {
33.
            return Information;
34.
35.
        public void setInformation(String information) {
            Information = information;
36.
37.
38.
        public Double getLatitude() {
39.
            return Latitude;
40.
41.
        public void setLatitude(Double latitude) {
42.
            Latitude = latitude;
43.
44.
        public Double getLongitude() {
45.
            return Longitude;
46.
47.
        public void setLongitude(Double longitude) {
48.
            Longitude = longitude;
49.
50.
        public String getImage_Url() {
51.
            return Image_Url;
```

```
52.
53.
        public void setImage_Url(String image_Url) {
54.
            Image_Url = image_Url;
55.
        public University_Locations(String ID, String shortName, String longName, String informati
56.
    on, Double latitude, Double longitude, String image_Url) {
57.
            this.ID = ID;
58.
            ShortName = shortName;
59.
            LongName = longName;
60.
            Information = information;
61.
            Latitude = latitude;
62.
            Longitude = longitude;
63.
            Image_Url = image_Url;
64.
65.
        public University Locations() {}
66.
        public ContentValues ToValues() {
            ContentValues Values = new ContentValues(7);
67.
68.
            Values.put(MapLocations Table.COLUMN ID, ID);
69.
            Values.put(MapLocations Table.COLUMN SHORTNAME, ShortName);
            Values.put(MapLocations Table.COLUMN LONGNAME, LongName);
70.
71.
            Values.put(MapLocations Table.COLUMN INFO, Information);
            Values.put(MapLocations Table.COLUMN LATITUDE, Latitude);
72.
            Values.put(MapLocations_Table.COLUMN_LONGITUDE, Longitude);
73.
74.
            Values.put(MapLocations_Table.COLUMN_IMAGE_URL, Image_Url);
75.
            return Values;
76.
77.}
```

Local_DB_Helper.java

```
    package com.example.baltu.myapplication.DB Constructor;

import android.content.Context;
3. import android.database.sqlite.SQLiteDatabase;

    import android.database.sqlite.SQLiteOpenHelper;

import android.widget.Toast;
6. import com.example.baltu.myapplication.DB_Constructor.*;

    import com.example.baltu.myapplication.DB_Constructor.Local_DB.Buss_Table;

import com.example.baltu.myapplication.DB_Constructor.Local_DB.Calender_Table;

    import com.example.baltu.myapplication.DB_Constructor.Local_DB.Information_Table;

    import com.example.baltu.myapplication.DB_Constructor.Local_DB.MapLocations_Table;

11. import com.example.baltu.myapplication.DB_Constructor.User_DB.Courses_Table;
12. import com.example.baltu.myapplication.DataTypes.Bus_Data;
13. import java.io.FileOutputStream;
14. import java.io.IOException;
15. import java.io.InputStream;
16. import java.io.OutputStream;
17. import java.util.Calendar;
18. import java.util.List;
19. /** * Created by Baltu on 2017-05-06. */
20. public class Local DB Helper extends SQLiteOpenHelper {
        static String DB_PATH = "/data/data/com.example.baltu.myapplication/databases/";
21.
22.
        public static final String DB_FILENAME = "LocalDb.db";
23.
        public static final int DB Version = 1;
24.
        Context mcontext;
25.
        public Local DB Helper(Context context) {
26.
            super(context, DB FILENAME, null, DB Version);
27.
            mcontext = context;
28.
29.
        Override public void onCreate(SQLiteDatabase db) {
30.
            db.execSQL(Buss_Table.SQL_CREATE);
            db.execSQL(Calender_Table.SQL_CREATE);
31.
32.
            db.execSQL(Information_Table.SQL_CREATE);
```

```
33.
            db.execSQL(MapLocations_Table.SQL_CREATE);
34.
35.
        Override public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) {}@
36.
        Override public void onDowngrade(SQLiteDatabase db, int oldVersion, int newVersion) {
37.
            super.onDowngrade(db, oldVersion, newVersion);
38.
39. }
                                           User_DB_Helper.java

    package com.example.baltu.myapplication.DB_Constructor;

2. import android.content.Context;
3. import android.database.sqlite.SQLiteDatabase;

    import android.database.sqlite.SQLiteOpenHelper;

import com.example.baltu.myapplication.DB Constructor.User DB.Courses Table;
6. import com.example.baltu.myapplication.DB Constructor.User DB.ExamsTable;

    import com.example.baltu.myapplication.DB Constructor.User DB.Settings;

import com.example.baltu.myapplication.DB Constructor.User DB.TasksTable;
9. /** * Created by Baltu on 2017-05-06. */
10. public class User DB Helper extends SQLiteOpenHelper {
11.
        public static final String DB FILENAME = "UserDb.db";
12.
        public static final int DB Version = 1;
13.
        public User_DB_Helper(Context context) {
            super(context, DB_FILENAME, null, DB_Version);
14.
15.
16.
        Override public void onCreate(SQLiteDatabase db) {
17.
            db.execSQL(Courses_Table.SQL_CREATE);
18.
            db.execSQL(TasksTable.SQL_CREATE);
19.
            db.execSQL(ExamsTable.SQL_CREATE);
20.
        Override public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) {}
21.
22.}
                                             Buss Table.java

    package com.example.baltu.myapplication.DB_Constructor.Local_DB;

2. /** * Created by Baltu on 2017-05-11. */
3. public class Buss_Table {
4.
        public static final String TABLE_NAME = "buss";
        public static final String COLUMN_ID = "id";
5.
        public static final String COLUMN_LINE_NUMBER = "Line_Number";
6.
        public static final String COLUMN_WEEKDAY = "Weekday";
7.
        public static final String COLUMN_TO_FROM = "To_from";
8.
        public static final String COLUMN_TIME = "time";
9.
        public static final String[] allColoumns = {
10.
11.
            COLUMN_ID, COLUMN_LINE_NUMBER, COLUMN_WEEKDAY, COLUMN_TO_FROM, COLUMN_TIME
12.
        public static final String SQL_CREATE = "CREATE TABLE " + TABLE NAME + "(" + COLUMN ID + "
13.
     TEXT PRIMARY KEY," + COLUMN_LINE_NUMBER + " INTEGER," + COLUMN_WEEKDAY + " INTEGER," + COLUMN
    _TO_FROM + " INTEGER," + COLUMN_TIME + " TEXT" + ");";
14.
       public static final String SQL_DELETE = "DROP TABLE " + TABLE_NAME;
15. }
                                           Calender_Table.java

    package com.example.baltu.myapplication.DB_Constructor.Local_DB;

2. /** * Created by Baltu on 2017-05-11. */
3. public class Calender_Table {
        public static final String TABLE_NAME = "calender";
4.
        public static final String COLUMN_ID = "ID";
5.
        public static final String COLUMN Event Name = "event name";
6.
7.
        public static final String COLUMN_SDATE = "start_date";
        public static final String COLUMN EDATE = "end date";
8.
9.
        public static final String[] allColoumns = {
```

```
COLUMN_ID, COLUMN_Event_Name, COLUMN_SDATE, COLUMN_EDATE
11.
        public static final String SQL_CREATE = "CREATE TABLE " + TABLE_NAME + "(" + COLUMN_ID + "
12.
    TEXT PRIMARY KEY," + COLUMN_Event_Name + " TEXT," + COLUMN_SDATE + " LONG," + COLUMN_EDATE +
    " LONG" + ");";
        public static final String SQL_DELETE = "DROP TABLE " + TABLE NAME;
13.
14. }
                                          Information_Table.java

    package com.example.baltu.myapplication.DB_Constructor.Local_DB;

2. /** * Created by Baltu on 2017-05-11. */
3. public class Information Table {
        public static final String TABLE NAME = "info";
        public static final String COLUMN ID = "ID";
        public static final String COLUMN_TITLE = "Title";
6.
7.
        public static final String COLUMN CONTENT = "Content";
        public static final String COLUMN Image = "Image";
        public static final String[] allColoumns = {
            COLUMN_ID, COLUMN_TITLE, COLUMN_CONTENT, COLUMN_Image
10.
11.
        public static final String SQL_CREATE = "CREATE TABLE " + TABLE_NAME + "(" + COLUMN ID + "
12.
    TEXT PRIMARY KEY, " + COLUMN_TITLE + " TEXT, " + COLUMN_CONTENT + " TEXT, " + COLUMN_Image + " T
    EXT" + ");";
        public static final String SQL_DELETE = "DROP TABLE " + TABLE_NAME;
13.
14. }
                                         MapLocations_Table.java

    package com.example.baltu.myapplication.DB_Constructor.Local_DB;

2. /** * Created by Baltu on 2017-05-11. */
3. public class MapLocations Table {
        public static final String TABLE_NAME = "MapLocations";
        public static final String COLUMN_ID = "ID";
5.
        public static final String COLUMN_SHORTNAME = "ShortName";
6.
        public static final String COLUMN_LONGNAME = "LongName";
7.
        public static final String COLUMN_INFO = "Information";
8.
        public static final String COLUMN_LATITUDE = "Latitude";
9.
        public static final String COLUMN_LONGITUDE = "Longitude";
10.
        public static final String COLUMN_IMAGE_URL = "ImageUrl";
11.
12.
        public static final String[] allColoumns = {
            COLUMN ID, COLUMN SHORTNAME, COLUMN LONGNAME, COLUMN INFO, COLUMN LATITUDE, COLUMN LON
    GITUDE, COLUMN IMAGE URL
14.
       };
        public static final String SQL_CREATE = "CREATE TABLE " + TABLE_NAME + "(" + COLUMN_ID + "
15.
     TEXT PRIMARY KEY, " + COLUMN_SHORTNAME + " TEXT, " + COLUMN_LONGNAME + " TEXT, " + COLUMN_INFO +
     " TEXT," + COLUMN_LATITUDE + " REAL," + COLUMN_LONGITUDE + " REAL," + COLUMN_IMAGE_URL + " TE
    XT" + ");";
     public static final String SQL_DELETE = "DROP TABLE " + TABLE_NAME;
16.
17. }
                                            Courses_Table.java

    package com.example.baltu.myapplication.DB Constructor.User DB;

    public class Courses Table {
        public static final String TABLE_ITEMS = "lectures";
        public static final String COLUMN ID = "itemId";
4.
5.
        public static final String COLUMN_NAME = "itemName";
        public static final String COLUMN NOTES = "notes";
6.
        public static final String COLUMN_STARTTIME = "starttime";
7.
        public static final String COLUMN ENDTIME = "wndtime";
8.
9.
        public static final String COLUMN_DAY = "day";
10.
        public static final String[] allColoumns = {
            COLUMN ID, COLUMN NAME, COLUMN NOTES, COLUMN STARTTIME, COLUMN ENDTIME, COLUMN DAY
11.
```

```
12. };
        public static final String SQL_CREATE = "CREATE TABLE " + TABLE_ITEMS + "(" + COLUMN_ID +
    " TEXT PRIMARY KEY," + COLUMN_NAME + " TEXT," + COLUMN_NOTES + " TEXT," + COLUMN_STARTTIME + "
     TEXT," + COLUMN_ENDTIME + " TEXT," + COLUMN_DAY + " TEXT" + ");";
        public static final String SQL_DELETE = "DROP TABLE " + TABLE_ITEMS;
15. }
                                              ExamsTable.java

    package com.example.baltu.myapplication.DB_Constructor.User_DB;

2. public class ExamsTable {
        public static final String TABLE NAME = "exams";
        public static final String COLUMN ID = "id";
        public static final String COLUMN CourseNAME = "course";
5.
        public static final String COLUMN Discription = "discription";
6.
7.
        public static final String COLUMN EXAMDATE = "exam date";
        public static final String COLUMN NOTES = "notes";
8.
9.
        public static final String[] allColoumns = {
            COLUMN ID, COLUMN CourseNAME, COLUMN Discription, COLUMN NOTES, COLUMN EXAMDATE, COLUM
10.
    N NOTES
11.
        };
        public static final String SQL CREATE = "CREATE TABLE " + TABLE NAME + "(" + COLUMN ID + "
12.
     TEXT PRIMARY KEY," + COLUMN_CourseNAME + " TEXT," + COLUMN_Discription + " TEXT," + COLUMN_EX
    AMDATE + " INTEGER ," + COLUMN_NOTES + " TEXT" + ");";
        public static final String SQL_DELETE = "DROP TABLE " + TABLE NAME;
13.
14. }
                                               Settings.java

    package com.example.baltu.myapplication.DB_Constructor.User_DB;

2. public class Settings {
        public static final String TABLE_NAME = "settings";
3.
        public static final String COLUMN_ID = "ID";
4.
        public static final String COLUMN_OPTIONNAME = "option";
5.
        public static final String COLUMN_Discription = "discription";
6.
7.
        public static final String COLUMN_CONTENT = "content";
        public static final String[] allColoumns = {
8.
            COLUMN_ID, COLUMN_OPTIONNAME, COLUMN_Discription, COLUMN_CONTENT
9.
10.
        public static final String SQL_CREATE = "CREATE TABLE " + TABLE_NAME + "(" + COLUMN_ID + "
11.
     TEXT PRIMARY KEY, " + COLUMN_OPTIONNAME + " TEXT," + COLUMN_Discription + " TEXT," + COLUMN_CO
    NTENT + " TEXT " + ");";
12.
       public static final String SQL DELETE = "DROP TABLE " + TABLE NAME;
13. }
                                              TasksTable.java

    package com.example.baltu.myapplication.DB Constructor.User DB;

    public class TasksTable {
        public static final String TABLE_NAME = "tasks";
4.
        public static final String COLUMN_ID = "ID";
        public static final String COLUMN_CourseNAME = "course";
5.
6.
        public static final String COLUMN Discription = "discription";
        public static final String COLUMN ENDDATE = "deadline date";
7.
        public static final String COLUMN NOTES = "notes";
8.
        public static final String[] allColoumns = {
            COLUMN ID, COLUMN CourseNAME, COLUMN Discription, COLUMN NOTES, COLUMN ENDDATE, COLUMN
10.
    _NOTES
11.
        };
        public static final String SQL CREATE = "CREATE TABLE " + TABLE NAME + "(" + COLUMN ID + "
12.
    TEXT PRIMARY KEY," + COLUMN_CourseNAME + " TEXT," + COLUMN_Discription + " TEXT," + COLUMN_EN DDATE + " INTEGER ," + COLUMN_NOTES + " TEXT" + ");";
13.
        public static final String SQL DELETE = "DROP TABLE " + TABLE NAME;
```

14. }

UserDB_Provider.java

```
    package com.example.baltu.myapplication.Data Provider;

2. import android.content.ContentValues;
import android.content.Context;
4. import android.database.Cursor;
5. import android.database.DatabaseUtils;
6. import android.database.sqlite.SQLiteDatabase;
7. import android.database.sqlite.SQLiteException;
import android.database.sqlite.SQLiteOpenHelper;
9. import com.example.baltu.myapplication.DB Constructor.User DB.Courses Table;
10. import com.example.baltu.myapplication.DB Constructor.User DB.ExamsTable;
11. import com.example.baltu.myapplication.DB Constructor.User DB.Settings;
12. import com.example.baltu.myapplication.DB Constructor.User DB.TasksTable;
13. import com.example.baltu.myapplication.DB Constructor.User DB Helper;
14. import com.example.baltu.myapplication.DataTypes.Exam class;
15. import com.example.baltu.myapplication.DataTypes.Tasks Data;
16. import com.example.baltu.myapplication.DataTypes.TimeTable Classes;
17. import com.scottyab.aescrypt.AESCrypt;
18. import java.security.GeneralSecurityException;
19. import java.util.ArrayList;
20. import java.util.List;
21. public class UserDB_Provider {
22.
        private Context mContext;
        private final static String passid = "15968987559";
23.
24.
        private SQLiteDatabase UserDb;
25.
        SQLiteOpenHelper mUserDBhelper;
        public UserDB_Provider(Context context) {
26.
27.
            this.mContext = context;
            mUserDBhelper = new User_DB_Helper(mContext);
28.
29.
            UserDb = mUserDBhelper.getWritableDatabase();
30.
31.
        public void open() {
           UserDb = mUserDBhelper.getWritableDatabase();
32.
33.
34.
        public void close() {
35.
                mUserDBhelper.close();
36.
37.
        public TimeTable_Classes addnewcourse(TimeTable_Classes ttc) {
            UserDb.insert(Courses_Table.TABLE_ITEMS, null, ttc.toValues());
38.
39.
            return ttc;
40.
        public long numberofcourses(TimeTable Classes ttc) {
41.
42.
            return DatabaseUtils.queryNumEntries(UserDb, Courses_Table.TABLE_ITEMS, "itemId=?", ne
    w String[] {
43.
                ttc.getID()
44.
           });
45.
        public TimeTable_Classes updatecourse(TimeTable_Classes ttc) {
46.
47.
            UserDb.update(Courses_Table.TABLE_ITEMS, ttc.toValues(), "itemId=?", new String[] {
48.
                ttc.getID()
49.
            });
50.
            return ttc;
51.
        public boolean deletecourse(String id) {
52.
            UserDb.delete(Courses_Table.TABLE_ITEMS, "itemId=?", new String[] {
53.
54.
                id
55.
            });
56.
            return true;
57.
        }
```

```
public List < TimeTable_Classes > getcourses(int day) {
58.
59.
                List < TimeTable_Classes > nelist = new ArrayList < > ();
60.
                String[] arg = {
61.
                    Integer.toString(day)
62.
                };
63.
                Cursor cur = UserDb.query(Courses Table.TABLE ITEMS, Courses Table.allColoumns, "d
   ay=?", arg, null, null, "starttime");
                while (cur.moveToNext()) {
64.
                    TimeTable Classes ttc = new TimeTable Classes();
65.
                    ttc.setID(cur.getString(cur.getColumnIndex(Courses Table.COLUMN ID)));
66.
67.
                    ttc.setCourse(cur.getString(cur.getColumnIndex(Courses Table.COLUMN NAME)));
68.
                    ttc.setDay_of_week(cur.getInt(cur.getColumnIndex(Courses_Table.COLUMN_DAY)));
69.
                    ttc.setStarting_time(cur.getString(cur.getColumnIndex(Courses_Table.COLUMN_STA
   RTTIME)));
70.
                    ttc.setFinishing time(cur.getString(cur.getColumnIndex(Courses Table.COLUMN EN
   DTIME)));
71.
                    ttc.setNotes(cur.getString(cur.getColumnIndex(Courses_Table.COLUMN_NOTES)));
72.
                    nelist.add(ttc);
73.
                }
74.
                return nelist;
75.
   =====
76.
        public Tasks Data addnewTask(Tasks Data ttc) {
77.
           UserDb.insert(TasksTable.TABLE_NAME, null, ttc.toValues());
78.
           return ttc;
79.
80.
        public Tasks Data updateTask(Tasks Data ttc) {
81.
           UserDb.update(TasksTable.TABLE_NAME, ttc.toValues(), "ID=?", new String[] {
                ttc.getID()
82.
83.
            });
84.
           return ttc;
85.
        public int DeleteTask(String id) {
86.
87.
            String[] arg = {
88.
                id
89.
            };
           return UserDb.delete(TasksTable.TABLE_NAME, "ID=?", arg);
90.
91.
        public List < Tasks Data > GetTasks(int x) {
92.
93.
                List < Tasks_Data > nelist = new ArrayList < > ();
94.
                String[] arg = {
95.
                    Long.toString((new java.util.Date()).getTime())
96.
                };
97.
                Cursor cur;
98.
                if (x == 0) {
                    cur = UserDb.query(TasksTable.TABLE NAME, TasksTable.allColoumns, "deadline da
   te>?", arg, null, null, TasksTable.COLUMN_ENDDATE);
100.
                       } else {
                           cur = UserDb.query(TasksTable.TABLE NAME, TasksTable.allColoumns, "dead
101.
   line_date<=?", arg, null, null, TasksTable.COLUMN_ENDDATE);</pre>
102.
103.
                       while (cur.moveToNext()) {
104.
                           Tasks Data ttc = new Tasks Data();
105.
                           ttc.setID(cur.getString(cur.getColumnIndex(TasksTable.COLUMN ID)));
                           ttc.setCourse(cur.getString(cur.getColumnIndex(TasksTable.COLUMN Course
   NAME)));
                           ttc.setDeadline Date(cur.getLong(cur.getColumnIndex(TasksTable.COLUMN E
   NDDATE)));
                           ttc.setDiscription(cur.getString(cur.getColumnIndex(TasksTable.COLUMN_D
108.
   iscription)));
```

```
109.
                           ttc.setNotes(cur.getString(cur.getColumnIndex(TasksTable.COLUMN_NOTES)))
    );
110.
                           nelist.add(ttc);
111.
112.
                       return nelist;
                   } //=========
113.
114.
               public Exam_class addnewExam(Exam_class ttc) {
                   UserDb.insert(ExamsTable.TABLE NAME, null, ttc.toValues());
115.
116.
                   return ttc;
117.
118.
               public Exam_class updateExam(Exam_class ttc) {
119.
                   UserDb.update(ExamsTable.TABLE_NAME, ttc.toValues(), "id=?", new String[] {
120.
                       ttc.getID()
121.
                   });
                   return ttc;
122.
123.
124.
               public int DeleteExam(String id) {
125.
                   String[] arg = {
126.
                       id
127.
                   };
                   return UserDb.delete(ExamsTable.TABLE NAME, "id=?", arg);
128.
129.
130.
               public List < Exam_class > GetExams(int x) {
131.
                       List < Exam_class > nelist = new ArrayList < > ();
132.
                       String[] arg = {
133.
                           Long.toString((new java.util.Date()).getTime())
134.
                       };
135.
                       Cursor cur;
                       if (x == 0) {
136.
                           cur = UserDb.query(ExamsTable.TABLE NAME, ExamsTable.allColoumns, "exam
137.
    date>?", arg, null, null, ExamsTable.COLUMN EXAMDATE);
138.
                           cur = UserDb.query(ExamsTable.TABLE NAME, ExamsTable.allColoumns, "exam
139.
    _date<=?", arg, null, null, ExamsTable.COLUMN_EXAMDATE);</pre>
140.
141.
                       while (cur.moveToNext()) {
142.
                           Exam_class ttc = new Exam_class();
                           ttc.setID(cur.getString(cur.getColumnIndex(ExamsTable.COLUMN ID)));
143.
144.
                           ttc.setCourse(cur.getString(cur.getColumnIndex(ExamsTable.COLUMN_Course
   NAME)));
145.
                           ttc.setExam Date(cur.getLong(cur.getColumnIndex(ExamsTable.COLUMN EXAMD
   ATE)));
                           ttc.setDiscription(cur.getString(cur.getColumnIndex(ExamsTable.COLUMN D
   iscription)));
                           ttc.setNotes(cur.getString(cur.getColumnIndex(ExamsTable.COLUMN NOTES)))
147.
   );
148.
                           nelist.add(ttc);
149.
                       }
150.
                       return nelist;
151.
                   } //============
         ======= //Settings
152.
               public int isPasswordOn() {
153.
                   Cursor cur;
154.
                   String[] arg = {
155.
                       passid
156.
                   };
                   cur = UserDb.query(Settings.TABLE NAME, Settings.allColoumns, Settings.COLUMN I
157.
   D + "=? ", arg, null, null, null);
                   if (cur.getCount() == 1) {
```

```
159.
                        if (cur.getString(cur.getColumnIndex(Settings.COLUMN_Discription)).equals("
    on")) {
160.
                            return 1:
                        } else if (cur.getString(cur.getColumnIndex(Settings.COLUMN_Discription)).e
161.
    quals("off")) {
162.
                            return 0:
163.
                        } else return 2;
164.
                   } else return 2;
165.
166.
               public String GetPasswordon() {
167.
                    Cursor cur;
168.
                    String[] arg = {
169.
                        passid
170.
                    };
171.
                    cur = UserDb.query(Settings.TABLE_NAME, Settings.allColoumns, Settings.COLUMN_I
               arg, null, null, null);
   D +
172.
                   return cur.getString(cur.getColumnIndex(Settings.COLUMN CONTENT)) + passid;
173.
174.
               public boolean SetPassword(String mypass) throws GeneralSecurityException {
175.
                    ContentValues values = new ContentValues(4);
176.
                    values.put(Settings.COLUMN ID, passid);
                    values.put(Settings.COLUMN Discription, "on");
177.
                    values.put(Settings.COLUMN_OPTIONNAME, "Password");
178.
179.
                    values.put(Settings.COLUMN_CONTENT, AESCrypt.encrypt(passid, mypass));
180.
                    String[] arg = {
181.
                        passid
182.
                    };
183.
                    try {
184.
                        UserDb.delete(Settings.TABLE_NAME, Settings.COLUMN_ID + "=?", arg);
185.
                        UserDb.insert(Settings.TABLE NAME, null, values);
186.
                    } catch (SQLiteException e) {
187.
                        e.printStackTrace();
188.
                        return false:
189.
                    } finally {
190.
                        return true;
191.
                    }
192.
               public boolean SetPasswordoff() throws GeneralSecurityException {
193.
194.
                    ContentValues values = new ContentValues(4);
195.
                    values.put(Settings.COLUMN ID, passid);
                    values.put(Settings.COLUMN_Discription, "off");
196.
197.
                    values.put(Settings.COLUMN OPTIONNAME, "Password");
198.
                    values.put(Settings.COLUMN CONTENT, "");
199.
                    String[] arg = {
200.
                        passid
201.
                    };
202.
                    try {
203.
                        UserDb.delete(Settings.TABLE_NAME, Settings.COLUMN_ID + "=?", arg);
204.
                        UserDb.insert(Settings.TABLE NAME, null, values);
205.
                    } catch (SQLiteException e) {
206.
                        e.printStackTrace();
207.
                        return false;
208.
                    } finally {
209.
                        return true;
210.
211.
212.
                                        Local_DB_Main_Provider.java
```

```
    package com.example.baltu.myapplication.Data_Provider;
    import android.content.Context;
```

```
import android.database.Cursor;
4. import android.database.sqlite.SQLiteDatabase;
5. import android.database.sqlite.SQLiteOpenHelper;
import com.example.baltu.myapplication.DB_Constructor.Local DB.Buss Table;
7. import com.example.baltu.myapplication.DB Constructor.Local DB.Calender Table;
8. import com.example.baltu.myapplication.DB_Constructor.Local_DB.MapLocations_Table;
import com.example.baltu.myapplication.DB_Constructor.Local_DB_Helper;
10. import com.example.baltu.myapplication.DataTypes.Bus Data;
11. import com.example.baltu.myapplication.DataTypes.Calender Data;
12. import com.example.baltu.myapplication.DataTypes.University Locations;
13. import java.util.ArrayList;
14. import java.util.List;
15. public class Local_DB_Main_Provider {
16.
        private Context mContext;
17.
        private SQLiteDatabase LocalDB;
18.
        SQLiteOpenHelper mLocalDBhelper;
19.
        public Local DB Main Provider(Context context) {
20.
            this.mContext = context:
            mLocalDBhelper = new Local DB Helper(mContext);
21.
            LocalDB = mLocalDBhelper.getWritableDatabase();
22.
23.
24.
        public void open() {
            LocalDB = mLocalDBhelper.getWritableDatabase();
25.
26.
27.
        public void close() {
28.
                mLocalDBhelper.close();
29.
30.
        public List < Bus Data > GetAllBus(int x, int y) {
31.
            List < Bus Data > nelist = new ArrayList < > ();
32.
            String[] arg = {
33.
                Long.toString((new java.util.Date()).getTime())
34.
            };
35.
            Cursor cur;
            cur = LocalDB.query(Buss Table.TABLE NAME, Buss Table.allColoumns, " To from=? AND
36.
    ekday=? ", new String[] {
                String.valueOf(x), Integer.toString(y)
37.
            }, null, null, Buss_Table.COLUMN TIME);
38.
            while (cur.moveToNext()) {
39.
40.
                Bus Data ttc = new Bus Data();
41.
                ttc.setID(cur.getString(cur.getColumnIndex(Buss Table.COLUMN ID)));
42.
                ttc.setLine_Number(cur.getInt(cur.getColumnIndex(Buss_Table.COLUMN_LINE_NUMBER)));
43.
                ttc.setTime(cur.getString(cur.getColumnIndex(Buss Table.COLUMN TIME)));
44.
                ttc.setTo from(cur.getInt(cur.getColumnIndex(Buss Table.COLUMN TO FROM)));
45.
                ttc.setWeekday(cur.getInt(cur.getColumnIndex(Buss Table.COLUMN WEEKDAY)));
46.
                nelist.add(ttc);
47.
            }
48.
            return nelist;
49.
50.
        public List < Bus Data > Get1lineBus(int x, int y, int z) {
51.
            List < Bus Data > nelist = new ArrayList < > ();
52.
            String[] arg = {
53.
                Long.toString((new java.util.Date()).getTime())
54.
            };
55.
            Cursor cur;
            cur = LocalDB.query(Buss Table.TABLE NAME, Buss Table.allColoumns, "Line Number=? AND
56.
    To from=? AND Weekday=? ", new String[] {
57.
                String.valueOf(x), Integer.toString(y), Integer.toString(z)
58.
            }, null, null, Buss_Table.COLUMN_TIME);
59.
            while (cur.moveToNext()) {
```

```
60.
                Bus_Data ttc = new Bus_Data();
61.
                ttc.setID(cur.getString(cur.getColumnIndex(Buss_Table.COLUMN_ID)));
62.
                ttc.setLine_Number(cur.getInt(cur.getColumnIndex(Buss_Table.COLUMN_LINE_NUMBER)));
63.
                ttc.setTime(cur.getString(cur.getColumnIndex(Buss Table.COLUMN TIME)));
                ttc.setTo from(cur.getInt(cur.getColumnIndex(Buss_Table.COLUMN_TO_FROM)));
64.
65.
                ttc.setWeekday(cur.getInt(cur.getColumnIndex(Buss_Table.COLUMN_WEEKDAY)));
66.
                nelist.add(ttc);
67.
68.
            return nelist;
69.
70.
        public List < Calender_Data > GetCalendarItems() {
            List < Calender_Data > nelist = new ArrayList < > ();
71.
72.
            Cursor cur;
73.
            cur = LocalDB.query(Calender Table.TABLE NAME, Calender Table.allColoumns, null, null,
     null, null, Calender Table.COLUMN SDATE);
74.
            while (cur.moveToNext()) {
75.
                Calender Data ttc = new Calender Data();
                ttc.setID(cur.getString(cur.getColumnIndex(Calender_Table.COLUMN_ID)));
76.
77.
                ttc.setEvent_Name(cur.getString(cur.getColumnIndex(Calender_Table.COLUMN_Event_Nam
    e)));
                ttc.setStartDate(cur.getLong(cur.getColumnIndex(Calender_Table.COLUMN SDATE)));
78.
79.
                ttc.setEndDate(cur.getLong(cur.getColumnIndex(Calender_Table.COLUMN_EDATE)));
80.
                nelist.add(ttc);
81.
82.
            return nelist;
83.
84.
        public List < University Locations > GetMapLocations() {
85.
            List < University Locations > Locationslist = new ArrayList < > ();
86.
            Cursor cur;
            cur = LocalDB.query(MapLocations Table.TABLE NAME, MapLocations Table.allColoumns, nul
87.
    1, null, null, MapLocations Table.COLUMN LONGNAME);
88.
            while (cur.moveToNext()) {
                University Locations location = new University Locations();
89.
                location.setID(cur.getString(cur.getColumnIndex(MapLocations Table.COLUMN ID)));
90.
                location.setShortName(cur.getString(cur.getColumnIndex(MapLocations_Table.COLUMN_S
91.
    HORTNAME)));
                location.setLongName(cur.getString(cur.getColumnIndex(MapLocations_Table.COLUMN_LO
92.
    NGNAME)));
                location.setInformation(cur.getString(cur.getColumnIndex(MapLocations_Table.COLUMN
93.
    _INFO)));
94.
                location.setLatitude(cur.getDouble(cur.getColumnIndex(MapLocations Table.COLUMN LA
    TITUDE)));
                location.setLongitude(cur.getDouble(cur.getColumnIndex(MapLocations Table.COLUMN L
95.
    ONGITUDE)));
                location.setImage Url(cur.getString(cur.getColumnIndex(MapLocations Table.COLUMN I
96.
    MAGE_URL)));
97.
                Locationslist.add(location);
98.
            return Locationslist;
99.
100.
101.
           }
                                           BusItemsAdapter.java
```

```
    package com.example.baltu.myapplication.Data_Provider.Adapters;
    import android.content.Intent;
    import android.support.v7.widget.RecyclerView;
    import android.view.LayoutInflater;
    import android.view.View;
    import android.view.ViewGroup;
    import android.widget.TextView;
```

```
8. import com.example.baltu.myapplication.DataTypes.Bus_Data;
9. import com.example.baltu.myapplication.R;
10. import com.example.baltu.myapplication.Map.University Map;
11. import java.text.DateFormat;
12. import java.text.ParseException;
13. import java.text.SimpleDateFormat;
14. import java.util.Date;
15. import java.util.List;
16. public class BusItemsAdapter extends RecyclerView.Adapter < BusItemsAdapter.ViewHolder > { //
   The items to display in your RecyclerView
17.
        private List < Bus Data > items; // Provide a suitable constructor (depends on the kind of
    dataset)
18.
        public BusItemsAdapter(List < Bus_Data > items) {
19.
                this.items = items;
20.
            } // Return the size of your dataset (invoked by the layout manager)
21.
22.
        Override public int getItemCount() {
23.
            return this.items.size();
24.
        }@
        Override public int getItemViewType(int position) {
25.
26.
            return items.get(position).getLine Number();
27.
28.
        Override public BusItemsAdapter.ViewHolder onCreateViewHolder(ViewGroup viewGroup, int vie
   wType) {
29.
            LayoutInflater inflater = LayoutInflater.from(viewGroup.getContext());
30.
            final ViewHolder viewHolder;
31.
            View v1;
32.
            switch (viewType) {
33.
                case 1:
                    v1 = inflater.inflate(R.layout.bus1 layout, viewGroup, false);
34.
                    viewHolder = new ViewHolder(v1);
35.
36.
                    break;
37.
38.
                    v1 = inflater.inflate(R.layout.bus2 layout, viewGroup, false);
39.
                    viewHolder = new ViewHolder(v1);
40.
                    break;
41.
42.
                    v1 = inflater.inflate(R.layout.bus3_layout, viewGroup, false);
43.
                    viewHolder = new ViewHolder(v1);
44.
                    break:
45.
46.
                    v1 = inflater.inflate(R.layout.bus4 layout, viewGroup, false);
47.
                    viewHolder = new ViewHolder(v1);
48.
                    break:
49.
50.
                    v1 = inflater.inflate(R.layout.bus5 layout, viewGroup, false);
                    viewHolder = new ViewHolder(v1);
51.
52.
                    break:
53.
54.
                    v1 = inflater.inflate(R.layout.bus1 layout, viewGroup, false);
55.
                    viewHolder = new ViewHolder(v1);
56.
                    break;
57.
58.
            return viewHolder;
59.
60.
        Override public void onBindViewHolder(final BusItemsAdapter.ViewHolder viewHolder, final i
61.
            final Bus Data item = items.get(position);
62.
            DateFormat df = new SimpleDateFormat("hh:mm aaa");
63.
            DateFormat tlf = new SimpleDateFormat("HH:mm");
64.
            Date now = new Date();
```

```
65.
            String day_of_week = (new SimpleDateFormat("E")).format(now);
66.
            String time = tlf.format(now);
67.
            Date bustime = new Date();
68.
            try {
69.
                bustime = tlf.parse(item.getTime());
70.
                now = tlf.parse(time);
            } catch (ParseException e) {
71.
72.
                e.printStackTrace();
73.
74.
            viewHolder.Timet.setText(df.format(bustime));
75.
            Date left = new Date(0);
            if (day_of_week.equals("Sun") || day_of_week.equals("Mon") || day_of_week.equals("Tue"
76.
    ) || day_of_week.equals("Wed") || day_of_week.equals("Thu")) {
77.
                if (bustime.after(now)) {
78.
                    left = new Date(0, 0, 0, bustime.getHours() - now.getHours(), bustime.getMinut
    es() - now.getMinutes(), bustime.getSeconds() - now.getSeconds());
79.
                } else {
80.
                    left = new Date(0, 0, 0, 23 - (now.getHours() - bustime.getHours()), 60 - (now
    .getMinutes() - bustime.getMinutes()), 59 - (now.getSeconds() - bustime.getSeconds()));
81.
82.
            } else if (day_of_week.equals("Fri")) {
83.
                if (bustime.after(now)) {
84.
                    left = new Date(0, 0, 0, bustime.getHours() - now.getHours(), bustime.getMinut
    es() - now.getMinutes(), bustime.getSeconds() - now.getSeconds());
85.
                } else {
86.
                    left = new Date(0, 0, 2, 23 - (now.getHours() - bustime.getHours()), 60 - (now
    .getMinutes() - bustime.getMinutes()), 59 - (now.getSeconds() - bustime.getSeconds()));
87.
88.
            } else if (day_of_week.equals("Sat")) {
89.
                if (bustime.after(now)) {
90.
                    left = new Date(0, 0, 2, bustime.getHours() - now.getHours(), bustime.getMinut
    es() - now.getMinutes(), bustime.getSeconds() - now.getSeconds());
91.
                } else {
                    left = new Date(0, 0, 1, 23 - (now.getHours() - bustime.getHours()), 60 - (now
92.
    .getMinutes() - bustime.getMinutes()), 59 - (now.getSeconds() - bustime.getSeconds()));
93.
94.
            viewHolder.Timeleft.setText(Integer.toString(left.getDay()) + "d:" + Integer.toString(
95.
    left.getHours()) + "h:" + Integer.toString(left.getMinutes()) + "m");
96.
            viewHolder.mView.setOnClickListener(new View.OnClickListener() {@
97.
                Override public void onClick(View v) {
98.
                    Intent intf = new Intent(viewHolder.mView.getContext(), University Map.class);
99.
                    intf.putExtra("type", 1);
                            intf.putExtra("line", items.get(position).getLine Number());
100.
101.
                            viewHolder.mView.getContext().startActivity(intf);
102.
103.
                   });
104.
               public static class ViewHolder extends RecyclerView.ViewHolder {
105.
                   public TextView Timet;
106.
107.
                   public TextView Timeleft;
108.
                   public View mView;
109.
                   public Long Timer;
110.
                   public ViewHolder(View itemView) {
111.
                        super(itemView);
112.
                        Timet = (TextView) itemView.findViewById(R.id.bustime);
113.
                        Timeleft = (TextView) itemView.findViewById(R.id.timelefttime);
114.
                       mView = itemView;
115.
                   }
116.
```

BusItemsAdapterweekend.java

```
    package com.example.baltu.myapplication.Data Provider.Adapters;

2. import android.content.Intent;
import android.support.v7.widget.RecyclerView;
4. import android.view.LayoutInflater;
5. import android.view.View;
import android.view.ViewGroup;
import android.widget.TextView;
8. import com.example.baltu.myapplication.DataTypes.Bus Data;
9. import com.example.baltu.myapplication.R;
10. import com.example.baltu.myapplication.Map.University Map;
11. import java.text.DateFormat;
12. import java.text.ParseException;
13. import java.text.SimpleDateFormat;
14. import java.util.Date;
15. import java.util.List;
16. public class BusItemsAdapterweekend extends RecyclerView.Adapter < BusItemsAdapterweekend.View
    Holder > { // The items to display in your RecyclerView
17.
        private List < Bus Data > items; // Provide a suitable constructor (depends on the kind of
18.
        public BusItemsAdapterweekend(List < Bus_Data > items) {
19.
                this.items = items;
20.
            } // Return the size of your dataset (invoked by the layout manager)
21.
22.
        Override public int getItemCount() {
23.
            return this.items.size();
24.
25.
        Override public int getItemViewType(int position) {
26.
            return items.get(position).getLine Number();
27.
        Override public BusItemsAdapterweekend. ViewHolder on Create ViewHolder (ViewGroup viewGroup,
28.
    int viewType) {
29.
            LayoutInflater inflater = LayoutInflater.from(viewGroup.getContext());
30.
            final ViewHolder viewHolder;
31.
            View v1;
32.
            switch (viewType) {
33
                case 1:
34
                    v1 = inflater.inflate(R.layout.bus1_layout, viewGroup, false);
35.
                    viewHolder = new ViewHolder(v1);
36.
                    break:
37.
                case 2:
38.
                    v1 = inflater.inflate(R.layout.bus2 layout, viewGroup, false);
39
                    viewHolder = new ViewHolder(v1);
40
                    break;
41
                case 3:
42.
                    v1 = inflater.inflate(R.layout.bus3_layout, viewGroup, false);
43.
                    viewHolder = new ViewHolder(v1);
44.
                    break:
45.
                case 4:
46.
                    v1 = inflater.inflate(R.layout.bus4 layout, viewGroup, false);
47.
                    viewHolder = new ViewHolder(v1);
48.
                    break:
49.
                case 5:
50.
                    v1 = inflater.inflate(R.layout.bus5 layout, viewGroup, false);
51
                    viewHolder = new ViewHolder(v1);
52.
                    break;
53
                default:
54.
                    v1 = inflater.inflate(R.layout.bus1_layout, viewGroup, false);
55.
                    viewHolder = new ViewHolder(v1);
```

```
56.
                    break:
57.
58.
           return viewHolder;
59.
60.
        Override public void onBindViewHolder(final BusItemsAdapterweekend.ViewHolder viewHolder,
   final int position) {
            final Bus_Data item = items.get(position);
61.
           DateFormat df = new SimpleDateFormat("hh:mm aaa");
62.
           DateFormat tlf = new SimpleDateFormat("HH:mm");
63.
64.
           Date now = new Date();
65.
            DateFormat day of week fomat = new SimpleDateFormat("E");
           String day of week = day of week fomat.format(now);
66.
67.
            String time = tlf.format(now);
68.
           Date bustime = new Date();
69.
            try {
70.
                bustime = tlf.parse(item.getTime());
71.
                now = tlf.parse(time);
72.
            } catch (ParseException e) {
73.
                e.printStackTrace();
74.
75.
           viewHolder.Timet.setText(df.format(bustime));
76.
           Date left = new Date(0);
77.
            if (day_of_week.equals("Sat")) {
                if (bustime.after(now)) {
78.
79.
                    left = new Date(0, 0, 0, bustime.getHours() - now.getHours(), bustime.getMinut
   es() - now.getMinutes(), bustime.getSeconds() - now.getSeconds());
80.
                    left = new Date(0, 0, 0, 23 - (now.getHours() - bustime.getHours()), 60 - (now
81.
    .getMinutes() - bustime.getMinutes()), 59 - (now.getSeconds() - bustime.getSeconds()));
82.
83.
            } else if (day of week.equals("Fri")) {
84.
                if (bustime.after(now)) {
85.
                    left = new Date(0, 0, 1, bustime.getHours() - now.getHours(), bustime.getMinut
   es() - now.getMinutes(), bustime.getSeconds() - now.getSeconds());
86.
                    left = new Date(0, 0, 0, 23 - (now.getHours() - bustime.getHours()), 60 - (now
87.
    .getMinutes() - bustime.getMinutes()), 59 - (now.getSeconds() - bustime.getSeconds()));
88.
89.
            } else if (day_of_week.equals("Sun")) {
90.
                if (bustime.after(now)) {
                    left = new Date(0, 0, 6, bustime.getHours() - now.getHours(), bustime.getMinut
   es() - now.getMinutes(), bustime.getSeconds() - now.getSeconds());
92.
                    left = new Date(0, 0, 5, 23 - (now.getHours() - bustime.getHours()), 60 - (now
    .getMinutes() - bustime.getMinutes()), 59 - (now.getSeconds() - bustime.getSeconds()));
94.
95.
            } else if (day of week.equals("Mon")) {
96.
                if (bustime.after(now)) {
                    left = new Date(0, 0, 5, bustime.getHours() - now.getHours(), bustime.getMinut
97.
   es() - now.getMinutes(), bustime.getSeconds() - now.getSeconds());
98.
                    left = new Date(0, 0, 4, 23 - (now.getHours() - bustime.getHours()), 60 - (now
    .getMinutes() - bustime.getMinutes()), 59 - (now.getSeconds() - bustime.getSeconds()));
100.
                       }
101.
                   } else if (day of week.equals("Tue")) {
102.
                       if (bustime.after(now)) {
                           left = new Date(0, 0, 4, bustime.getHours() - now.getHours(), bustime.g
   etMinutes() - now.getMinutes(), bustime.getSeconds() - now.getSeconds());
                       } else {
```

```
105.
                           left = new Date(0, 0, 3, 23 - (now.getHours() - bustime.getHours()), 60
     - (now.getMinutes() - bustime.getMinutes()), 59 - (now.getSeconds() - bustime.getSeconds()));
106.
107.
                   } else if (day_of_week.equals("Wed")) {
                        if (bustime.after(now)) {
108.
109.
                            left = new Date(0, 0, 3, bustime.getHours() - now.getHours(), bustime.g
    etMinutes() - now.getMinutes(), bustime.getSeconds() - now.getSeconds());
                       } else {
110.
111.
                            left = new Date(0, 0, 2, 23 - (now.getHours() - bustime.getHours()), 60
     - (now.getMinutes() - bustime.getMinutes()), 59 - (now.getSeconds() - bustime.getSeconds()));
112.
113.
                   } else if (day_of_week.equals("Thu")) {
114.
                        if (bustime.after(now)) {
115.
                            left = new Date(0, 0, 2, bustime.getHours() - now.getHours(), bustime.g
    etMinutes() - now.getMinutes(), bustime.getSeconds() - now.getSeconds());
                       } else {
116.
117.
                           left = new Date(0, 0, 1, 23 - (now.getHours() - bustime.getHours()), 60
     - (now.getMinutes() - bustime.getMinutes()), 59 - (now.getSeconds() - bustime.getSeconds()));
118.
119.
                   viewHolder.Timeleft.setText(Integer.toString(left.getDay()) + "d:" + Integer.to
120.
    String(left.getHours()) + "h:" + Integer.toString(left.getMinutes()) + "m");
121.
                   viewHolder.mView.setOnClickListener(new View.OnClickListener() {@
122.
                       Override public void onClick(View v) {
123.
                            Intent intf = new Intent(viewHolder.mView.getContext(), University Map.
    class);
124.
                            intf.putExtra("type", 1);
                            intf.putExtra("line", items.get(position).getLine_Number());
125.
126.
                           viewHolder.mView.getContext().startActivity(intf);
127.
                        }
128.
                   });
129.
               }
               public static class ViewHolder extends RecyclerView.ViewHolder {
130.
131.
                   public TextView Timet;
132.
                   public TextView Timeleft;
133.
                   public View mView;
134.
                   public Long Timer;
135.
                   public ViewHolder(View itemView) {
136.
                        super(itemView);
137.
                        Timet = (TextView) itemView.findViewById(R.id.bustime);
138.
                       Timeleft = (TextView) itemView.findViewById(R.id.timelefttime);
139.
                       mView = itemView:
140.
                   }
141.
142.
```

CalendarItemsAdapter.java

```
    package com.example.baltu.myapplication.Data_Provider.Adapters;
    import android.content.Context;
    import android.support.v7.widget.RecyclerView;
    import android.view.LayoutInflater;
    import android.view.View;
    import android.view.ViewGroup;
    import android.widget.TextView;
    import com.example.baltu.myapplication.DataTypes.Calender_Data;
    import java.text.DateFormat;
    import java.text.SimpleDateFormat;
```

```
12. import java.util.Date;
13. import java.util.List;
14. public class CalendarItemsAdapter extends RecyclerView.Adapter < CalendarItemsAdapter.ViewHold
    er > {
15.
        private List < Calender Data > mItems;
16.
        private Context mContext;
17.
        public CalendarItemsAdapter(Context context, List < Calender_Data > items) {
18.
            this.mContext = context;
19.
            this.mItems = items;
20.
21.
        Override public CalendarItemsAdapter.ViewHolder onCreateViewHolder(ViewGroup parent, int v
    iewType) {
22.
            LayoutInflater inflater = LayoutInflater.from(mContext);
23.
            View itemView = inflater.inflate(R.layout.calendar_item_layout, parent, false);
24.
            ViewHolder viewHolder = new ViewHolder(itemView);
25.
            return viewHolder;
26.
        }@
27.
        Override public void onBindViewHolder(final CalendarItemsAdapter.ViewHolder holder, int po
    sition) {
28.
            final Calender Data item = mItems.get(position);
29.
            DateFormat df = new SimpleDateFormat("dd / MM / yyyy");
            if (item.getEvent_Name().contains("$")) { //Months will contain $
30.
31.
                holder.TITLE.setText(item.getEvent_Name().substring(2));
32.
                holder.TITLE.setTextSize(24);
33.
                holder.EDateView.setVisibility(View.GONE);
34.
                holder.SDate View.setVisibility(View.GONE);
35.
                holder.TITLE.setTextColor(mContext.getResources().getColor(android.R.color.white))
                holder. \verb|mView.setBackgroundColor(mContext.getResources().getColor(android.R.color.h)| \\
36.
    olo blue dark));
37.
            } else {
38.
                if (item.getEvent Name().contains("##")) { //Years will contain ##
                    holder.TITLE.setText(item.getEvent Name().substring(2));
39.
40.
                    holder.TITLE.setTextSize(24);
                    holder.TITLE.setTextColor(mContext.getResources().getColor(android.R.color.whi
41.
    te));
42.
                    holder.EDateView.setVisibility(View.GONE);
                    holder.SDate View.setVisibility(View.GONE);
43.
                    holder.mView.setBackgroundColor(mContext.getResources().getColor(android.R.col
44.
    or.holo_green_dark));
45.
46.
                    holder.TITLE.setText(item.getEvent Name());
47.
                    if (item.getStartDate().equals(item.getEndDate())) {
48.
                         holder.SDateText.setText(df.format(new Date(item.getStartDate())));
49.
                         holder.EDateView.setVisibility(View.GONE);
50.
                    } else {
                         holder.SDateText.setText(df.format(new Date(item.getStartDate())));
51.
52.
                         holder.SDate.setText("Start Date:");
53.
                         holder.EDateText.setText(df.format(new Date(item.getEndDate())));
54.
55.
                }
56.
57.
58.
        Override public int getItemCount() {
59.
            return mItems.size();
60.
61.
        public static class ViewHolder extends RecyclerView.ViewHolder {
62.
            public TextView TITLE;
63.
            public View SDate View;
64.
            public TextView SDate;
65.
            public TextView SDateText;
```

```
66.
            public TextView EDateText;
67.
            public View EDateView;
68.
            public View mView;
69.
            public ViewHolder(View itemView) {
70.
                super(itemView);
                TITLE = (TextView) itemView.findViewById(R.id.calendar title);
71.
72.
                SDateText = (TextView) itemView.findViewById(R.id.calendar date text);
73.
                SDate = (TextView) itemView.findViewById(R.id.calendar date);
74.
                EDateText = (TextView) itemView.findViewById(R.id.calendar Enddate text);
75.
                EDateView = itemView.findViewById(R.id.calendar end view);
76.
                SDate View = itemView.findViewById(R.id.Calendar StartDate View);
77.
                mView = itemView;
78.
79.
80.}
```

CoursesItemAdapter.java

```
    package com.example.baltu.myapplication.Data Provider.Adapters;

import android.content.Context;
3. import android.content.Intent;
4. import android.support.v7.widget.RecyclerView;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.TextView;
9. import com.example.baltu.myapplication.DataTypes.TimeTable Classes;
10. import com.example.baltu.myapplication.R;
11. import com.example.baltu.myapplication.TimeTables.Courses_Viewer_Editor_Activity;
12. import java.text.DateFormat;
13. import java.text.SimpleDateFormat;
14. import java.util.List;
15. public class CoursesItemAdapter extends RecyclerView.Adapter < CoursesItemAdapter.ViewHolder >
16.
        private static DateFormat timeformat = new SimpleDateFormat("HH:mm");
17.
        private List < TimeTable_Classes > mItems;
18.
        private Context mContext;
19.
        public CoursesItemAdapter(Context context, List < TimeTable_Classes > items) {
20.
            this.mContext = context;
21.
            this.mItems = items;
22.
        Override public CoursesItemAdapter. ViewHolder onCreateViewHolder(ViewGroup parent, int vie
23.
    wType) {
            LayoutInflater inflater = LayoutInflater.from(mContext);
24.
25.
            View itemView = inflater.inflate(R.layout.lecture_layout, parent, false);
26.
            ViewHolder viewHolder = new ViewHolder(itemView);
27.
            return viewHolder;
28.
29
        Override public void onBindViewHolder(final CoursesItemAdapter.ViewHolder holder, int posi
    tion) {
30.
            final TimeTable Classes item = mItems.get(position);
31.
            holder.cName.setText(item.getCourse());
32.
            holder.starttime.setText(item.getStarting time());
33.
            holder.endtime.setText(item.getFinishing time());
34.
            holder.courseid.setText(item.getID());
35.
            holder.mView.setOnClickListener(new View.OnClickListener() {@
36.
                Override public void onClick(View v) {
37.
                    Intent ce = new Intent(mContext, Courses Viewer Editor Activity.class);
38.
                    ce.putExtra("name", item.getCourse());
39.
                    ce.putExtra("day", item.getDay_of_week());
40.
                    ce.putExtra("start", item.getStarting_time());
41.
                    ce.putExtra("end", item.getFinishing_time());
```

```
42.
                    ce.putExtra("note", item.getNotes());
43.
                    ce.putExtra("id", item.getID());
44.
                    mContext.startActivity(ce);
45.
46.
            });
47.
        }@
48.
        Override public int getItemCount() {
49.
            return mItems.size();
50.
51.
        public static class ViewHolder extends RecyclerView.ViewHolder {
52.
            public TextView cName;
53.
            public TextView starttime;
54.
            public TextView endtime;
55.
            public TextView courseid;
56.
            public View mView;
57.
            public ViewHolder(View itemView) {
58.
                super(itemView);
59.
                cName = (TextView) itemView.findViewById(R.id.Task course name);
60.
                starttime = (TextView) itemView.findViewById(R.id.Startt);
61.
                endtime = (TextView) itemView.findViewById(R.id.Endt);
62.
                courseid = (TextView) itemView.findViewById(R.id.course_id);
63.
                mView = itemView;
64.
65.
66.}
```

ExamsItemsAdapter.java

```
    package com.example.baltu.myapplication.Data_Provider.Adapters;

import android.content.Context;
import android.content.Intent;

    import android.support.v7.widget.RecyclerView;

import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.TextView;
9. import com.example.baltu.myapplication.DataTypes.Exam_class;
10. import com.example.baltu.myapplication.R;
11. import com.example.baltu.myapplication.TimeTables.Exams_Viewer_Editor_Activity;
12. import java.text.DateFormat;
13. import java.text.SimpleDateFormat;
14. import java.util.Date;
15. import java.util.List;
16. public class ExamsItemsAdapter extends RecyclerView.Adapter < ExamsItemsAdapter.ViewHolder > {
17.
        private List < Exam_class > mItems;
18.
        private Context mContext;
19.
        int f;
20.
        public ExamsItemsAdapter(Context context, List < Exam_class > items) {
21.
            this.mContext = context;
22.
            this.mItems = items;
23.
24.
        Override public ExamsItemsAdapter.ViewHolder onCreateViewHolder(ViewGroup parent, int view
   Type) {
25.
            LayoutInflater inflater = LayoutInflater.from(mContext);
           View itemView = inflater.inflate(R.layout.exam layout, parent, false);
26.
27.
           ViewHolder viewHolder = new ViewHolder(itemView);
28.
           return viewHolder;
29.
        }@
30.
        Override public void onBindViewHolder(final ExamsItemsAdapter.ViewHolder holder, int posit
   ion) {
31.
            final Exam_class item = mItems.get(position);
```

```
32.
            holder.TName.setText(item.getCourse());
33.
            holder.TDescription.setText(item.getDiscription());
34.
            Date d = new Date(item.getExam_Date()); //String ddate=d.toString();
35.
            DateFormat dtd = new SimpleDateFormat("EEE dd MMM yyyy");
36.
            DateFormat dtt = new SimpleDateFormat("hh:mm aaa");
37.
            holder.DeadLineT.setText(dtt.format(d));
            holder.DeadLineD.setText(dtd.format(d));
38.
            holder.Taskid.setText(item.getID());
39.
            holder.mView.setOnClickListener(new View.OnClickListener() {@
40.
41.
                Override public void onClick(View v) {
                    Intent In = new Intent(mContext, Exams Viewer Editor Activity.class);
42.
43.
                    In.putExtra("id", item.getID());
                    In.putExtra("name", item.getCourse());
44.
                    In.putExtra("desc", item.getDiscription());
45.
46.
                    In.putExtra("date", item.getExam_Date());
                    In.putExtra("notes", item.getNotes());
47.
48.
                    mContext.startActivity(In);
49.
                }
50.
            });
51.
        }@
52.
        Override public int getItemCount() {
53.
            return mItems.size();
54.
        public static class ViewHolder extends RecyclerView.ViewHolder {
55.
56.
            public TextView TName;
57.
            public TextView TDescription;
58.
            public TextView DeadLineT;
59.
            public TextView DeadLineD;
60.
            public TextView Taskid;
61.
            public View mView;
            public ViewHolder(View itemView) {
62.
63.
                super(itemView);
                TName = (TextView) itemView.findViewById(R.id.Task course name);
64.
                TDescription = (TextView) itemView.findViewById(R.id.Task Description);
65.
                DeadLineT = (TextView) itemView.findViewById(R.id.DeadlineTime);
66.
                DeadLineD = (TextView) itemView.findViewById(R.id.DeadlineDate);
67.
68.
                Taskid = (TextView) itemView.findViewById(R.id.TaskID);
69.
                mView = itemView;
70.
71.
72.}
```

TasksItemsAdapter.java

```
1. package com.example.baltu.myapplication.Data_Provider.Adapters;
2. import android.content.Context;
3. import android.content.Intent;
4. import android.support.v7.widget.RecyclerView;
5. import android.view.LayoutInflater;
6. import android.view.View;
7. import android.view.ViewGroup;
8. import android.widget.TextView;
9. import com.example.baltu.myapplication.DataTypes.Tasks_Data;
10. import com.example.baltu.myapplication.R;
11. import com.example.baltu.myapplication.TimeTables.Tasks_Viewer_Editor_Activity;
12. import java.text.DateFormat;
13. import java.text.SimpleDateFormat;
14. import java.util.Date;
15. import java.util.List;
```

```
16. public class TasksItemsAdapter extends RecyclerView.Adapter < TasksItemsAdapter.ViewHolder > {
17.
        private List < Tasks Data > mItems;
18.
        private Context mContext;
19.
        public TasksItemsAdapter(Context context, List < Tasks_Data > items) {
20.
            this.mContext = context;
21.
            this.mItems = items;
22.
23.
        Override public TasksItemsAdapter.ViewHolder onCreateViewHolder(ViewGroup parent, int view
    Type) {
24.
            LayoutInflater inflater = LayoutInflater.from(mContext);
25.
            View itemView = inflater.inflate(R.layout.task_layout, parent, false);
26.
            ViewHolder viewHolder = new ViewHolder(itemView);
27.
            return viewHolder;
28.
        Override public void onBindViewHolder(final TasksItemsAdapter.ViewHolder holder, int posit
29.
    ion) {
30.
            final Tasks Data item = mItems.get(position);
31.
            holder.TName.setText(item.getCourse());
32.
            holder.TDescription.setText(item.getDiscription());
33.
            Date d = new Date(item.getDeadline Date()); //String ddate=d.toString();
            DateFormat dtd = new SimpleDateFormat("EEE dd MMM yyyy");
34.
            DateFormat dtt = new SimpleDateFormat("hh:mm aaa");
35.
            holder.DeadLineT.setText(dtt.format(d));
36.
37.
            holder.DeadLineD.setText(dtd.format(d));
38.
            holder.Taskid.setText(item.getID());
39.
            holder.mView.setOnClickListener(new View.OnClickListener() {@
40.
                Override public void onClick(View v) {
41.
                    Intent In = new Intent(mContext, Tasks_Viewer_Editor_Activity.class);
                    In.putExtra("id", item.getID());
42.
                    In.putExtra("name", item.getCourse());
43.
                    In.putExtra("desc", item.getDiscription());
44.
                    In.putExtra("date", item.getDeadline_Date());
In.putExtra("notes", item.getNotes());
45.
46.
47.
                    mContext.startActivity(In);
48.
                }
49.
            });
50.
        }@
        Override public int getItemCount() {
51.
52.
            return mItems.size();
53.
54.
        public static class ViewHolder extends RecyclerView.ViewHolder {
55.
            public TextView TName;
            public TextView TDescription;
56.
57.
            public TextView DeadLineT;
58.
            public TextView DeadLineD;
59.
            public TextView Taskid;
60.
            public View mView;
            public ViewHolder(View itemView) {
61.
62.
                super(itemView);
63.
                TName = (TextView) itemView.findViewById(R.id.Task course name);
64.
                TDescription = (TextView) itemView.findViewById(R.id.Task Description);
65.
                DeadLineT = (TextView) itemView.findViewById(R.id.DeadlineTime);
66.
                DeadLineD = (TextView) itemView.findViewById(R.id.DeadlineDate);
67.
                Taskid = (TextView) itemView.findViewById(R.id.TaskID);
68.
                mView = itemView;
69.
70.
71.}
```