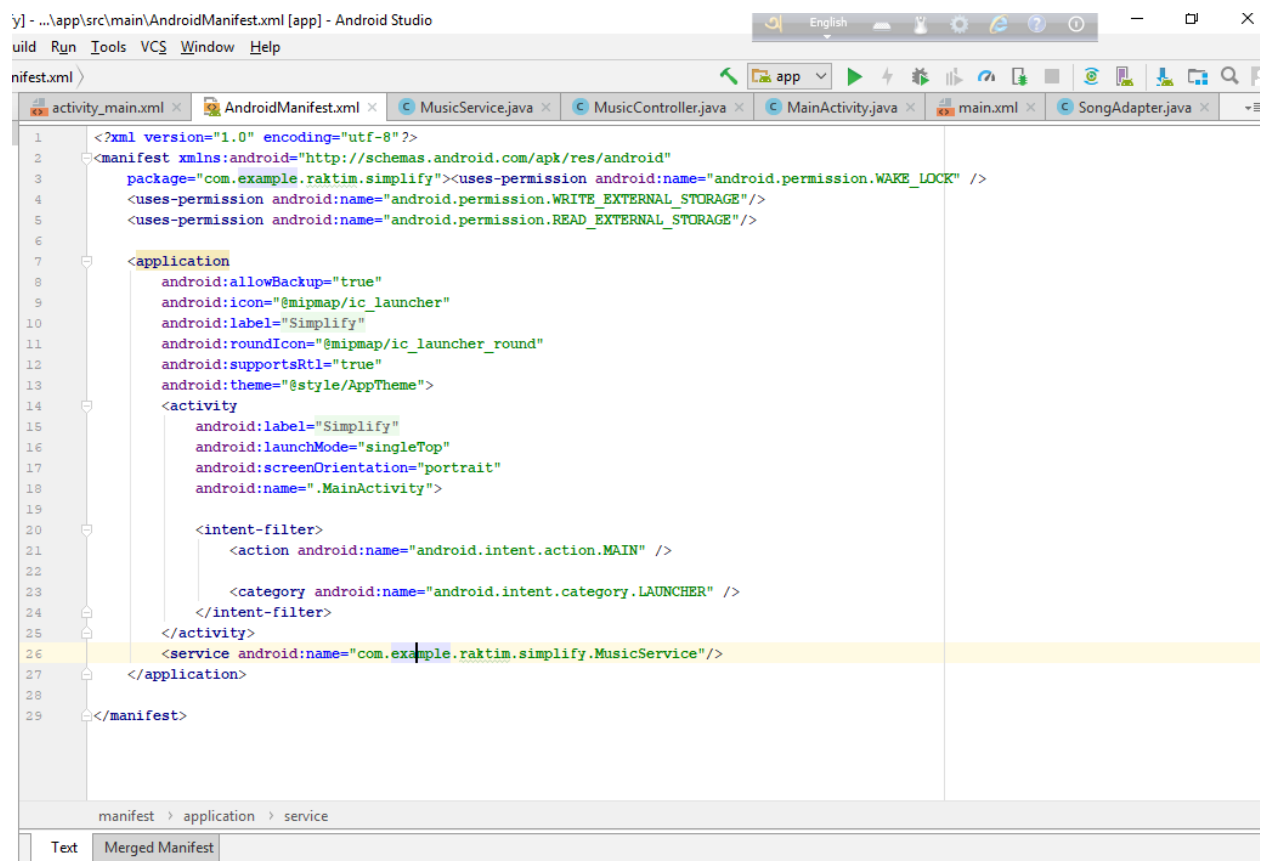# Software Engineering
Group: BETA

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This is our code how we design the application.

om ⟩ example ⟩ raktim ⟩ simplify ⟩ MusicService

activity_main.xml × AndroidManifest.xml × MusicService.java × MusicController.java × MainActivity.java × main.xml × SongAdapt

```java
package com.example.raktim.simplify;
import android.app.Service;
import android.content.Intent;
import android.media.MediaPlayer;
import android.os.IBinder;
import java.util.ArrayList;
import android.content.ContentUris;
import android.media.AudioManager;
import android.net.Uri;
import android.os.Binder;
import android.os.PowerManager;
import android.util.Log;
import java.util.Random;
import android.app.Notification;
import android.app.PendingIntent;

public class MusicService extends Service implements
        MediaPlayer.OnPreparedListener, MediaPlayer.OnErrorListener,
        MediaPlayer.OnCompletionListener {
    //media player
    private MediaPlayer player;
    //song list
    private ArrayList<Song> songs;
    //current position
    private int songPosn;
    private final IBinder musicBind = new MusicBinder();
    private String songTitle = "";
    private static final int NOTIFY_ID = 1;
    private boolean shuffle = false;
    private Random rand;

    @Override
    public void onPrepared(MediaPlayer mp) {
        //start playback
```

MusicService ⟩ playSong()

```java
package com.example.raktim.simplify;
import android.content.Context;
import android.view.KeyEvent;
import android.widget.MediaController;

public class MusicController extends MediaController {
    Context c;
    public MusicController(Context c){
        super(c);
        this.c = c;
    }

    public void hide(){}

    @Override
    public boolean dispatchKeyEvent(KeyEvent event) {
        int keyCode = event.getKeyCode();
        if(keyCode == KeyEvent.KEYCODE_BACK){
            ((MainActivity)c).onBackPressed();
            return true;
        }
        return super.dispatchKeyEvent(event);
    }

}
```

MusicController

Run Tools VCS Window Help

example > raktim > simplify > C MainActivity

app

activity_main.xml ×   AndroidManifest.xml ×   C MusicService.java ×   C MusicController.java ×   C MainActivity.java ×   main.xml ×   C Sc

```java
97              bindService(playIntent, musicConnection, Context.BIND_AUTO_CREATE);
98              startService(playIntent);
99          }
00      }
01
02      //connect to the service
03      private ServiceConnection musicConnection = new ServiceConnection(){
04          @Override
05          public void onServiceConnected(ComponentName name, IBinder service) {
06              MusicBinder binder = (MusicBinder)service;
07              //get service
08              musicSrv = binder.getService();
09              //pass list
10              musicSrv.setList(songList);
11              musicBound = true;
12          }
13
14          @Override
15          public void onServiceDisconnected(ComponentName name) {
16              musicBound = false;
17          }
18
19          public void songPicked(View view){
20              musicSrv.setSong(Integer.parseInt(view.getTag().toString()));
21              musicSrv.playSong();
22              if(playbackPaused){
23                  setController();
24                  playbackPaused=false;
25              }
26              controller.show( timeout: 0);
27          }
28      };
29
30
```

MainActivity > onStart()

d Run Tools VCS Window Help

) 〉 main.xml 〉

activity_main.xml × | AndroidManifest.xml × | © MusicService.java × | © MusicController.java × | © MainActivity.java × | main.xml ×

```xml
1        <?xml version="1.0" encoding="utf-8"?>
2
3        <menu xmlns:android="http://schemas.android.com/apk/res/android"
4            xmlns:simplify="http://schemas.android.com/apk/res-auto">
5
6            <item
7                android:id="@+id/action_shuffle"
8                android:icon="@drawable/rand"
9                android:orderInCategory="1"
10               simplify:showAsAction="always"
11               android:title="Shuffle"/>
12
13           <item
14               android:id="@+id/action_end"
15               android:icon="@drawable/end"
16               android:orderInCategory="2"
17               simplify:showAsAction="always"
18               android:title="End"/>
19       </menu>
```
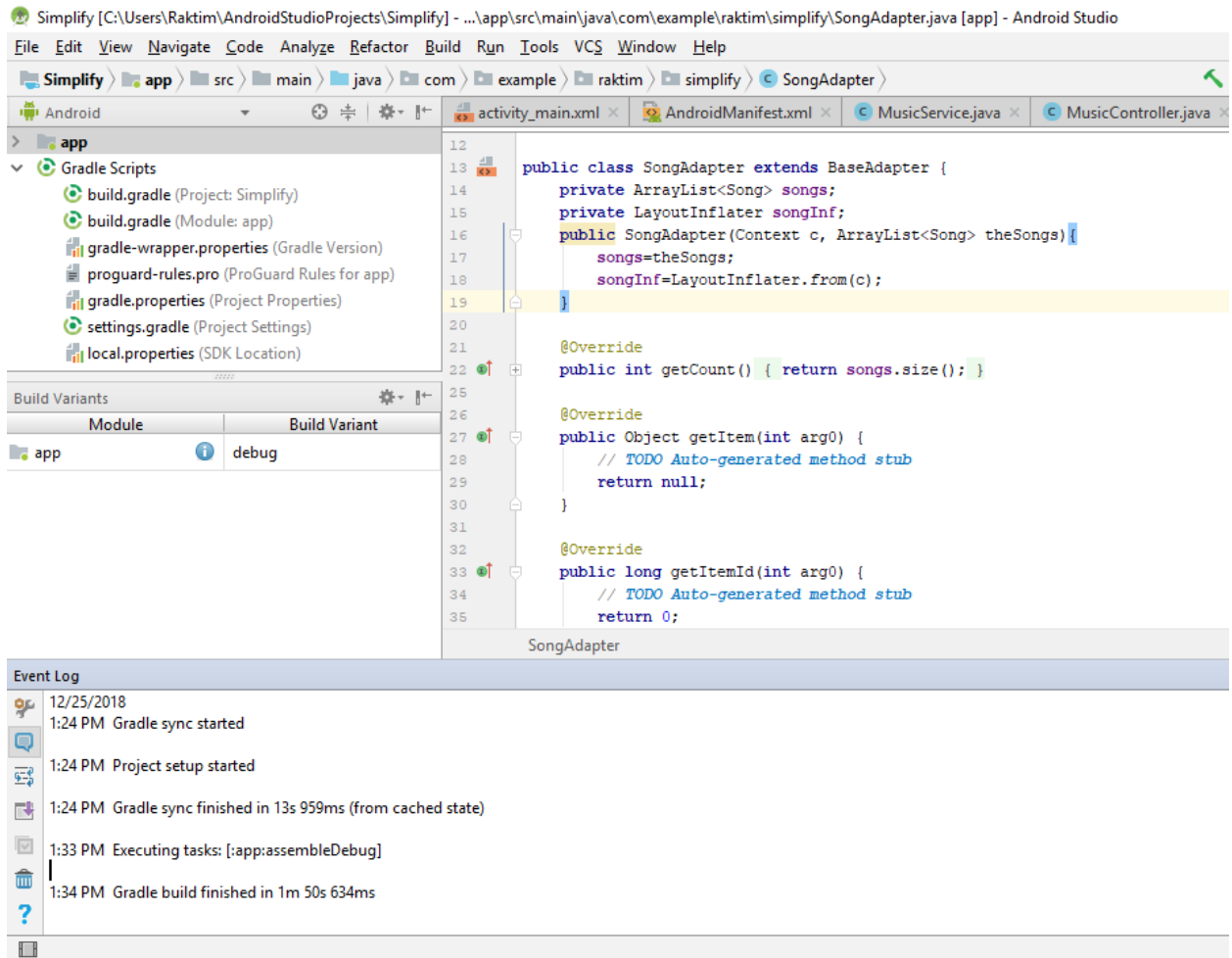
menu 〉 item

Design   Text

inutes ago)   10:43 CRLF‡ UTF-8 C

Build Run Tools VCS Window Help

com > example > raktim > simplify > SongAdapter

activity_main.xml ×   AndroidManifest.xml ×   MusicService.java ×   MusicController.java ×   MainActivity.java ×   main.xml ×   SongAdapt

```java
public class SongAdapter extends BaseAdapter {
    private ArrayList<Song> songs;
    private LayoutInflater songInf;
    public SongAdapter(Context c, ArrayList<Song> theSongs){
        songs=theSongs;
        songInf=LayoutInflater.from(c);
    }

    @Override
    public int getCount() { return songs.size(); }

    @Override
    public Object getItem(int arg0) {
        // TODO Auto-generated method stub
        return null;
    }

    @Override
    public long getItemId(int arg0) {
        // TODO Auto-generated method stub
        return 0;
    }

    @Override
    public View getView(int position, View convertView, ViewGroup parent) {
        //map to song layout
        LinearLayout songLay = (LinearLayout)songInf.inflate
            (R.layout.song, parent,  attachToRoot: false);
        //get title and artist views
        TextView songView = (TextView)songLay.findViewById(R.id.song_title);
        TextView artistView = (TextView)songLay.findViewById(R.id.song_artist);
        //get song using position
        Song currSong = songs.get(position);
```

SongAdapter

And This has been appear after build this application

We can see ,no error is here.

And this is the final application after run and build the code. given below:

Simplify

17_prishtha_(_সতেরো_পৃষ্ঠা_)_by_Ashes
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A._R._Rahman,_"Jiya_Jale"_(Dil_Se):_Berklee_Indian_Ensemble_(Cover)
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AAMI_TOMAKEI_BOLE_DEBO_-_TAPOSH_FEAT._BAPPA_MAJUMDER_:_OMZ_WIND_OF_CHANGE_[_S:02_]
<unknown>

Aaj_Jaane_Ki_Zid_Na_Karo_Arijit_Singh
<unknown>

Aaoge_Jab_Tum_Full_Song_|_Jab_We_Met_|_Kareena__Kapoor,_Shahid_Kapoor
<unknown>

Adit_Feat._Elita_and_Mahadi-_Hridoy_(Version_1)
<unknown>

Alga_korogo_khopar_badhon_(Nazrul_shongeet)_-_Pulak.avi
<unknown>

Aqua_-_Barbie_Girl
<unknown>

Arnob-_tomar_jonno

This is a team project so we work together but a we did some specific portion of this application individually such as;

Project managing: Ruhel Ahmed Raktim
UI design planning: Md Mamun Ali
UI design implementation: Sarfaraj Rahman
Java Programmer: Md Zahirul haque
Usability and Features handling: Daniel

Conclusion: We tried our best to implement this project. And successfully we had run it . we find many bugs here and we solve it ourselves. This is such a big opportunity to create a software. And we will definitely work on it to update our own software