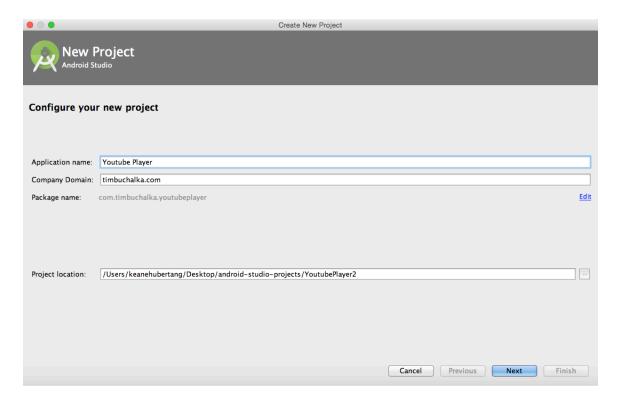
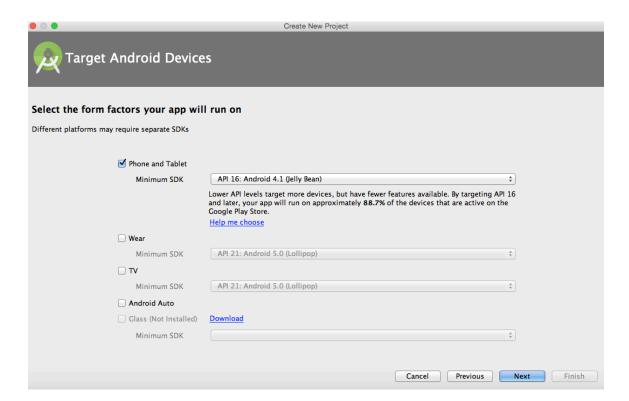
Youtube App For Android Studio 1.4

Lecture 42 - Youtube App Setup

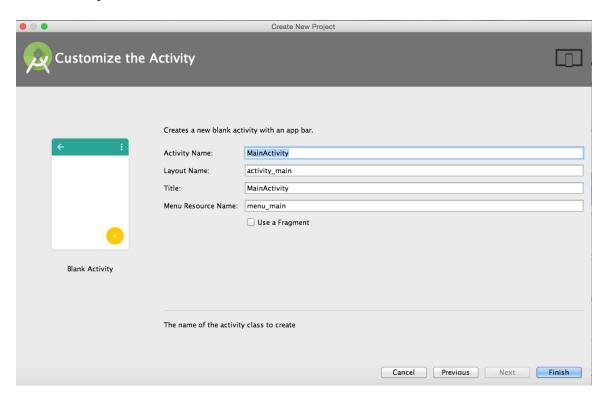
Create a new Android Studio Project, set the Application Name to "Youtube Player" and set the Company Domain to "timbuchalka.com". Click On Next to proceed.



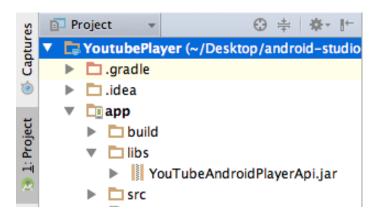
Make sure Phone and Tablet SDK is checked, and is set to API 16. Leave the other boxes uncheck and press Next.



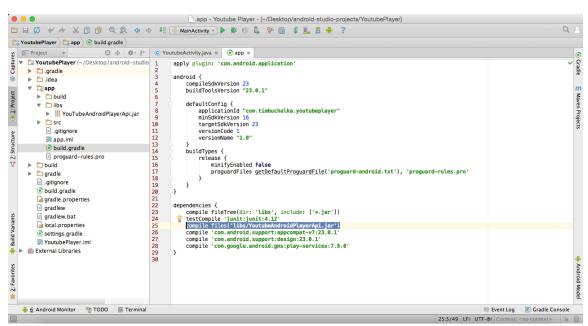
Choose Blank Activity and press Next and on the last screen leave everything at default and press Finish.



Then go to https://developers.google.com/youtube/android/player and download the Youtube Player jar file. Once it has been downloaded, extract the zip file and copy and paste the .jar file into the YoutubePlayer app's libs folder in YouTubePlayer/app/libs.



Then open up the **build.gradle** file in the **YouTubePlayer/app**. And add the following line "compile files('libs/YoutubeAndroidPlayerApi.jar')" in the dependencies area.



http://i.imgur.com/scqzLUr.png

Next open up the MainActivity.java file in the

YouTubePlayer/app/src/main/java/packagename and comment out the following lines by pressing CMD+/ or manually commenting it by adding // on the beginning of each line:

FloatingActionButton fab = (FloatingActionButton) findViewById(R.id.fab); fab.setOnClickListener(new View.OnClickListener() {

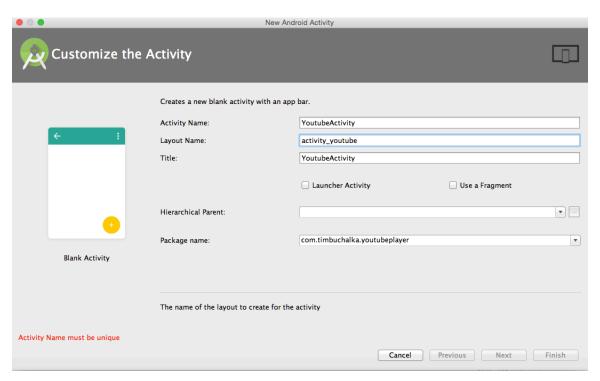
This what it looks like after commenting the lines.

Next, open up the activity_main.xml file in the **YouTubePlayer/app/src/main/res/layout** and comment out the following lines:

```
<android.support.design.widget.FloatingActionButton
    android:id="@+id/fab"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="bottom|end"
    android:layout_margin="@dimen/fab_margin"
    android:src="@android:drawable/ic_dialog_email"/>
```

This is what it looks like after commenting the lines:

Next, right click on the **YouTubePlayer/app/src/main/java/packagename** and create a new Blank Activity. Then set the Activity Name to **YoutubeActivity**, set the Layout Name to activity_youtube, and then clicked Finish.



After the activity has been created open up YoutubeActivity in the **YouTubePlayer/app/src/main/java/packagename** and comment out the following lines by pressing CMD+/ or manually commenting it by adding // on the beginning of each line:

FloatingActionButton fab = (FloatingActionButton) findViewById(R.id.fab); fab.setOnClickListener(new View.OnClickListener() { @Override

This what it looks like after commenting the lines.

Next, comment out the following lines in the onCreate method.

setSupportActionBar(toolbar);

```
Toolbar toolbar = (Toolbar) findViewById(R.id.toolbar);
setSupportActionBar(toolbar);

Toolbar toolbar = (Toolbar) findViewById(R.id.toolbar);
```

Next, open up the activity_youtube.xml file in the **YouTubePlayer/app/src/main/res/layout** and comment out the following lines:

```
<android.support.design.widget.FloatingActionButton
  android:id="@+id/fab"
  android:layout_width="wrap_content"
  android:layout_height="wrap_content"
  android:layout_gravity="bottom|end"
  android:layout_margin="@dimen/fab_margin"
  android:src="@android:drawable/ic_dialog_email"/>
```

This is what it looks like after commenting the lines:

Then go back to YoutubeActivity.java and replace the following line "public class YoutubeActivity extends AppCompatActivity" to "public class YoutubeActivity extends YouTubeBaseActivity implements YouTubePlayer.OnInitializedListener"

Then add the following fields within the class:

```
private String GOOGLE_API_KEY = "TBA";
private String YOUTUBE_VIDEO_ID = "TBA";
```

Your current YoutubeActivity code should look like the following:

```
public class YoutubeActivity extends YouTubeBaseActivity implements
YouTubePlayer.OnInitializedListener{
  private String GOOGLE_API_KEY = "AlzaSyB4xh2zIJ5nUfytHeCb6huCQk-S_jvAHyo";
  private String YOUTUBE VIDEO ID = "XUb97Wv9R6o";
  @Override
  protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_youtube);
      Toolbar toolbar = (Toolbar) findViewById(R.id.toolbar);
      setSupportActionBar(toolbar);
      FloatingActionButton fab = (FloatingActionButton) findViewById(R.id.fab);
     fab.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
          Snackbar.make(view, "Replace with your own action",
Snackbar.LENGTH_LONG)
//
              .setAction("Action", null).show();
```

```
// }
// });
}
}
```

Next open up the content_youtube.xml and replace the contents with the following code below:

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
 xmlns:android="http://schemas.android.com/apk/res/android"
 xmlns:tools="http://schemas.android.com/tools"
 xmlns:app="http://schemas.android.com/apk/res-auto"
 android:layout_width="match_parent"
 android:orientation="vertical"
 android:layout_height="match_parent"
 app:layout_behavior="@string/appbar_scrolling_view_behavior"
 tools:showIn="@layout/activity_youtube"
 tools:context="com.timbuchalka.youtubeplayer.YoutubeActivity">
 <com.google.android.youtube.player.YouTubePlayerView</pre>
   android:id="@+id/youtube_player"
   android:layout_width="match_parent"
   android:layout_height="match_parent"
   android:background="#ffffff"/>
</LinearLayout>
```

Lecture 43 - Youtube App - Add activity & Listeners

Open up YoutubeActivity.java and add the following lines within the onCreate method.

```
YouTubePlayerView youTubePlayerView = (YouTubePlayerView)
findViewById(R.id.youtube_player);
youTubePlayerView.initialize(GOOGLE_API_KEY, this);
```

Then generate Override Methods and Select **onInitializationSuccess** and **onInitializationFailure** which can be found way below the Override Methods window. Press Ok after selecting both.

Within the parentheses of the public void onInitializationSuccess method, change **boolean b** to **boolean wasRestored**.

Add the following line within the **onInitializationFailure** method.

```
Toast.makeText(this, "Cannot initialize Youtube player",
Toast.LENGTH_LONG).show();
```

Add the following lines of code in the **onInitializationSuccess** method.

```
youTubePlayer.setPlayerStateChangeListener(playerStateChangeListener);
youTubePlayer.setPlaybackEventListener(playbackEventListener);

if(!wasRestored) {
    youTubePlayer.cueVideo(YOUTUBE_VIDEO_ID);
}
```

It should look like the following:

http://i.imgur.com/xgHwbni.png

Then next we need add the **PlaybackEventListener** and **PlayerStateChangeListener**, so add the following line of code in YoutubeActivity.

```
private YouTubePlayer.PlaybackEventListener playbackEventListener = new
YouTubePlayer.PlaybackEventListener() {
   @Override
   public void onPlaying() {
   @Override
   public void onPaused() {
   @Override
   public void onStopped() {
   @Override
   public void onBuffering(boolean b) {
   @Override
   public void onSeekTo(int i) {
 private YouTubePlayer.PlayerStateChangeListener playerStateChangeListener =
new YouTubePlayer.PlayerStateChangeListener() {
    @Override
```

```
public void onLoading() {
@Override
public void onLoaded(String s) {
}
@Override
public void onAdStarted() {
@Override
public void onVideoStarted() {
}
@Override
public void onVideoEnded() {
@Override
public void onError(YouTubePlayer.ErrorReason errorReason) {
```

Then add the line "Toast.makeText(YoutubeActivity.this, "Good, video is playing...", Toast.LENGTH_LONG).show();" in the **public void onPlaying** method. Next, add the line "Toast.makeText(YoutubeActivity.this, "Oh you paused???", Toast.LENGTH_LONG).show();" in the **public void onPaused()** method. These are in the **private YouTubePlayer.PlaybackEventListener**

The **private YouTubePlayer.PlaybackEventListener** should look like this in the end.

```
private YouTubePlayer.PlaybackEventListener playbackEventListener = new YouTubePlayer.PlaybackEventListener() {
    @Override
    public void onPlaying() {
        Toast.makeText(YoutubeActivity.this, "Good, video is playing...", Toast.LENGTH_LONG).show();
    }
    @Override
    public void onPaused() {
        Toast.makeText(YoutubeActivity.this, "Oh you paused???", Toast.LENGTH_LONG).show();
    }
    @Override
    public void onStopped() {
    }
    @Override
    public void onBuffering(boolean b) {
        @Override
    public void onSeekTo(int i) {
     }
    }
}
```

http://i.imgur.com/yAnoP0K.png

Then add the line "Toast.makeText(YoutubeActivity.this, "Make the video content author rich???", Toast.LENGTH_LONG).show();" in the public void onAdStarted() method. Next, add the line "Toast.makeText(YoutubeActivity.this, "Video started!!", Toast.LENGTH_LONG).show();" in the public void onVideoStarted() method. These are in the private YouTubePlayer.PlayerStateChangeListener

The **private YouTubePlayer.PlayerStateChangeListener** should look like this in the end.

http://i.imgur.com/I5h4NMD.png

Lecture 44 - Youtube App - Getting The API KEY

Create a Youtube API and paste the API key in the "private String GOOGLE_API_KEY = "TBA";" replace the TBA with the API key. Then get the a Youtube Video ID from an random youtube video and replace the TBA within the "private String YOUTUBE VIDEO ID = "TBA";" line. These lines are in the YoutubeActivity.

They should look like this when adding the key and video id.

```
private String GOOGLE_API_KEY = "AIzaSyB4xh2zIJ5nUfytHeCb6huCQk-S_jvAHyo";
private String YOUTUBE_VIDEO_ID = "XUb97Wv9R6o";
```

Next, open up AndroidManifest.xml file in the **YouTubePlayer/app/src/main/res** and paste in the following lines of code within the <activity> tag for YoutubeActivity.

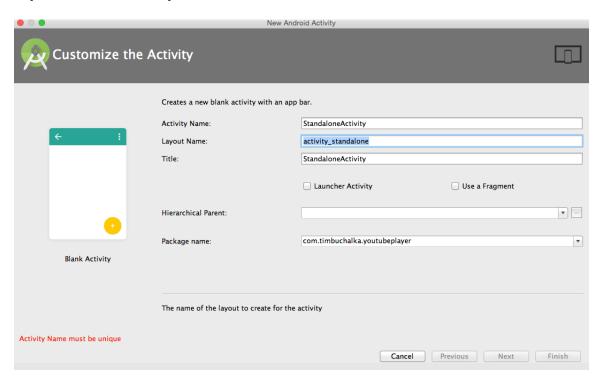
```
<intent-filter>
     <action android:name="android.intent.action.MAIN" />
     <category android:name="android.intent.category.LAUNCHER" />
     </intent-filter>
```

It should look like this in the end.

Then run the YoutubeActivity by right clicking on the YoutubeActivity on the project pane and select Run YoutubeActivity.

Lecture 45 - Youtube App - Standalone Activity

Right click on the **YouTubePlayer/app/src/main/java/packagename** and create a new Blank Activity. Then set the Activity Name to **StandaloneActivity**, set the Layout Name to activity_standalone, and then clicked Finish.



After the activity has been created open up StandaloneActivity in the **YouTubePlayer/app/src/main/java/packagename** and comment out the following lines by pressing CMD+/ or manually commenting it by adding // on the beginning of each line:

This what it looks like after commenting the lines.

Next, open up the activity_standalone.xml file in the **YouTubePlayer/app/src/main/res/layout** and comment out the following lines:

```
<android.support.design.widget.FloatingActionButton
    android:id="@+id/fab"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_gravity="bottom|end"
    android:layout_margin="@dimen/fab_margin"
    android:src="@android:drawable/ic_dialog_email"/>
```

This is what it looks like after commenting the lines:

Then go open up the content_standalone.xml file in the **YouTubePlayer/app/src/main/res/layout** folder. Replace the contents with the following lines of code.

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
   xmlns:android="http://schemas.android.com/apk/res/android"
   xmlns:tools="http://schemas.android.com/tools"
   xmlns:app="http://schemas.android.com/apk/res-auto"
   android:layout_width="match_parent"
   android:layout_height="match_parent"</pre>
```

```
android:orientation="vertical"
 app:layout_behavior="@string/appbar_scrolling_view_behavior"
 tools:showIn="@layout/activity_standalone"
 tools:context="com.timbuchalka.youtubeplayer.StandaloneActivity">
 <Button
   android:id="@+id/btnPlayVideo"
   android:layout width="wrap content"
   android:layout_height="wrap_content"
   android:layout margin="5dp"
   android:text="Play Video"/>
  <Button
   android:id="@+id/btnPlaylist"
   android:lavout width="wrap content"
   android:layout_height="wrap_content"
   android:layout margin="5dp"
   android:text="Play Playlist"/>
</LinearLayout>
```

Then open up the StandaloneActivity and copy and paste in the GOOGLE_API_KEY and YOUTUBE_VIDEO_ID fields from YoutubeActivity to the StandaloneActivity class.

```
private String GOOGLE_API_KEY = "AlzaSyB4xh2zIJ5nUfytHeCb6huCQk-S_jvAHyo"; private String YOUTUBE_VIDEO_ID = "XUb97Wv9R6o";
```

Then add in the following lines of code below it.

```
private String YOUTUBE_PLAYLIST_ID = "TBA";

private Button btnPlayVideo;

private Button btnPlaylist;
```

Next, edit "public class YoutubeActivity extends YouTubeBaseActivity" to "public class YoutubeActivity extends YouTubeBaseActivity implements YouTubePlayer.OnInitializedListener"

Then generate a Override Method, and select on Click View which is located way below the Override Method window.

You should get this lines of code

```
@Override
public void onClick(View v) {
```

)

Next add the following lines in the onCreate method.

```
btnPlayVideo = (Button) findViewById(R.id.btnPlayVideo);
btnPlaylist = (Button) findViewById(R.id.btnPlaylist);
btnPlayVideo.setOnClickListener(this);
btnPlaylist.setOnClickListener(this);
```

The code in StandaloneActivity should look like this currently.

```
12 👩
       public class StandaloneActivity extends AppCompatActivity implements View.OnClickListener{
13
14
           private String GOOGLE_API_KEY = "AIzaSyB4xh2zIJ5nUfytHeCb6huCQk-S_jvAHyo";
15
           private String YOUTUBE_VIDEO_ID = "XUb97Wv9R6o";
16
           private String YOUTUBE_PLAYLIST_ID = "PLXtTjtWmQhg3aTiE0y_i0_DRlKtTiv519";
17
18
           private Button btnPlayVideo;
19
           private Button btnPlaylist;
20
21
22
           @Override
23 ⊚↑
           protected void onCreate(Bundle savedInstanceState) {
24
               super.onCreate(savedInstanceState);
25
               setContentView(R.layout.activity_standalone);
26
               Toolbar toolbar = (Toolbar) findViewById(R.id.toolbar);
27
               setSupportActionBar(toolbar);
28
               btnPlayVideo = (Button) findViewById(R.id.btnPlayVideo);
29
               btnPlaylist = (Button) findViewById(R.id.btnPlaylist);
30
               btnPlayVideo.setOnClickListener(this);
31
               btnPlaylist.setOnClickListener(this);
32
33
                 FloatingActionButton fab = (FloatingActionButton) findViewById(R.id.fab);
34
                 fab.setOnClickListener(new View.OnClickListener() {
35
36
                     public void onClick(View view) {
                        Snackbar.make(view, "Replace with your own action", Snackbar.LENGTH_LONG)
37
                                 .setAction("Action", null).show();
38
39
40
                 });
41
42
43
44 ef
           public void onClick(View v) {
45
```

http://i.imgur.com/lovLJFm.png

Next, add these lines of code in the **public void onClick method**.

```
Intent intent = null;
    switch(v.getId()) {
        case R.id.btnPlayVideo:
            intent = YouTubeStandalonePlayer.createVideoIntent(this, GOOGLE_API_KEY,
YOUTUBE_VIDEO_ID);
            break;
        case R.id.btnPlaylist:
```

```
intent = YouTubeStandalonePlayer.createPlaylistIntent(this,
GOOGLE_API_KEY, YOUTUBE_PLAYLIST_ID);
    break;

    default:
    }
    if(intent != null) {
        startActivity(intent);
    }
}
```

Then search for a youtube playlist and paste its ID in the TBA area of the "private String YOUTUBE_PLAYLIST_ID = "TBA";"

Finally, go back to the AndroidManifest.xml file and add in the following lines within the <activity> tag of the StandaloneActivity.

```
<intent-filter>
     <action android:name="android.intent.action.MAIN" />
     <category android:name="android.intent.category.LAUNCHER" />
     </intent-filter>
```

It should end up looking like this.

Then run the StandaloneActivity by right clicking on the StandaloneActivity on the project pane and select Run StandaloneActivity.

Lecture 46 - Youtube App - Finish and Wrap Up

Open up the content_main.xml and replace with the following lines of code.

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
 xmlns:android="http://schemas.android.com/apk/res/android"
 xmlns:tools="http://schemas.android.com/tools"
 xmlns:app="http://schemas.android.com/apk/res-auto"
 android:layout width="match parent"
 android:layout_height="match_parent"
 android:orientation="vertical"
 app:layout_behavior="@string/appbar_scrolling_view_behavior"
 tools:showIn="@layout/activity_main"
 tools:context="com.timbuchalka.youtubeplayer.MainActivity">
 <Button
   android:id="@+id/btnPlaySingle"
   android:layout width="wrap content"
   android:layout_height="wrap_content"
   android:layout_margin="5dp"
   android:text="Play Single Video"/>
 <Button
   android:id="@+id/btnStandalone"
   android:layout width="wrap content"
   android:layout_height="wrap_content"
   android:layout margin="5dp"
   android:text="Standalone SubMenu"/>
</LinearLayout>
```

Open up the MainActivity.java file and add in the following lines of code.

```
private Button btnSingle;
private Button btnStandalone;
```

And then edit "public class MainActivity extends AppCompatActivity" to "public class MainActivity extends AppCompatActivity implements View.OnClickListener"

Then generate a Override Method, and select onClick View which is located way below the Override Method window.

You should get this lines of code

```
@Override
public void onClick(View v) {
}
```

Then add the following lines in the onCreate method.

```
btnSingle = (Button) findViewById(R.id.btnPlaySingle);
btnStandalone = (Button) findViewById(R.id.btnStandalone);
btnSingle.setOnClickListener(this);
btnStandalone.setOnClickListener(this);
```

It should look like this currently.

```
public class MainActivity extends AppCompatActivity implements View.OnClickListener {
    private Button btnSingle;
    private Button btnStandalone;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        Toolbar toolbar = (Toolbar) findViewById(R.id.toolbar);
        setSupportActionBar(toolbar);
        btnSingle = (Button) findViewById(R.id.btnPlaySingle);
        btnStandalone = (Button) findViewById(R.id.btnStandalone);
        btnSingle.setOnClickListener(this);
        btnStandalone.setOnClickListener(this);
          FloatingActionButton fab = (FloatingActionButton) findViewById(R.id.fab);
          fab.setOnClickListener(new View.OnClickListener() {
             @Override
             public void onClick(View view) {
                 Snackbar.make(view, "Replace with your own action", Snackbar.LENGTH_LONG)
                          .setAction("Action", null).show();
//
          });
    @Override
    public void onClick(View v) {
```

Then add these following lines of code in the **public void onClick method**.

```
Intent intent = null;
switch(v.getId()) {
    case R.id.btnPlaySingle:
    intent = new Intent(MainActivity.this, YoutubeActivity.class);
```

```
break;
  case R.id.btnStandalone:
    intent = new Intent(MainActivity.this, StandaloneActivity.class);
    break;

  default:
  }
  if(intent != null) {
    startActivity(intent);
  }
}
```

Then run the MainActivity by right clicking on the MainActivity on the project pane and select Run MainActivity.