Android GuideBook:

Activity.main.xml:

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


<TextView
android:layout_gravity="center"
android:id="@+id/textView"
android:textSize="50sp"
android:textStyle="bold"
android:textColor="@color/colorAccent"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignEnd="@+id/seekBar"
android:layout_alignParentTop="true"
android:layout_marginTop="106dp"
android:layout_marginEnd="-8dp"
android:text="0" />

<SeekBar
android:id="@+id/seekBar"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_alignParentStart="true"
android:layout_alignParentTop="true"
android:layout_marginStart="25dp"
android:layout_marginTop="263dp" />


</LinearLayout>
```

MainActivtity.java:

```java
package com.example.anabi.randomproject;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.SeekBar;
import android.widget.TextView;

import static java.lang.Integer.parseInt;

public class MainActivity extends AppCompatActivity {

SeekBar seekBar;
```

```java
TextView textView;

@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);

seekBar = (SeekBar)findViewById(R.id.seekBar);
textView = (TextView)findViewById(R.id.textView);

seekBar.setOnSeekBarChangeListener(new SeekBar.OnSeekBarChangeListener() {
@Override
public void onProgressChanged(SeekBar seekBar, int progress, boolean fromUser) {

textView.setText(progress+"");

}

@Override
public void onStartTrackingTouch(SeekBar seekBar) {

}

@Override
public void onStopTrackingTouch(SeekBar seekBar) {

}
});


}

}
```

EditText: How does it work

Activity.xml:

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


<EditText

android:layout_marginLeft="40dp"
android:layout_marginTop="25dp"
android:padding="10dp"
android:hint="Name.."
```

```xml
    android:id="@+id/et_name"
    android:layout_width="300dp"
    android:layout_height="wrap_content" />

<EditText

    android:layout_marginLeft="40dp"
    android:layout_marginTop="25dp"
    android:padding="10dp"
    android:hint="Password.."
    android:id="@+id/et_pass"
    android:layout_width="300dp"
    android:layout_height="wrap_content" />

<EditText
    android:layout_marginLeft="40dp"
    android:layout_marginTop="25dp"
    android:padding="10dp"
    android:hint="Email.."
    android:id="@+id/et_email"
    android:layout_width="300dp"
    android:layout_height="wrap_content" />

<Button
    android:layout_marginTop="30dp"
    android:layout_gravity="center"
    android:background="#f2f2f2"
    android:textColor="@color/colorAccent"
    android:textStyle="bold"
    android:textSize="20sp"
    android:text="Submit"
    android:id="@+id/btn_submit"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content" />



</LinearLayout>
```

MainActivity.java:

```java
package com.example.anabi.randomproject;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;


public class MainActivity extends AppCompatActivity {

EditText et_name,et_pass,et_email;
Button submit;

@Override
```

```java
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);


et_email = (EditText) findViewById(R.id.et_email);
et_name = (EditText) findViewById(R.id.et_name);
et_pass = (EditText) findViewById(R.id.et_pass);
submit = (Button)findViewById(R.id.btn_submit);

submit.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) {
Toast.makeText(getApplicationContext(),"Hello "+et_name.getText().toString()+" \n"+
"Your Password: "+et_pass.getText().toString()+" \n"+
"Your Email: "+et_email.getText().toString(),Toast.LENGTH_SHORT).show();
}
});



}

}
```

Intent Pass DATA from One To another and Reverse

Activity.main.xml:

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

<TextView
android:id="@+id/msgTextView"
android:layout_marginLeft="40dp"
android:layout_marginTop="10dp"
android:text="Message:"
android:textStyle="bold"
android:textSize="15sp"
android:layout_width="wrap_content"
android:layout_height="wrap_content" />

<EditText

android:layout_marginLeft="40dp"
android:layout_marginTop="25dp"
android:padding="10dp"
android:hint="Name.."
android:id="@+id/et_name"
```

```xml
    android:layout_width="300dp"
    android:layout_height="wrap_content" />

<EditText

    android:layout_marginLeft="40dp"
    android:layout_marginTop="25dp"
    android:padding="10dp"
    android:hint="Password.."
    android:id="@+id/et_pass"
    android:layout_width="300dp"
    android:layout_height="wrap_content" />

<EditText
    android:layout_marginLeft="40dp"
    android:layout_marginTop="25dp"
    android:padding="10dp"
    android:hint="Email.."
    android:id="@+id/et_email"
    android:layout_width="300dp"
    android:layout_height="wrap_content" />

<Button
    android:layout_marginTop="30dp"
    android:layout_gravity="center"
    android:background="#f2f2f2"
    android:textColor="@color/colorAccent"
    android:textStyle="bold"
    android:textSize="20sp"
    android:text="Submit"
    android:id="@+id/btn_submit"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content" />


</LinearLayout>
```

Activity 2.main.xml:

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    tools:context=".Main2Activity">

<TextView
    android:layout_marginRight="98dp"
    android:textStyle="bold"
    android:textColor="#646464"
    android:textSize="20sp"
    android:layout_gravity="center"
    android:layout_marginTop="30dp"
    android:id="@+id/textViewNameId"
```

```xml
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Name:" />

<TextView
    android:layout_marginRight="80dp"
    android:textStyle="bold"
    android:textColor="#646464"
    android:textSize="20sp"
    android:layout_gravity="center"
    android:layout_marginTop="30dp"
    android:id="@+id/textViewPasswordId"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Password:" />


<TextView
    android:layout_marginRight="98dp"
    android:textStyle="bold"
    android:textColor="#646464"
    android:textSize="20sp"
    android:layout_gravity="center"
    android:layout_marginTop="30dp"
    android:id="@+id/textViewEmailId"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Email:" />

<EditText

    android:textStyle="bold"
    android:textColor="#646464"
    android:textSize="22sp"
    android:layout_gravity="center"
    android:layout_marginTop="100dp"
    android:id="@+id/msgForFirstActivity"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:hint="Message for 1st Activity" />

<Button
    android:id="@+id/btn_send_first"
    android:layout_marginLeft="135dp"
    android:layout_marginTop="20dp"
    android:textStyle="bold"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Send to 1st "/>


</LinearLayout>
```

MainActivity.java:

package com.example.anabi.randomproject;

```java
import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.Toast;


public class MainActivity extends AppCompatActivity {

static final int REQUEST_CODE = 20;

EditText et_name,et_pass,et_email;
Button submit;

@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);


et_email = (EditText) findViewById(R.id.et_email);
et_name = (EditText) findViewById(R.id.et_name);
et_pass = (EditText) findViewById(R.id.et_pass);
submit = (Button)findViewById(R.id.btn_submit);

submit.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) {

Intent intent = new Intent(MainActivity.this,Main2Activity.class);

intent.putExtra("Name",et_name.getText().toString());
intent.putExtra("Password",et_pass.getText().toString());
intent.putExtra("Email",et_email.getText().toString());

startActivityForResult(intent,REQUEST_CODE);


}
});

}

@Override
protected void onActivityResult(int requestCode, int resultCode, Intent data){

if((requestCode==REQUEST_CODE)&&(resultCode==RESULT_OK)){

TextView msgTextView = (TextView)findViewById(R.id.msgTextView);
msgTextView.append(data.getExtras().getString("Message"));

}
```

```
}


}


MainActivity2.java:

package com.example.anabi.randomproject;

import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;

public class Main2Activity extends AppCompatActivity {

TextView nameTextView,passTextView,emailTextView;

@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main2);

nameTextView = (TextView) findViewById(R.id.textViewNameId);
passTextView = (TextView) findViewById(R.id.textViewPasswordId);
emailTextView = (TextView) findViewById(R.id.textViewEmailId);


Button msgButton = (Button)findViewById(R.id.btn_send_first);
msgButton.setOnClickListener(new View.OnClickListener() {
@Override
public void onClick(View v) {
finish();
}
});




Bundle bundle = getIntent().getExtras();
nameTextView.append(bundle.getString("Name"));
passTextView.append(bundle.getString("Password"));
emailTextView.append(bundle.getString("Email"));



}
```

```java
@Override
public void finish(){

Intent intent2ndActivity = new Intent();
EditText msgfrom2ndto1st = (EditText) findViewById(R.id.msgForFirstActivity);
intent2ndActivity.putExtra("Message", msgfrom2ndto1st.getText().toString());
setResult(RESULT_OK,intent2ndActivity);

super.finish();


}


}
```

*** ****TAB_LAYOUT_ ICON STYLE AND SCROLLABLE******_____*

AcitvityMain.xml:

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



<android.support.v7.widget.Toolbar
android:id="@+id/toolbar"
android:background="@color/colorPrimary"
android:layout_width="match_parent"
android:minHeight="?attr/actionBarSize"
android:layout_height="wrap_content"
android:theme="@style/ThemeOverlay.AppCompat.Dark.ActionBar"
app:popupTheme="@style/ThemeOverlay.AppCompat.Light">

<TextView
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="Sliding Tabs"
android:textColor="#ffd4e3"/>

</android.support.v7.widget.Toolbar>

<android.support.design.widget.TabLayout
android:id="@+id/tab"
android:background="@color/colorPrimary"
android:minHeight="?attr/actionBarSize"
android:layout_width="match_parent"
android:layout_height="wrap_content"
app:tabMode="scrollable"
app:tabSelectedTextColor="#ffd4e3"
android:theme="@style/ThemeOverlay.AppCompat">
```

</android.support.design.widget.TabLayout>

```xml
<android.support.v4.view.ViewPager
android:id="@+id/pager"
android:layout_width="match_parent"
android:layout_height="wrap_content">

</android.support.v4.view.ViewPager>

</LinearLayout>
```

Fragment_tab1.xml:

```xml
<?xml version="1.0" encoding="utf-8"?>
<FrameLayout xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:tools="http://schemas.android.com/tools"
android:layout_width="match_parent"
android:layout_height="match_parent"
tools:context=".Tab1">

<!-- TODO: Update blank fragment layout -->
<TextView
android:layout_gravity="center"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="Tab1"
android:textStyle="bold"
android:textSize="40sp"
/>

</FrameLayout>
```

Fragment_tab2.xml:

```xml
<?xml version="1.0" encoding="utf-8"?>
<FrameLayout xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:tools="http://schemas.android.com/tools"
android:layout_width="match_parent"
android:layout_height="match_parent"
tools:context=".Tab2">

<!-- TODO: Update blank fragment layout -->
<TextView
android:layout_gravity="center"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="Tab2"
android:textStyle="bold"
android:textSize="40sp" />

</FrameLayout>
```

Fragment_tab3.xml:

```xml
<?xml version="1.0" encoding="utf-8"?>
<FrameLayout xmlns:android="http://schemas.android.com/apk/res/android"
```

```xml
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".Tab3">

    <!-- TODO: Update blank fragment layout -->
    <TextView
    android:layout_gravity="center"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Tab3"
    android:textStyle="bold"
    android:textSize="40sp" />

</FrameLayout>
```

Tab1.fragment:

```java
package com.example.anabi.iconstyletabviewex;


import android.os.Bundle;
import android.support.v4.app.Fragment;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;


/**
 * A simple {@link Fragment} subclass.
 */
public class Tab1 extends Fragment {


public Tab1() {
// Required empty public constructor
}


@Override
public View onCreateView(LayoutInflater inflater, ViewGroup container,
Bundle savedInstanceState) {
// Inflate the layout for this fragment
return inflater.inflate(R.layout.fragment_tab1, container, false);
}

public interface OnFragmentInteractionListener {
}
}
```

Tab2.Fragment:

```java
package com.example.anabi.iconstyletabviewex;


import android.os.Bundle;
```

```java
import android.support.v4.app.Fragment;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;


/**
 * A simple {@link Fragment} subclass.
 */
public class Tab2 extends Fragment {


    public Tab2() {
        // Required empty public constructor
    }


    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container,
    Bundle savedInstanceState) {
        // Inflate the layout for this fragment
        return inflater.inflate(R.layout.fragment_tab2, container, false);
    }

    public interface OnFragmentInteractionListener {
    }
}
```

Tab_3.Fragemnt:

```java
package com.example.anabi.iconstyletabviewex;


import android.os.Bundle;
import android.support.v4.app.Fragment;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;


/**
 * A simple {@link Fragment} subclass.
 */
public class Tab3 extends Fragment {


    public Tab3() {
        // Required empty public constructor
    }


    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container,
    Bundle savedInstanceState) {
        // Inflate the layout for this fragment
        return inflater.inflate(R.layout.fragment_tab3, container, false);
```

```
}

public interface OnFragmentInteractionListener {

}
}
```

PagerAdapter.java:

```java
package com.example.anabi.iconstyletabviewex;

import android.support.v4.app.Fragment;
import android.support.v4.app.FragmentManager;
import android.support.v4.app.FragmentStatePagerAdapter;

public class PagerAdapter extends FragmentStatePagerAdapter {

int mNoOfTabs;

public PagerAdapter(FragmentManager fm, int NumberOfTabs) {
super(fm);
this.mNoOfTabs = NumberOfTabs;
}


@Override
public Fragment getItem(int i) {

switch (i){

case 0:
Tab1 tab1 = new Tab1();
return tab1;

case 1:
Tab2 tab2 = new Tab2();
return tab2;

case 2:
Tab3 tab3 = new Tab3();
return tab3;

}
return null;
}


@Override
public int getCount() {
return mNoOfTabs;
}
}
```

MainActivity.java:

```java
package com.example.anabi.iconstyletabviewex;
```

```java
import android.support.design.widget.TabLayout;
import android.support.v4.view.ViewPager;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;


public class MainActivity extends AppCompatActivity implements Tab1.OnFragmentInteractionListener,
Tab2.OnFragmentInteractionListener, Tab3.OnFragmentInteractionListener {


@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);

TabLayout tab = (TabLayout) findViewById(R.id.tab);
tab.addTab(tab.newTab().setIcon(R.drawable.ic_home));
tab.addTab(tab.newTab().setIcon(R.drawable.ic_favorite));
tab.addTab(tab.newTab().setIcon(R.drawable.ic_gamepad));


final ViewPager viewPager = (ViewPager)findViewById(R.id.pager);
final PagerAdapter adapter = new PagerAdapter(getSupportFragmentManager(),tab.getTabCount());
viewPager.setAdapter(adapter);
viewPager.setOnPageChangeListener(new TabLayout.TabLayoutOnPageChangeListener(tab));
tab.setOnTabSelectedListener(new TabLayout.OnTabSelectedListener() {
@Override
public void onTabSelected(TabLayout.Tab tab) {

viewPager.setCurrentItem(tab.getPosition());
}

@Override
public void onTabUnselected(TabLayout.Tab tab) {

}

@Override
public void onTabReselected(TabLayout.Tab tab) {

}
});


}
}
```

Spinner And how it performs:

activityMain.xml:

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

```xml
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    tools:context=".MainActivity">

    <Spinner
    android:layout_marginTop="30dp"
    android:layout_gravity="center"
    android:id="@+id/spinner"
    android:layout_width="60dp"
    android:backgroundTint="@color/colorAccent"
    android:layout_height="wrap_content"/>

    <ImageView
    android:layout_gravity="center"
    android:layout_marginTop="250dp"
    android:id="@+id/image"
    android:layout_width="200dp"
    android:layout_height="100dp" />
    </LinearLayout>
```

Array.xml:::::::::::

```xml
<?xml version="1.0" encoding="utf-8"?>
<resources>

<array name="image_list">


<item>Image 1</item>
<item>Image 2</item>
<item>Image 3</item>
<item>Image 4</item>


</array>


</resources>
```

MainActivity.Java:::::

```java
package com.example.anabi.mutipurposelistfragspin;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.AdapterView;
import android.widget.ArrayAdapter;
import android.widget.ImageView;
import android.widget.Spinner;

public class MainActivity extends AppCompatActivity {

Spinner spinner;
ImageView imageView;
```

```java
@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);

imageView = (ImageView) findViewById(R.id.image);

spinner = (Spinner)findViewById(R.id.spinner);

ArrayAdapter<CharSequence> myArrayAdapter =
ArrayAdapter.createFromResource(this,R.array.image_list,android.R.layout.simple_spinner_item);

myArrayAdapter.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item);

spinner.setAdapter(myArrayAdapter);


spinner.setOnItemSelectedListener(new AdapterView.OnItemSelectedListener() {
@Override
public void onItemSelected(AdapterView<?> parent, View view, int position, long id) {


switch (position){


case 0:
imageView.setImageResource(R.drawable.insta);
break;

case 1:
imageView.setImageResource(R.drawable.twit);
break;

case 2:
imageView.setImageResource(R.drawable.youtub);
break;

case 3:
imageView.setImageResource(R.drawable.fb);


}

}

@Override
public void onNothingSelected(AdapterView<?> parent) {

}
});
}
}
```

Beautiful Expandable Floating Action Button:

activityMain.xml:

```xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"
android:layout_width="match_parent"
android:layout_height="match_parent"
android:background="@drawable/back"
tools:context=".MainActivity">


<com.wangjie.rapidfloatingactionbutton.RapidFloatingActionLayout
xmlns:rfal="http://schemas.android.com/apk/res-auto"
android:id="@+id/activity_main_rfal"
android:layout_width="match_parent"
android:layout_height="match_parent"
rfal:rfal_frame_color="#ffffff"
rfal:rfal_frame_alpha="0.7"
>
<com.wangjie.rapidfloatingactionbutton.RapidFloatingActionButton
xmlns:rfab="http://schemas.android.com/apk/res-auto"
android:id="@+id/activity_main_rfab"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_alignParentEnd="true"
android:layout_alignParentBottom="true"
android:layout_marginEnd="15dp"
android:layout_marginBottom="15dp"
android:padding="8dp"
rfab:rfab_size="normal"
rfab:rfab_drawable="@drawable/rfab__drawable_rfab_default"
rfab:rfab_color_normal="#f20085"
rfab:rfab_color_pressed="#263238"
rfab:rfab_shadow_radius="7dp"
rfab:rfab_shadow_color="#464646"
rfab:rfab_shadow_dx="0dp"
rfab:rfab_shadow_dy="5dp"
/>
</com.wangjie.rapidfloatingactionbutton.RapidFloatingActionLayout>




</RelativeLayout>
```

MainActivity.java::::::::

```java
package com.example.anabi.teleprompterapp;

import android.graphics.Color;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.widget.Toast;

import com.wangjie.rapidfloatingactionbutton.RapidFloatingActionButton;
```

```java
import com.wangjie.rapidfloatingactionbutton.RapidFloatingActionHelper;
import com.wangjie.rapidfloatingactionbutton.RapidFloatingActionLayout;
import com.wangjie.rapidfloatingactionbutton.contentimpl.labellist.RFACLabelItem;
import com.wangjie.rapidfloatingactionbutton.contentimpl.labellist.RapidFloatingActionContentLabelList;

import java.util.ArrayList;
import java.util.List;

public class MainActivity extends AppCompatActivity implements
RapidFloatingActionContentLabelList.OnRapidFloatingActionContentLabelListListener {

    private RapidFloatingActionLayout rfaLayout;
    private RapidFloatingActionButton rfaButton;
    private RapidFloatingActionHelper rfaHelper;
    private RapidFloatingActionHelper rfabHelper;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main);

    rfaLayout = findViewById(R.id.activity_main_rfal);
    rfaButton = findViewById(R.id.activity_main_rfab);

    setUpExpandableFloatingActiobButton();
    }


    private void setUpExpandableFloatingActiobButton(){

    RapidFloatingActionContentLabelList rfaContent = new RapidFloatingActionContentLabelList(getApplicationContext());
    rfaContent.setOnRapidFloatingActionContentLabelListListener(this);
    List<RFACLabelItem> items = new ArrayList<>();
    items.add(new RFACLabelItem<Integer>()
    .setLabel("Write Script")
    .setLabelSizeSp(15)
    .setResId(R.drawable.ic_keyboard_black_24dp)
    .setIconNormalColor(0xff4e342e)
    .setIconPressedColor(0xff3e2723)
    .setLabelSizeSp(14)
    .setWrapper(0)
    );
    items.add(new RFACLabelItem<Integer>()
    .setLabel("Import Script")
    .setResId(R.drawable.ic_import_export_black_24dp)
    .setIconNormalColor(0xff4e342e)
    .setIconPressedColor(0xff3e2723)
    .setLabelSizeSp(14)
    .setWrapper(1)
    );

    rfaContent
    .setItems(items)
    .setIconShadowColor(0xff888888)

    ;
```

```java
rfabHelper = new RapidFloatingActionHelper(
getApplicationContext(),
rfaLayout,
rfaButton,
rfaContent
).build();



}

@Override
public void onRFACItemLabelClick(int position, RFACLabelItem item) {

writeOrImportScript(position);
}

@Override
public void onRFACItemIconClick(int position, RFACLabelItem item) {

writeOrImportScript(position);


}

private void writeOrImportScript(int position){


if(position == 0){

Toast.makeText(getApplicationContext(),"Writing the script",Toast.LENGTH_SHORT).show();
}
else{
Toast.makeText(getApplicationContext(),"Importing the script",Toast.LENGTH_SHORT).show();
}


}
}
```

Build.GradleFile::::::::

```gradle
apply plugin: 'com.android.application'

android {
compileSdkVersion 28
defaultConfig {
applicationId "com.example.anabi.teleprompterapp"
minSdkVersion 22
targetSdkVersion 28
versionCode 1
versionName "1.0"
```

```gradle
testInstrumentationRunner "android.support.test.runner.AndroidJUnitRunner"
}
buildTypes {
release {
minifyEnabled false
proguardFiles getDefaultProguardFile('proguard-android.txt'), 'proguard-rules.pro'
}
}
}

dependencies {
implementation fileTree(dir: 'libs', include: ['*.jar'])
implementation 'com.android.support:appcompat-v7:28.0.0'
implementation 'com.android.support.constraint:constraint-layout:1.1.3'
testImplementation 'junit:junit:4.12'
androidTestImplementation 'com.android.support.test:runner:1.0.2'
androidTestImplementation 'com.android.support.test.espresso:espresso-core:3.0.2'
implementation 'com.github.wangjiegulu:rfab:2.0.0'
}
```

Sqlite-DataBase Demo Udemy:

```java
try {

SQLiteDatabase myDatabase = this.openOrCreateDatabase("Users", MODE_PRIVATE, null);

myDatabase.execSQL("CREATE TABLE IF NOT EXISTS users (name VARCHAR, age INT(3))");

myDatabase.execSQL("INSERT INTO users (name,age) VALUES ('Rob',34)");

myDatabase.execSQL("INSERT INTO users (name,age) VALUES ('Tommy', 4)");

Cursor c = myDatabase.rawQuery("SELECT * FROM users",null);

int nameIndex = c.getColumnIndex("name");
int ageIndex = c.getColumnIndex("age");

c.moveToFirst();

while(c!=null){

Log.i("name",c.getString(nameIndex));
Log.i("age", Integer.toString(c.getInt(ageIndex)));

c.moveToNext();

}



} catch (Exception e) {
```

```
        e.printStackTrace();

}
```

SQLITE DATABASE BASICS:

Activity.xml:

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

<EditText

android:id="@+id/editTextTask"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:hint="Enter Task Here.."
android:textAlignment="center"
android:layout_marginTop="20dp"
android:padding="10dp"/>

<Button
android:onClick="addButtonClicked"
android:textSize="18sp"
android:layout_margin="10dp"
android:textColor="#fff"
android:backgroundTint="@color/colorAccent"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:text="Add Task"
android:id="@+id/buttonAddTask"/>

<Button
android:onClick="removeButtonCliked"
android:textSize="18sp"
android:layout_margin="10dp"
android:textColor="#fff"
android:backgroundTint="@color/colorAccent"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:text="Remove Task"
android:id="@+id/buttonRemoveTask"/>

<TextView
android:id="@+id/textViewTask"
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:textAlignment="center"
android:textSize="20sp"
android:hint="No Tasks added Yet!"
```

android:layout_marginTop="20dp"/>

</LinearLayout>

Tasks.java:

```
package com.example.anabi.sqlitedatabasebasicforfinalproject;

public class Tasks {

private int _id;
private String _taskname;

public void Tasks(){

}

public Tasks(String taskname){
this._taskname = taskname;
}

public int get_id() {
return _id;
}

public String get_taskname() {
return _taskname;
}

public void set_id(int _id) {
this._id = _id;
}

public void set_taskname(String _taskname) {
this._taskname = _taskname;
}
}
```

DatabaseHelper.java

```
package com.example.anabi.sqlitedatabasebasicforfinalproject;

import android.content.ContentValues;
import android.content.Context;
import android.database.Cursor;
import android.database.DatabaseErrorHandler;
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;

public class MyDatabaseHelper extends SQLiteOpenHelper {

private static final int DATABASE_VERSION = 1;
private static final String DATABASE_NAME = "tasks.db";
private static final String TABLE_TASKS = "tasks";
private static final String COLUMN_ID = "_id";
private static final String COLUMN_TASKNAME = "taskname";
```

```java
public MyDatabaseHelper(Context context, String name, SQLiteDatabase.CursorFactory factory, int version) {
    super(context, DATABASE_NAME, factory, DATABASE_VERSION);
}

@Override
public void onCreate(SQLiteDatabase db) {

    String query = " CREATE TABLE " + TABLE_TASKS + " ( " + COLUMN_ID + " INTEGER PRIMARY KEY AUTOINCREMENT, " +
            COLUMN_TASKNAME + " TEXT " + ");";

    db.execSQL(query);

}


// Adding Tasks to Table

public void addTasks(Tasks tasks){

    ContentValues values = new ContentValues();
    values.put(COLUMN_TASKNAME,tasks.get_taskname());
    SQLiteDatabase db = getWritableDatabase();
    db.insert(TABLE_TASKS,null,values);
    db.close();

}


//Remove Data from Tasks Table

public void removeTasks(String taskname){

    SQLiteDatabase db = getWritableDatabase();
    db.execSQL(" DELETE FROM " + TABLE_TASKS + " WHERE " + COLUMN_TASKNAME + "=\"" + taskname + "\";");

}


public String databasetostring(){

    String dbstring = "";
    SQLiteDatabase db = getWritableDatabase();
    String query = "SELECT * FROM " + TABLE_TASKS + " WHERE 1";

    Cursor c = db.rawQuery(query,null);
    c.moveToFirst();

    while(!c.isAfterLast()){
    if(c.getString(c.getColumnIndex("taskname"))!=null){
    dbstring += c.getString(c.getColumnIndex("taskname"));
    dbstring += "\n";
    }
    c.moveToNext();
    }
```

```java
        db.close();
        return dbstring;
    }



    @Override
    public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) {
        db.execSQL(" DROP TABLE IF EXISTS " + TABLE_TASKS);

        onCreate(db);
    }
}

MainActvity.java:

package com.example.anabi.sqlitedatabasebasicforfinalproject;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.TextView;

public class MainActivity extends AppCompatActivity {

    EditText editText;
    TextView textView;
    MyDatabaseHelper databaseHelper;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        editText = (EditText)findViewById(R.id.editTextTask);
        textView = (TextView)findViewById(R.id.textViewTask);
        databaseHelper = new MyDatabaseHelper(this,null,null,1);
        printDB();


    }

    public void addButtonClicked(View view) {

        Tasks tasks = new Tasks(editText.getText().toString());
        databaseHelper.addTasks(tasks);
        printDB();
        editText.setText("");

    }
```

```java
public void removeButtonCliked(View view) {

String input = editText.getText().toString();
databaseHelper.removeTasks(input);
printDB();
editText.setText("");

}

public void printDB(){

String dbString = databaseHelper.databasetostring();
textView.setText(dbString);



}
```

Firebase Basics:

Activity.xml:

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

<EditText
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_margin="10dp"
android:hint="Enter Name"
android:id="@+id/name"/>

<EditText
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_margin="10dp"
android:hint="Enter Contact"
android:id="@+id/contact"/>

<Button
android:text="Click"
android:textColor="#fff"
android:textSize="18sp"
android:backgroundTint="@color/colorAccent"
android:onClick="buttonClicked"
android:layout_width="match_parent"
android:layout_height="wrap_content" />

<TextView
```

```xml
android:layout_marginTop="20sp"
android:layout_gravity="center"
android:textAlignment="center"
android:textSize="18sp"
android:id="@+id/textView"
android:text="Demo"
android:layout_width="wrap_content"
android:layout_height="wrap_content" />


</LinearLayout>
```

MainAcitivity.java:

```java
package com.example.anabi.finalyearfirebasebasiclearning;

import android.support.annotation.NonNull;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.EditText;
import android.widget.TextView;

import com.google.firebase.database.DataSnapshot;
import com.google.firebase.database.DatabaseError;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.database.ValueEventListener;

public class MainActivity extends AppCompatActivity {

TextView textView;
FirebaseDatabase database;
DatabaseReference myRef;

@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);

database = FirebaseDatabase.getInstance();
myRef = database.getReference();




myRef.addValueEventListener(new ValueEventListener() {
@Override
public void onDataChange(@NonNull DataSnapshot dataSnapshot) {

}

@Override
public void onCancelled(@NonNull DatabaseError databaseError) {

}
});
```

```java
}

public void buttonClicked(View view) {


    EditText editTextName = (EditText) findViewById(R.id.name);
    EditText editTextContact = (EditText) findViewById(R.id.contact);

    //myRef = database.getReference("Users");
    //myRef.child("Names").push().setValue(editTextName.getText().toString());

    String child = editTextName.getText().toString();
    myRef = database.getReference("Users").child(child);
    myRef.child("Name").setValue(editTextName.getText().toString());
    myRef.child("contact").setValue(editTextContact.getText().toString());



}
}
```

Using Map Object to get Name and Contact using EditText and onclick

Will Store value to database and show in log.v:

```java
package com.example.anabi.finalyearfirebasebasiclearning;

import android.support.annotation.NonNull;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.util.Log;
import android.view.View;
import android.widget.EditText;
import android.widget.TextView;

import com.google.firebase.database.DataSnapshot;
import com.google.firebase.database.DatabaseError;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.database.ValueEventListener;

import java.util.Map;

public class MainActivity extends AppCompatActivity {

TextView textView;
FirebaseDatabase database;
DatabaseReference myRef;

@Override
protected void onCreate(Bundle savedInstanceState) {
```

```java
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);

database = FirebaseDatabase.getInstance();
myRef = database.getReference();


myRef.addValueEventListener(new ValueEventListener() {
@Override
public void onDataChange(@NonNull DataSnapshot dataSnapshot) {

Map<String,String> map = (Map<String,String>) dataSnapshot.getValue();
String name = map.get("Name");
String contact = map.get("Contact");

Log.v("Name",name);
Log.v("Contact",contact);

}

@Override
public void onCancelled(@NonNull DatabaseError databaseError) {

}
});




}

public void buttonClicked(View view) {


EditText editTextName = (EditText) findViewById(R.id.name);
EditText editTextContact = (EditText) findViewById(R.id.contact);
myRef = database.getReference();
myRef.child("Name").setValue(editTextName.getText().toString());
myRef.child("contact").setValue(editTextContact.getText().toString());



}
}
```

Xml:

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

```xml
<EditText
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_margin="10dp"
android:hint="Enter Name"
android:id="@+id/name"/>

<EditText
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:layout_margin="10dp"
android:hint="Enter Contact"
android:id="@+id/contact"/>

<Button
android:text="Click"
android:textColor="#fff"
android:textSize="18sp"
android:backgroundTint="@color/colorAccent"
android:onClick="buttonClicked"
android:layout_width="match_parent"
android:layout_height="wrap_content" />

<TextView
android:layout_marginTop="20sp"
android:layout_gravity="center"
android:textAlignment="center"
android:textSize="18sp"
android:id="@+id/textView"
android:text="Demo"
android:layout_width="wrap_content"
android:layout_height="wrap_content" />


</LinearLayout>
```

Show Values in ListView: in Firebase:

XML:

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


<ListView
android:id="@+id/listView"
android:layout_width="match_parent"
android:layout_height="match_parent">

</ListView>
```
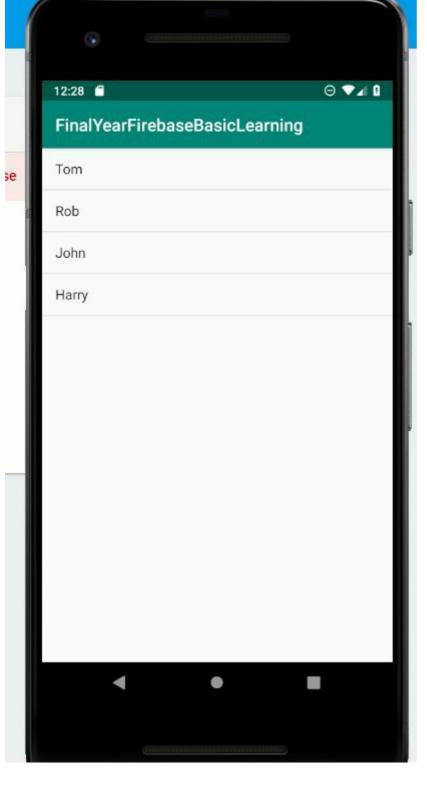
```
</LinearLayout>
```

MainActivity.java:

```java
package com.example.anabi.finalyearfirebasebasiclearning;

import android.support.annotation.NonNull;
import android.support.annotation.Nullable;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.util.Log;
import android.view.View;
import android.widget.ArrayAdapter;
import android.widget.EditText;
import android.widget.ListView;
import android.widget.TextView;

import com.google.firebase.database.ChildEventListener;
import com.google.firebase.database.DataSnapshot;
import com.google.firebase.database.DatabaseError;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;
import com.google.firebase.database.ValueEventListener;

import java.util.ArrayList;
import java.util.Map;

public class MainActivity extends AppCompatActivity {

private ListView listView;
private FirebaseDatabase database;
private DatabaseReference myRef;
private ArrayList<String> mUserName = new ArrayList<>();

@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);

database = FirebaseDatabase.getInstance();
myRef = database.getReference("Users");

listView = (ListView) findViewById(R.id.listView);

final ArrayAdapter<String> arrayAdapter = new ArrayAdapter<String>
(this,android.R.layout.simple_list_item_1,mUserName);

listView.setAdapter(arrayAdapter);

myRef.addChildEventListener(new ChildEventListener() {
@Override
public void onChildAdded(@NonNull DataSnapshot dataSnapshot, @Nullable String s) {

String value = dataSnapshot.getValue(String.class);
mUserName.add(value);
```
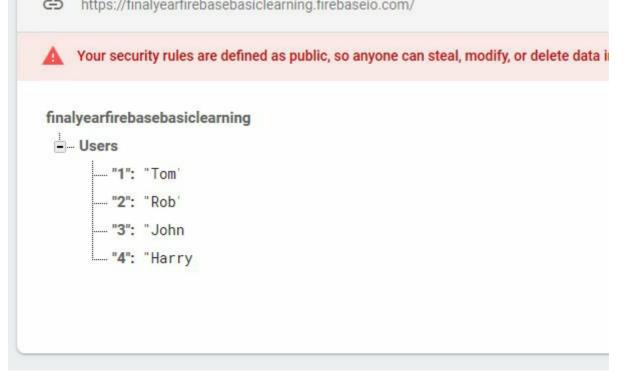
```java
arrayAdapter.notifyDataSetChanged();

}

@Override
public void onChildChanged(@NonNull DataSnapshot dataSnapshot, @Nullable String s) {

}

@Override
public void onChildRemoved(@NonNull DataSnapshot dataSnapshot) {

}

@Override
public void onChildMoved(@NonNull DataSnapshot dataSnapshot, @Nullable String s) {

}

@Override
public void onCancelled(@NonNull DatabaseError databaseError) {

}
});




}

//public void buttonClicked(View view) {


//EditText editTextName = (EditText) findViewById(R.id.name);
//EditText editTextContact = (EditText) findViewById(R.id.contact);
// myRef = database.getReference();
//myRef.child("Name").setValue(editTextName.getText().toString());
//myRef.child("contact").setValue(editTextContact.getText().toString());



//}
}
```

Some Screenshot :

FinalYearFirebaseBasicLearning

Tom

Rob

John

Harry

finalyearfirebasebasiclearning
- Users
  - "1": "Tom'
  - "2": "Rob'
  - "3": "John
  - "4": "Harry

Learn FireBase Authentication

With Emails:

Xml: activity.main.xml:

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




<EditText
android:layout_margin="20dp"
android:hint="Enter email.."
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:id="@+id/email"/>

<EditText
android:layout_margin="20dp"
android:hint="Enter password.."
android:layout_width="match_parent"
android:layout_height="wrap_content"
android:id="@+id/password"/>

<Button
android:textAlignment="center"
android:text="Login"
android:layout_margin="20dp"
android:backgroundTint="@color/colorAccent"
android:textSize="18sp"
```

```xml
    android:textColor="#fff"
    android:onClick="LoginButtonCliked"
    android:id="@+id/addButton"
    android:layout_width="match_parent"
    android:layout_height="wrap_content" />

</LinearLayout>
```

Xml : NewActivity.xml:

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    android:background="#0a1e00"
    tools:context=".NewActivity">


    <TextView
        android:layout_marginTop="200dp"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:gravity="center"
        android:text="Success"
        android:textStyle="bold"
        android:fontFamily="cursive"
        android:textAlignment="center"
        android:textColor="#05d45c"
        android:textSize="90sp" />

    <Button
        android:textAlignment="center"
        android:text="Logout"
        android:layout_margin="50dp"
        android:backgroundTint="#df8106"
        android:textSize="18sp"
        android:textColor="#fff"
        android:onClick="signOut"
        android:id="@+id/addButton"
        android:layout_width="match_parent"
        android:layout_height="wrap_content" />
</LinearLayout>
```

MainActivity.java:

```java
package com.example.anabi.finalyearfirebasebasiclearning;


import android.content.Intent;
import android.support.annotation.NonNull;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.text.TextUtils;
```

```java
import android.view.View;
import android.widget.EditText;
import android.widget.Toast;

import com.google.android.gms.tasks.OnCompleteListener;
import com.google.android.gms.tasks.Task;
import com.google.firebase.auth.AuthResult;
import com.google.firebase.auth.FirebaseAuth;
import com.google.firebase.database.DatabaseReference;
import com.google.firebase.database.FirebaseDatabase;


public class MainActivity extends AppCompatActivity {

FirebaseDatabase database;
DatabaseReference myRef;

private FirebaseAuth mAuth;
private FirebaseAuth.AuthStateListener authStateListener;

private EditText emailText;
private EditText passText;



@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);


emailText = (EditText) findViewById(R.id.email);
passText = (EditText) findViewById(R.id.password);

mAuth = FirebaseAuth.getInstance();

authStateListener = new FirebaseAuth.AuthStateListener() {
@Override
public void onAuthStateChanged(@NonNull FirebaseAuth firebaseAuth) {


if(firebaseAuth.getCurrentUser()!=null){
Intent intent = new Intent(MainActivity.this,NewActivity.class);
startActivity(intent);
}

}
};




}

@Override
```

```java
protected void onStart() {
super.onStart();
mAuth.addAuthStateListener(authStateListener);
}

public void LoginButtonCliked(View view) {

String email = emailText.getText().toString();
String pass = passText.getText().toString();

if(TextUtils.isEmpty(email) || TextUtils.isEmpty(pass)){

Toast.makeText(this,"Enter Both Values",Toast.LENGTH_SHORT).show();
}
else{

mAuth.signInWithEmailAndPassword(email,pass).addOnCompleteListener(new OnCompleteListener<AuthResult>() {
@Override
public void onComplete(@NonNull Task<AuthResult> task) {

if(!task.isSuccessful()){

Toast.makeText(MainActivity.this,"Incorrect username and password",Toast.LENGTH_SHORT).show();

}

}
});
}

}
}

New Activity.java

package com.example.anabi.finalyearfirebasebasiclearning;

import android.content.Intent;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;

import com.google.firebase.auth.FirebaseAuth;

public class NewActivity extends AppCompatActivity {

private FirebaseAuth mAuth;
private FirebaseAuth.AuthStateListener authStateListener;

@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_new);
}

public void signOut(View view) {
```

```java
mAuth = FirebaseAuth.getInstance();
mAuth.signOut();

startActivity(new Intent(NewActivity.this,MainActivity.class));

}
}
```

Dependecies :

```
dependencies {
implementation fileTree(dir: 'libs', include: ['*.jar'])
//noinspection GradleCompatible
implementation 'com.android.support:appcompat-v7:28.0.0'
implementation 'com.android.support.constraint:constraint-layout:1.1.3'
testImplementation 'junit:junit:4.12'
androidTestImplementation 'com.android.support.test:runner:1.0.2'
androidTestImplementation 'com.android.support.test.espresso:espresso-core:3.0.2'
implementation 'com.google.firebase:firebase-database:16.0.5'
implementation 'com.google.firebase:firebase-core:16.0.6'
implementation 'com.google.firebase:firebase-auth:16.1.0'
}
```

Upload Image Using Phone UI to Firebase Storage

Xml : imagePro.xml

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

<Button
android:onClick="buttonUpload"
android:text="Upload Image"
android:layout_margin="20dp"
android:layout_width="wrap_content"
android:layout_height="wrap_content" />

</RelativeLayout>
```

ImagePro.java:>>

```java
package com.example.anabi.finalyearfirebasebasiclearning.ImagePro;

import android.content.Intent;
import android.net.Uri;
import android.support.annotation.Nullable;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.View;
import android.widget.Toast;
```

```java
import com.example.anabi.finalyearfirebasebasiclearning.MainActivity;
import com.example.anabi.finalyearfirebasebasiclearning.R;
import com.google.android.gms.tasks.OnSuccessListener;
import com.google.firebase.storage.FirebaseStorage;
import com.google.firebase.storage.StorageReference;
import com.google.firebase.storage.UploadTask;

public class MainImageProActivity extends AppCompatActivity {

private StorageReference storageReference;
private static final int GALLERY_INTENT = 1;


@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main_image_pro);


storageReference = FirebaseStorage.getInstance().getReference();

}

public void buttonUpload(View view) {


Intent intent = new Intent(Intent.ACTION_PICK);
intent.setType("image/*");
startActivityForResult(intent,GALLERY_INTENT);

}


@Override
protected void onActivityResult(int requestCode, int resultCode, @Nullable Intent data) {

if(requestCode == GALLERY_INTENT && resultCode == RESULT_OK){

Uri uri = data.getData();
StorageReference filepath = storageReference.child("Photos").child(uri.getLastPathSegment());
filepath.putFile(uri).addOnSuccessListener(new OnSuccessListener<UploadTask.TaskSnapshot>() {
@Override
public void onSuccess(UploadTask.TaskSnapshot taskSnapshot) {

Toast.makeText(MainImageProActivity.this,"ImageUploaded",Toast.LENGTH_SHORT).show();

}
});

}

}
}
```

Set Proper Webview

```java
appleBrandWebview = (WebView) findViewById(R.id.appleBrandWebview);
appleBrandWebview.loadUrl("https://www.apple.com/iphone/");
appleBrandWebview.getSettings().setJavaScriptEnabled(true);
appleBrandWebview.setWebViewClient(new WebViewClient());
appleBrandWebview.getSettings().setSupportZoom(true);
appleBrandWebview.getSettings().setBuiltInZoomControls(true);
appleBrandWebview.getSettings().setDisplayZoomControls(true);


appleBrandWebview.setOnKeyListener(new View.OnKeyListener()
{
@Override
public boolean onKey(View v, int keyCode, KeyEvent event)
{
if(event.getAction() == KeyEvent.ACTION_DOWN)
{
WebView webView = (WebView) v;

switch(keyCode)
{
case KeyEvent.KEYCODE_BACK:
if(webView.canGoBack())
{
webView.goBack();
return true;
}
break;
}
}

return false;
}
});
```

best Way to Implement Webview on fragment and tab view

```java
package com.example.anabi.finalyearproject1try.DesktopGpuActivity;


import android.os.Bundle;
import android.support.v4.app.Fragment;
import android.view.KeyEvent;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.webkit.WebSettings;
import android.webkit.WebView;
import android.webkit.WebViewClient;

import com.example.anabi.finalyearproject1try.R;

/**
 * A simple {@link Fragment} subclass.
 */
public class DesktopGpuNvidiaTab extends Fragment {
```

```java
public DesktopGpuNvidiaTab() {
// Required empty public constructor
}


@Override
public View onCreateView(LayoutInflater inflater, ViewGroup container,
Bundle savedInstanceState) {



View v = inflater.inflate(R.layout.fragment_desktop_gpu_nvidia_tab, container, false);

WebView desktopGpuNvidiaWebView = (WebView)v.findViewById(R.id.desktopGpuNvidiaWebview);
desktopGpuNvidiaWebView.getSettings().setJavaScriptEnabled(true);
desktopGpuNvidiaWebView.setWebViewClient(new WebViewClient());
desktopGpuNvidiaWebView.loadUrl("https://www.nvidia.com/en-us/geforce/20-series/");
desktopGpuNvidiaWebView.getSettings().setSupportZoom(true);
desktopGpuNvidiaWebView.getSettings().setBuiltInZoomControls(true);
desktopGpuNvidiaWebView.getSettings().setDisplayZoomControls(true);

desktopGpuNvidiaWebView.setOnKeyListener(new View.OnKeyListener()
{
@Override
public boolean onKey(View v, int keyCode, KeyEvent event)
{
if(event.getAction() == KeyEvent.ACTION_DOWN)
{
WebView webView = (WebView) v;

switch(keyCode)
{
case KeyEvent.KEYCODE_BACK:
if(webView.canGoBack())
{
webView.goBack();
return true;
}
break;
}
}

return false;
}
});

// Inflate the layout for this fragment
return v;
}

public interface OnFragmentInteractionListener {
}

}
```

Advanced WebView

Some important link to show youtube video is full screen:

1. https://www.monstertechnocodes.com/2018/07/how-to-enable-fullscreen-mode-in-any.html

2. https://www.monstertechnocodes.com/2018/11/how-to-handle-orientation-change-in.html

Main XML:

```xml
<?xml version="1.0" encoding="utf-8"?>
<android.support.v4.widget.SwipeRefreshLayout xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"
android:layout_width="match_parent"
android:layout_height="match_parent"
android:orientation="vertical"
android:id="@+id/mySwipeLayout"
tools:context=".MainActivity">

<LinearLayout
android:orientation="vertical"
android:layout_width="match_parent"
android:layout_height="match_parent">

<LinearLayout
android:id="@+id/linear_layout"
android:visibility="visible"
android:orientation="horizontal"
android:layout_width="match_parent"
android:layout_height="30dp">

<ProgressBar
android:id="@+id/myProgressBar"
android:layout_weight="0.1"
style="@style/Base.Widget.AppCompat.ProgressBar.Horizontal"
android:layout_width="match_parent"
android:layout_height="match_parent" />

<ImageView
android:id="@+id/myImageView"
android:src="@mipmap/ic_launcher_round"
android:layout_weight="0.9"
android:layout_width="match_parent"
android:layout_height="match_parent" />


</LinearLayout>

<WebView
android:id="@+id/myWebView"
android:layout_width="match_parent"
android:layout_height="match_parent"/>

</LinearLayout>
```

```
</android.support.v4.widget.SwipeRefreshLayout>
```

Menu:

```xml
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto">

<item
android:id="@+id/menu_back"
app:showAsAction="always"
android:icon="@drawable/ic_arrow_backward"
android:title="Backward"/>

<item
android:id="@+id/menu_forward"
app:showAsAction="always"
android:icon="@drawable/ic_arrow_forward"
android:title="Forward"/>

<item
android:id="@+id/menu_share"
android:icon="@drawable/ic_share"
android:title="Share app"/>

<item
android:id="@+id/menu_refresh"
android:icon="@drawable/ic_refresh"
android:title="Refresh"/>
```

```xml
</menu>
```

Main_Activity.Java:------

```java
package com.example.anabi.advancedwebview;

import android.content.Intent;
import android.graphics.Bitmap;
import android.support.v4.widget.SwipeRefreshLayout;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuInflater;
import android.view.MenuItem;
import android.view.View;
import android.webkit.WebChromeClient;
import android.webkit.WebView;
import android.webkit.WebViewClient;
import android.widget.ImageView;
import android.widget.LinearLayout;
import android.widget.ProgressBar;
```

```java
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

ProgressBar progressBar;
ImageView imageView;
WebView webView;
LinearLayout mlinearLayout;
SwipeRefreshLayout swipeRefreshLayout;
String myCurrentUrl;

@Override
protected void onCreate(Bundle savedInstanceState) {
super.onCreate(savedInstanceState);
setContentView(R.layout.activity_main);

progressBar = (ProgressBar) findViewById(R.id.myProgressBar);
imageView = (ImageView)findViewById(R.id.myImageView);
webView = (WebView) findViewById(R.id.myWebView);
mlinearLayout = (LinearLayout)findViewById(R.id.linear_layout);
swipeRefreshLayout = (SwipeRefreshLayout)findViewById(R.id.mySwipeLayout);

progressBar.setMax(100);

webView.loadUrl("https://www.google.com");
webView.getSettings().setJavaScriptEnabled(true);
webView.setWebViewClient(new WebViewClient(){

@Override
public void onPageStarted(WebView view, String url, Bitmap favicon) {
mlinearLayout.setVisibility(View.VISIBLE);
super.onPageStarted(view, url, favicon);
}

@Override
public void onPageFinished(WebView view, String url) {
mlinearLayout.setVisibility(View.GONE);
swipeRefreshLayout.setRefreshing(false);
super.onPageFinished(view, url);
myCurrentUrl = url;
}
});
webView.setWebChromeClient(new WebChromeClient(){

@Override
public void onProgressChanged(WebView view, int newProgress) {
super.onProgressChanged(view, newProgress);
progressBar.setProgress(newProgress);
}

@Override
public void onReceivedTitle(WebView view, String title) {
super.onReceivedTitle(view, title);
getSupportActionBar().setTitle(title);
}
```
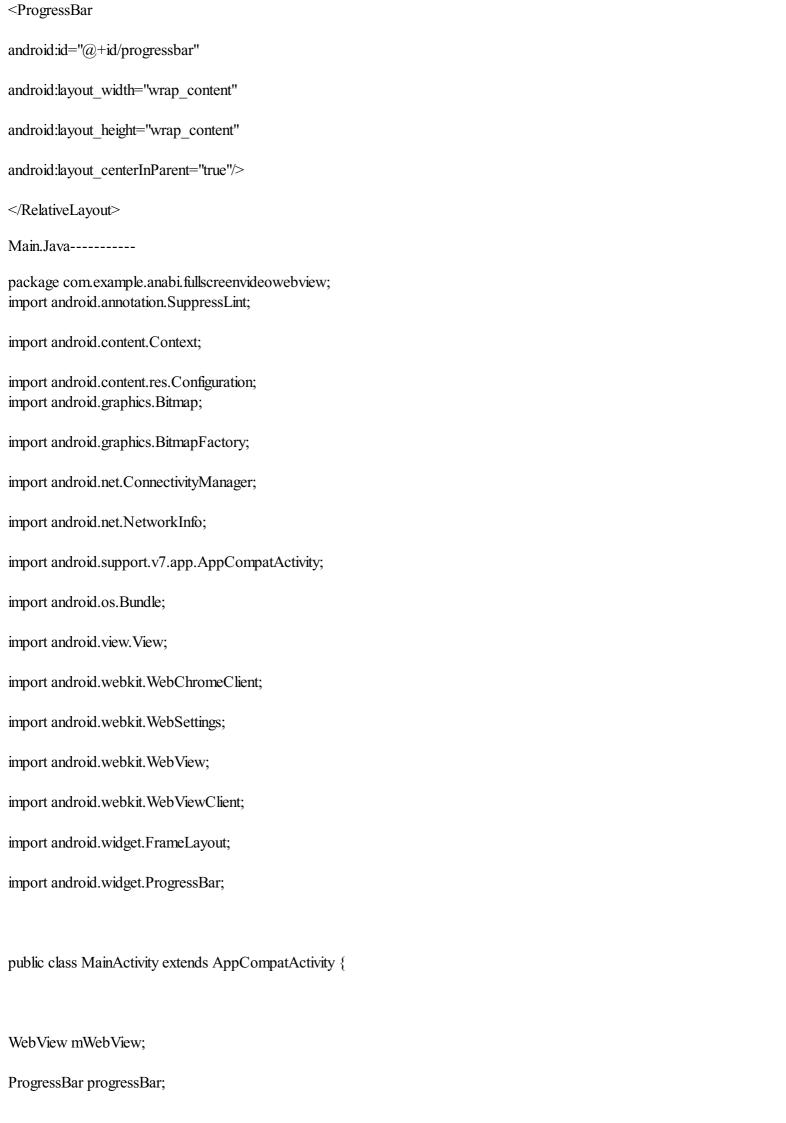
```java
@Override
public void onReceivedIcon(WebView view, Bitmap icon) {
super.onReceivedIcon(view, icon);
imageView.setImageBitmap(icon);
}
});

swipeRefreshLayout.setOnRefreshListener(new SwipeRefreshLayout.OnRefreshListener() {
@Override
public void onRefresh() {

webView.reload();


}
});



}



@Override
public boolean onCreateOptionsMenu(Menu menu) {
MenuInflater menuInflater = getMenuInflater();
menuInflater.inflate(R.menu.menu,menu);
return super.onCreateOptionsMenu(menu);
}



@Override
public boolean onOptionsItemSelected(MenuItem item) {

switch (item.getItemId()){

case R.id.menu_back:
onBackPressed();
break;

case R.id.menu_forward:
onForwardPressed();
break;

case R.id.menu_refresh:
webView.reload();
break;

case R.id.menu_share:
Intent shareIntent = new Intent(Intent.ACTION_SEND);
shareIntent.setType("text/plain");
shareIntent.putExtra(Intent.EXTRA_TEXT,myCurrentUrl);
shareIntent.putExtra(Intent.EXTRA_SUBJECT,"Copied URL");
startActivity(Intent.createChooser(shareIntent,"Share URL with friends"));


}

return super.onOptionsItemSelected(item);
```

```java
}

private void onForwardPressed(){
if(webView.canGoForward()){

webView.goForward();
}
else {

Toast.makeText(getApplicationContext(),"cannot go further!",Toast.LENGTH_SHORT).show();
}
}
```

```java
@Override
public void onBackPressed() {
if(webView.canGoBack()){

webView.goBack();

}else {
finish();
}
}
}
```

styles.xml:

```xml
<resources>

<!-- Base application theme. -->
<style name="AppTheme" parent="Theme.AppCompat.Light.DarkActionBar">
<!-- Customize your theme here. -->
<item name="colorPrimary">#8528ff</item>
<item name="colorPrimaryDark">#7b00c7</item>
<item name="colorAccent">@color/colorAccent</item>
</style>

</resources>
```

Manifest:

```xml
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
package="com.example.anabi.advancedwebview">

<uses-permission android:name="android.permission.INTERNET"></uses-permission>

<application
android:allowBackup="true"
android:icon="@mipmap/ic_launcher"
android:label="@string/app_name"
android:roundIcon="@mipmap/ic_launcher_round"
android:supportsRtl="true"
android:theme="@style/AppTheme">
<activity android:name=".MainActivity">
<intent-filter>
<action android:name="android.intent.action.MAIN" />

<category android:name="android.intent.category.LAUNCHER" />
</intent-filter>
</activity>
</application>

</manifest>
```

After That Most Advanced Project Based WebView Full Support Full screen Youtube video.:

Main.xml---

```xml
<?xml version="1.0" encoding="utf-8"?>

<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:app="http://schemas.android.com/apk/res-auto"

xmlns:tools="http://schemas.android.com/tools"

android:layout_width="match_parent"

android:layout_height="match_parent"

tools:context=".MainActivity">




<WebView

android:id="@+id/webView"

android:layout_width="match_parent"

android:layout_height="match_parent"

android:layout_centerInParent="true" />
```

```xml
<ProgressBar

android:id="@+id/progressbar"

android:layout_width="wrap_content"

android:layout_height="wrap_content"

android:layout_centerInParent="true"/>

</RelativeLayout>
```

Main.Java-----------

```java
package com.example.anabi.fullscreenvideowebview;
import android.annotation.SuppressLint;

import android.content.Context;

import android.content.res.Configuration;
import android.graphics.Bitmap;

import android.graphics.BitmapFactory;

import android.net.ConnectivityManager;

import android.net.NetworkInfo;

import android.support.v7.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.webkit.WebChromeClient;

import android.webkit.WebSettings;

import android.webkit.WebView;

import android.webkit.WebViewClient;

import android.widget.FrameLayout;

import android.widget.ProgressBar;


public class MainActivity extends AppCompatActivity {


WebView mWebView;

ProgressBar progressBar;
```

```java
@SuppressLint("SetJavaScriptEnabled")

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity_main);


progressBar = (ProgressBar) findViewById(R.id.progressbar);

mWebView = (WebView) findViewById(R.id.webView);


progressBar.setVisibility(View.VISIBLE);

mWebView.setWebViewClient(new Browser_home());

mWebView.setWebChromeClient(new MyChrome());

WebSettings webSettings = mWebView.getSettings();

webSettings.setJavaScriptEnabled(true);

webSettings.setAllowFileAccess(true);

webSettings.setAppCacheEnabled(true);

loadWebsite();

//new code

if(savedInstanceState==null){
mWebView.post(new Runnable() {
@Override
public void run() {
loadWebsite();
}
});
}

//end new code

}


//new code
```

```java
@Override
public void onConfigurationChanged(Configuration newConfig) {
super.onConfigurationChanged(newConfig);
}

@Override
protected void onSaveInstanceState(Bundle outState )
{
super.onSaveInstanceState(outState);
mWebView.saveState(outState);
}

@Override
protected void onRestoreInstanceState(Bundle savedInstanceState)
{
super.onRestoreInstanceState(savedInstanceState);
mWebView.restoreState(savedInstanceState);
}


//end new code



private void loadWebsite() {

ConnectivityManager cm = (ConnectivityManager) getApplication().getSystemService(Context.CONNECTIVITY_SERVICE);

NetworkInfo netInfo = cm.getActiveNetworkInfo();

if (netInfo != null && netInfo.isConnectedOrConnecting()) {

mWebView.loadUrl("https://www.youtube.com/");

} else {

mWebView.setVisibility(View.GONE);

}

}



class Browser_home extends WebViewClient {

Browser_home() {

}
```

```java
@Override

public void onPageStarted(WebView view, String url, Bitmap favicon) {

super.onPageStarted(view, url, favicon);


}


@Override

public void onPageFinished(WebView view, String url) {

setTitle(view.getTitle());

progressBar.setVisibility(View.GONE);

super.onPageFinished(view, url);


}

}



private class MyChrome extends WebChromeClient {


private View mCustomView;

private WebChromeClient.CustomViewCallback mCustomViewCallback;

protected FrameLayout mFullscreenContainer;

private int mOriginalOrientation;

private int mOriginalSystemUiVisibility;


MyChrome() {}


public Bitmap getDefaultVideoPoster()

{
```

```java
if (mCustomView == null) {

return null;

}

return BitmapFactory.decodeResource(getApplicationContext().getResources(), 2130837573);

}


public void onHideCustomView()

{

((FrameLayout)getWindow().getDecorView()).removeView(this.mCustomView);

this.mCustomView = null;

getWindow().getDecorView().setSystemUiVisibility(this.mOriginalSystemUiVisibility);

setRequestedOrientation(this.mOriginalOrientation);

this.mCustomViewCallback.onCustomViewHidden();

this.mCustomViewCallback = null;

}


public void onShowCustomView(View paramView, WebChromeClient.CustomViewCallback paramCustomViewCallback)

{

if (this.mCustomView != null)

{

onHideCustomView();

return;

}

this.mCustomView = paramView;

this.mOriginalSystemUiVisibility = getWindow().getDecorView().getSystemUiVisibility();

this.mOriginalOrientation = getRequestedOrientation();

this.mCustomViewCallback = paramCustomViewCallback;

((FrameLayout)getWindow().getDecorView()).addView(this.mCustomView, new FrameLayout.LayoutParams(-1, -1));
```

```java
getWindow().getDecorView().setSystemUiVisibility(3846);

    }

    }

}
```

manifest:

```xml
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
package="com.example.anabi.fullscreenvideowebview">

<uses-permission android:name="android.permission.INTERNET"></uses-permission>
<uses-permission android:name="android.permission.ACCESS_NETWORK_STATE"></uses-permission>

<application
android:allowBackup="true"
android:icon="@mipmap/ic_launcher"
android:label="@string/app_name"
android:roundIcon="@mipmap/ic_launcher_round"
android:supportsRtl="true"
android:theme="@style/AppTheme">
<activity android:name=".MainActivity"
android:configChanges="keyboard|keyboardHidden|orientation|screenLayout|uiMode|screenSize|smallestScreenSize">
<intent-filter>
<action android:name="android.intent.action.MAIN" />

<category android:name="android.intent.category.LAUNCHER" />
</intent-filter>
</activity>
</application>

</manifest>
```

Styles:

```xml
<resources>

<!-- Base application theme. -->
<style name="AppTheme" parent="Theme.AppCompat.Light.NoActionBar">
<!-- Customize your theme here. -->
<item name="colorPrimary">#da0e0e</item>
<item name="colorPrimaryDark">#bf0000</item>
<item name="colorAccent">@color/colorAccent</item>
</style>

</resources>
```