MAD LAB

Experiment

1. Android Application Life Cycle:

import android.os.Bundle;

import android.app.Activity;

import android.widget.Toast;

public class MainActivity extends Activity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout. activity\_main );

Toast.makeText (getApplicationContext(),

"I am create method"

,

Toast.LENGTH\_LONG).show();

}

@Override

protected void onStart() {

// TODO Auto-generated method stub

super.onStart();

Toast.makeText (getApplicationContext(),

"I am start method"

,

Toast.LENGTH\_LONG ).show();

}

@Override

protected void onResume() {

// TODO Auto-generated method stub

super.onResume();

Toast.makeText (getApplicationContext(),

"I am resume method"

,

Toast.LENGTH\_LONG ).show();

}

@Override

protected void onStop() {

// TODO Auto-generated method stub

super.onStop();

Toast.makeText (getApplicationContext(),

"I am stop method"

,

Toast.LENGTH\_LONG ).show();

}

@Override

protected void onPause() {

// TODO Auto-generated method stub

super.onPause();

Toast.makeText (getApplicationContext(),

"I am pause method"

,

Toast.LENGTH\_LONG ).show();

}

@Override

protected void onRestart() {

// TODO Auto-generated method stub

super.onRestart();

Toast.makeText (getApplicationContext(),

"I am restart method"

,

Toast.LENGTH\_LONG ).show();

}

@Override

protected void onDestroy() {

// TODO Auto-generated method stub

super.onDestroy();

Toast.makeText (getApplicationContext(),

"I am destroy method"

,

Toast.LENGTH\_LONG ).show();

}

}

2. Calculator Application:

import android.os.Bundle;

import android.app.Activity;

import android.view.View;

import android.view.View.OnClickListener;

import android.widget.Button;

import android.widget.EditText;

import android.widget.Toast;

public class MainActivity extends Activity {

private EditText edittext1,edittext2;

private Button Btn\_Add ;

private Button Btn\_Sub ;

private Button Btn\_Mul ;

private Button Btn\_Div ;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

addListenerOnButton();

}

public void addListenerOnButton(){

edittext1=(EditText)findViewById(R.id.editText1);

edittext2=(EditText)findViewById(R.id.editText2);

Btn\_Add=(Button)findViewById(R.id.button1);

Btn\_Sub=(Button)findViewById(R.id.button2);

Btn\_Mul=(Button)findViewById(R.id.button3);

Btn\_Div=(Button)findViewById(R.id.button4);

Btn\_Add.setOnClickListener(new OnClickListener(){

public void onClick(View view) {

String value1=edittext1.getText().toString();

String value2=edittext2.getText().toString();

int a=Integer.parseInt(value1);

int b=Integer.parseInt(value2);

int sum=a+b;

Toast.makeText(getApplicationContext(),String.valueOf(sum),Toast.LENGTH\_LONG).show();

}

});

Btn\_Sub.setOnClickListener(new OnClickListener(){

@Override

public void onClick(View view) {

String value1=edittext1.getText().toString();

String value2=edittext2.getText().toString();

int a=Integer.parseInt(value1);

int b=Integer.parseInt(value2);

int sub=a-b;

Toast.makeText(getApplicationContext(),String.valueOf(sub),Toast.LENGTH\_LONG).show();

}

});

Btn\_Mul.setOnClickListener(new OnClickListener(){

@Override

public void onClick(View view) {

String value1=edittext1.getText().toString();

String value2=edittext2.getText().toString();

int a=Integer.parseInt(value1);

int b=Integer.parseInt(value2);

int m=a\*b;

Toast.makeText(getApplicationContext(),String.valueOf(m),Toast.LENGTH\_LONG).show();

}

});

Btn\_Div.setOnClickListener(new OnClickListener(){

@Override

public void onClick(View view) {

String value1=edittext1.getText().toString();

String value2=edittext2.getText().toString();

int a=Integer.parseInt(value1);

int b=Integer.parseInt(value2);

int n=a/b;

Toast.makeText(getApplicationContext(),String.valueOf(n),Toast.LENGTH\_LONG).show();

}

});

}

}

3. SMS Application:

(Add this line in AndroidManifest.xml

<uses-permission android:name="android.permission.SEND\_SMS" />

)

import android.os.Bundle;

import android.app.Activity;

import android.content.Intent;

import android.net.Uri;

import android.view.Menu;

import android.telephony.SmsManager;

import android.view.View;

import android.view.View.OnClickListener;

import android.widget.Button;

import android.widget.EditText;

import android.widget.Toast;

public class MainActivity extends Activity {

private EditText phoneNumber;

private EditText smsBody;

private Button smsManagerBtn;

private Button smsSendToBtn;

private Button smsViewBtn;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

phoneNumber = (EditText) findViewById(R.id.editText1);

smsBody = (EditText) findViewById(R.id.editText2);

smsManagerBtn = (Button) findViewById(R.id.button1);

smsSendToBtn = (Button) findViewById(R.id.button2);

smsViewBtn = (Button) findViewById(R.id.button3);

smsManagerBtn.setOnClickListener(new OnClickListener() {

public void onClick(View view) {

sendSmsByManager();

}

});

smsSendToBtn.setOnClickListener(new OnClickListener() {

public void onClick(View view) {

sendSmsBySIntent();

}

});

smsViewBtn.setOnClickListener(new OnClickListener() {

public void onClick(View view) {

sendSmsByVIntent();

}

});

}

public void sendSmsByManager() {

try {

// Get the default instance of the SmsManager

SmsManager smsManager = SmsManager.getDefault();

smsManager.sendTextMessage(phoneNumber.getText().toString(),null,smsBody.getText().toString(),null,null);

Toast.makeText(getApplicationContext(), "Your sms has successfully sent!",

Toast.LENGTH\_LONG).show();

} catch (Exception ex) {

Toast.makeText(getApplicationContext(),"Your sms has failed...",

Toast.LENGTH\_LONG).show();

ex.printStackTrace();

}

}

public void sendSmsBySIntent() {

// add the phone number in the data

Uri uri = Uri.parse("smsto:" + phoneNumber.getText().toString());

Intent smsSIntent = new Intent(Intent.ACTION\_SENDTO, uri);

// add the message at the sms\_body extra field

smsSIntent.putExtra("sms\_body", smsBody.getText().toString());

try{

startActivity(smsSIntent);

} catch (Exception ex) {

Toast.makeText(MainActivity.this, "Your sms has failed...",Toast.LENGTH\_LONG).show();

ex.printStackTrace();

}

}

public void sendSmsByVIntent() {

Intent smsVIntent = new Intent(Intent.ACTION\_VIEW);

// prompts only sms-mms clients

smsVIntent.setType("vnd.android-dir/mms-sms");

// extra fields for number and message respectively

smsVIntent.putExtra("address", phoneNumber.getText().toString());

smsVIntent.putExtra("sms\_body", smsBody.getText().toString());

try{

startActivity(smsVIntent);

} catch (Exception ex) {

Toast.makeText(MainActivity.this, "Your sms has failed...",

Toast.LENGTH\_LONG).show();

ex.printStackTrace();

}

}

@Override

public boolean onCreateOptionsMenu(Menu menu) {

// Inflate the menu; this adds items to the action bar if it is present.

getMenuInflater().inflate(R.menu.main, menu);

return true;

}

}

(or)

import android.os.Bundle;

import android.app.Activity;

import android.content.Intent;

import android.net.Uri;

import android.view.Menu;

import android.view.View;

import android.view.View.OnClickListener;

import android.widget.Button;

import android.widget.EditText;

import android.widget.Toast;

public class MainActivity extends Activity {

private EditText phoneNumber;

private EditText smsBody;

private Button smsSendToBtn;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

phoneNumber = (EditText) findViewById(R.id.editText1);

smsBody = (EditText) findViewById(R.id.editText2);

smsSendToBtn = (Button) findViewById(R.id.button1);

smsSendToBtn.setOnClickListener(new OnClickListener() {

public void onClick(View view) {

sendSmsBySIntent();

}

});

}

public void sendSmsBySIntent() {

// add the phone number in the data

Uri uri = Uri.parse("smsto:" + phoneNumber.getText().toString());

Intent smsSIntent = new Intent(Intent.ACTION\_SENDTO, uri);

// add the message at the sms\_body extra field

smsSIntent.putExtra("sms\_body", smsBody.getText().toString());

try{

startActivity(smsSIntent);

} catch (Exception ex) {

Toast.makeText(MainActivity.this, "Your sms has failed...",

Toast.LENGTH\_LONG).show();

ex.printStackTrace();

}

}

public void sendSmsByVIntent() {

Intent smsVIntent = new Intent(Intent.ACTION\_VIEW);

// prompts only sms-mms clients

smsVIntent.setType("vnd.android-dir/mms-sms");

// extra fields for number and message respectively

smsVIntent.putExtra("address", phoneNumber.getText().toString());

smsVIntent.putExtra("sms\_body", smsBody.getText().toString());

try{

startActivity(smsVIntent);

} catch (Exception ex) {

Toast.makeText(MainActivity.this, "Your sms has failed...",

Toast.LENGTH\_LONG).show();

ex.printStackTrace();

}

}

@Override

public boolean onCreateOptionsMenu(Menu menu) {

// Inflate the menu; this adds items to the action bar if it is present.

getMenuInflater().inflate(R.menu.main, menu);

return true;

}

}

4. Password Validation Application:

import android.os.Bundle;

import android.app.Activity;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.Toast;

public class MainActivity extends Activity {

EditText uname, pass;

Button blog, bclear;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

uname=(EditText)findViewById(R.id.editText1);

pass=(EditText)findViewById(R.id.editText2);

blog=(Button)findViewById(R.id.button1);

bclear=(Button)findViewById(R.id.button2);

blog.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View arg0) {

// TODO Auto-generated method stub

String na=uname.getText().toString();

String p=pass.getText().toString();

if(na.equals("admin") &&p.equals("admin"))

Toast.makeText(getApplicationContext(),"Authenticated...", Toast.LENGTH\_LONG).show();

else

{

Toast.makeText(getApplicationContext(), "UnAuthenticated...", Toast.LENGTH\_LONG).show();

uname.setText("");

pass.setText("");

}

}

});

bclear.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View arg0) {

// TODO Auto-generated method stub

uname.setText("");

pass.setText("");

}

});

}

}

5. Web Browser or Web View Application:

(Add this line in AndroidManifest.xml

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

)

import android.os.Bundle;

import android.view.View;

import android.webkit.WebView;

import android.webkit.WebViewClient;

import android.widget.Button;

import android.widget.EditText;

import android.app.Activity;

public class MainActivity extends Activity {

EditText txturl;

Button b;

WebView wv;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

txturl=(EditText)findViewById(R.id.editText1);

b=(Button)findViewById(R.id.button1);

wv=(WebView)findViewById(R.id.webView1);

//WebSettingswebSettings = wv.getSettings();

//webSettings.setJavaScriptEnabled(true);

b.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View arg0) {

// TODO Auto-generated method stub

wv.setWebViewClient(new WebViewClient());

wv.loadUrl("http://"+txturl.getText().toString());

}

});

}

}

6. Simple Notification Application:

import android.os.Bundle;

import android.app.Activity;

import android.app.NotificationManager;

import android.content.Context;

import android.support.v4.app.NotificationCompat;

public class MainActivity extends Activity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

//Get an instance of NotificationManager//

NotificationCompat.Builder mBuilder = new NotificationCompat.Builder(this)

.setSmallIcon(R.drawable.ic\_launcher)

.setContentTitle("My notification")

.setContentText("Hello World!");

// Gets an instance of the NotificationManager service//

NotificationManager mNotificationManager = (NotificationManager)getSystemService(Context.NOTIFICATION\_SERVICE);

// NotificationManager.notify().

mNotificationManager.notify(001, mBuilder.build());

}

}

7. Navigation Application With Multiple Activities:

Mainactivity:

import android.os.Bundle;

import android.app.Activity;

import android.content.Intent;

import android.view.Menu;

import android.view.View;

import android.widget.Button;

import android.widget.TextView;

import android.widget.Toast;

import android.view.View.OnClickListener;

public class MainActivity extends Activity {

private TextView tv;

private Button b;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

tv=(TextView)findViewById(R.id.textView1);

b=(Button)findViewById(R.id.button1);

b.setOnClickListener(new OnClickListener() {

@Override

public void onClick(View arg0) {

// TODO Auto-generated method stub

Toast.makeText(getApplicationContext(), tv.getText().toString(), Toast.LENGTH\_LONG).show();

Intent i=new Intent(MainActivity.this,SecondActivity.class);

startActivity(i);

}

});

}

@Override

public boolean onCreateOptionsMenu(Menu menu) {

// Inflate the menu; this adds items to the action bar if it is present.

getMenuInflater().inflate(R.menu.main, menu);

return true;

}

}

Secondactivity:

import android.app.Activity;

import android.os.Bundle;

public class SecondActivity extends Activity {

@Override

protected void onCreate(Bundle savedInstanceState) {

// TODO Auto-generated method stub

super.onCreate(savedInstanceState);

setContentView(R.layout.secondactivity\_main);

}

}

8. E-Mail Application:

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.app.Activity;

import android.content.Intent;

public class MainActivity extends Activity {

EditText txtTo, txtSub, txtMsg;

Button b;

String strTo, strSub, strMsg;

Intent in;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

txtTo=(EditText)findViewById(R.id.editText1);

txtSub=(EditText)findViewById(R.id.editText2);

txtMsg=(EditText)findViewById(R.id.editText3);

b=(Button)findViewById(R.id.button1);

b.setOnClickListener(new View.OnClickListener()

{

@Override

public void onClick(View arg0)

{

// TODO Auto-generated method stub

strTo=txtTo.getText().toString();

strSub=txtSub.getText().toString();

strMsg=txtMsg.getText().toString();

in=new Intent(Intent.ACTION\_SEND);

//in.putExtra(Intent.EXTRA\_EMAIL, new String[]{strTo});

in.putExtra(Intent.EXTRA\_EMAIL, strTo);

in.putExtra(Intent.EXTRA\_SUBJECT, strSub);

in.putExtra(Intent.EXTRA\_TEXT, strMsg);

in.setType("message/rfc822");

startActivity(Intent.createChooser(in, "Choose an email client..."));

}

});

}

}

9. Data Passing Application:

Mainactivity:

import android.os.Bundle;

import android.app.Activity;

import android.content.Intent;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.Toast;

public class MainActivity extends Activity {

EditText uname, pass;

Button blog, bclear;

Intent in;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

uname=(EditText)findViewById(R.id.editText1);

pass=(EditText)findViewById(R.id.editText2);

blog=(Button)findViewById(R.id.button1);

bclear=(Button)findViewById(R.id.button2);

blog.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View arg0) {

// TODO Auto-generated method stub

String na=uname.getText().toString();

String p=pass.getText().toString();

if(na.equals("admin") && p.equals("admin"))

{

Toast.makeText(getApplicationContext(), "Authenticated...", Toast.LENGTH\_LONG).show();

in=new Intent(getApplicationContext(),SecondActivity.class);

in.putExtra("myName", na);

startActivity(in);

}

else

{

Toast.makeText(getApplicationContext(), "Un Authenticated...", Toast.LENGTH\_LONG).show();

uname.setText("");

pass.setText("");

}

}

});

bclear.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View arg0) {

// TODO Auto-generated method stub

uname.setText("");

pass.setText("");

}

});

}

}

SecondActivity:

public class SecondActivity extends Activity {

TextView tv;

String na;

@Override

protected void onCreate(Bundle savedInstanceState) {

// TODO Auto-generated method stub

super.onCreate(savedInstanceState);

setContentView(R.layout.secondactivity\_main);

tv=(TextView)findViewById(R.id.textView1);

Intent in=getIntent();

na=in.getStringExtra("myName");

tv.setText("welcome"+" \t"+na);

}}

**NOTE:**

Androidmanifest.xml -Application-ApplicationNodes –Add-Acivity-Browse – In select class, type activity Secondactivity il be added/registered.

Save and see