Android Menus

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סוגי תפריטים ובנייתם

ישנם שני סוגי תפריטים

1. Options menu
2. Context menu

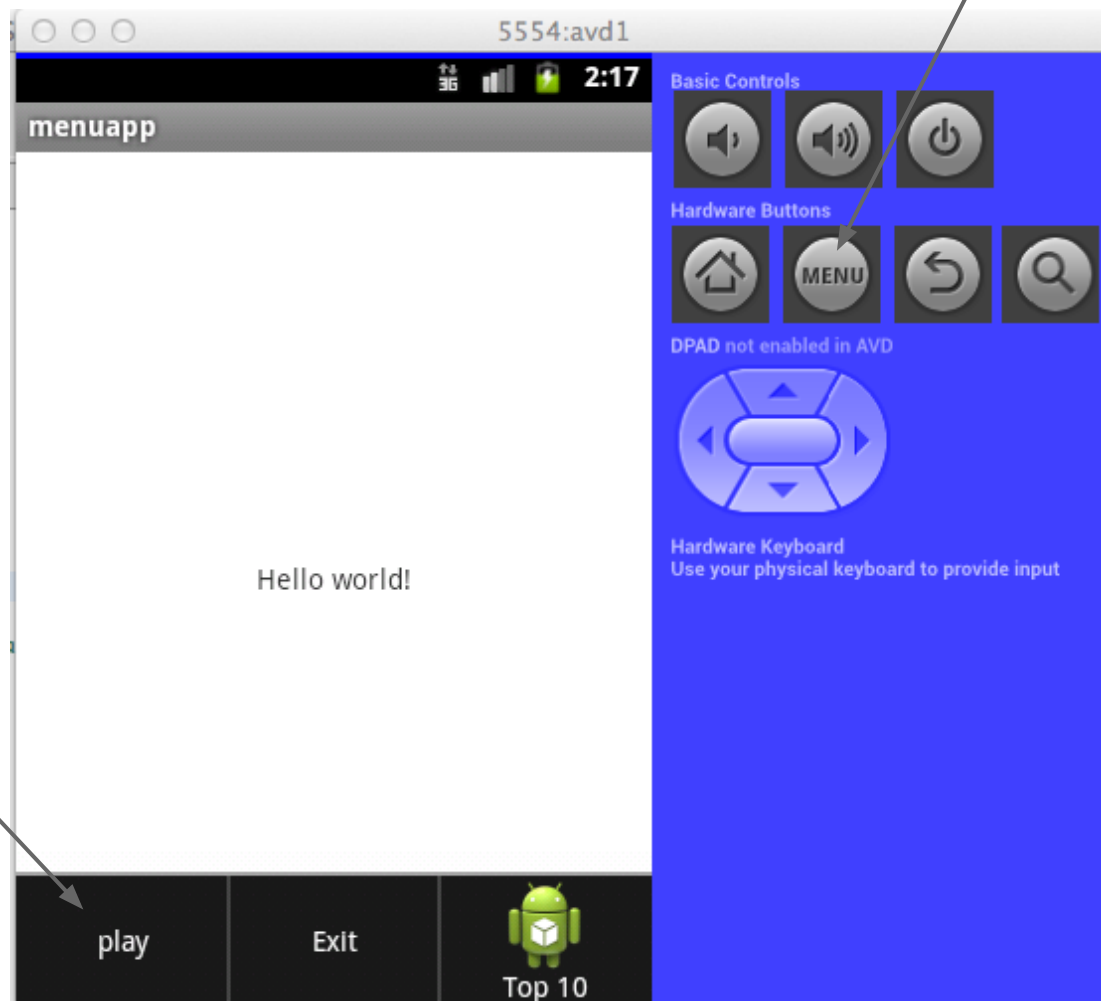1. על מנת לבנות תפריטים נעמוד על תיקיית menu וניצור קובץ xml חדש מסוג menu
2. ב-resource type נסמן menu
3. כל תפריט יהיה שייך ל-activity ספציפי.

menu example

```xml
<menu xmlns:android="http://schemas.android.com/apk/res/android" >
    <item
        android:id="@+id/stratActivity"
        android:orderInCategory="100"
        android:showAsAction="never"
        android:title="play"/>
        <item
        android:id="@+id/Exit"
        android:orderInCategory="100"
        android:showAsAction="never"
        android:title="Exit"/>
        <item
        android:id="@+id/topTensActivity"
        android:orderInCategory="100"
        android:showAsAction="never"
        android:title="Top 10"
        android:icon="@drawable/ic_launcher"
        />
</menu>
```

דוגמא ל-menu

```java
@Override
public boolean onCreateOptionsMenu(Menu menu)
{

    // Inflate the menu; this adds items to the action bar if it is present.
    getMenuInflater().inflate(R.menu.activity_main, menu);
    return true;
}
```

1. אם נחזיר שקר לא יוצג התפריט
2. getMenuInflater.inflate מקבל כפרמטר את ה-id של ה-menu שאותו אנו רוצים להציג

טיפול באירוע בעקבות לחיצה על פריט בתפריט

```java
@Override
public boolean onOptionsItemSelected(MenuItem item) {
    // TODO Auto-generated method stub
    return super.onOptionsItemSelected(item);
    switch(item.getItemId())
    {
    case:R.id.MyFirstMenu.....
```

context menu

1. צריך להוסיף את הפונקציה

Override@

```
public void onCreateContextMenu(ContextMenu menu, View v,
        ContextMenuInfo menuInfo) {
    super.onCreateContextMenu(menu, v, menuInfo);
    MenuInflater infalter=getMenuInflater();
    infalter.inflate(R.menu.popupmenu, menu);
}
```

2. רצוי להוסיף את הפונקציה

```java
@Override
   public boolean onContextItemSelected(MenuItem item) {
        // TODO Auto-generated method stub

        switch (item.getItemId()) {
        case R.id.firstline:
                selectedFirstLine();

                return true;
        case R.id.secondline :
                selectedSecondLine();
                return true;
        default:
                return false;
        }

   }
```

. יש לרשם אובייקט מסוג view לאירוע : 3
registerForContextMenu(tv);

menu xml יש לבנות .4
: לדוגמה

```xml
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:android="http://schemas.android.com/apk/res/android">
    <item android:id="@+id/firstline"
            android:title="First option" />
    <item android:id="@+id/secondline"
            android:title="Second Context Option" />
</menu>
```

דוגמה

בניית layout

```xml
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
        android:layout_width="fill_parent"
        android:layout_height="fill_parent"
        android:orientation="vertical"
        android:gravity="center" >
<TextView
    android:id="@+id/tv"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textSize="50sp"
        android:text="Press on me 2 seconds " />
</LinearLayout>
```

בניית ה-menu

```xml
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:android="http://schemas.android.com/apk/res/android">
    <item android:id="@+id/firstline"
            android:title="First option" />
    <item android:id="@+id/secondline"
            android:title="Second Context Option" />
</menu>
```

בניית ה-activity ורישום ה-view

```java
public class MainActivity extends Activity {
        TextView tv;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

            tv = (TextView)findViewById(R.id.tv);
            //register if for context
        registerForContextMenu(tv);

    }
```

onCreateContextMenu

```
@Override
public void onCreateContextMenu(ContextMenu menu, View v,
              ContextMenuInfo menuInfo) {
    // TODO Auto-generated method stub
    super.onCreateContextMenu(menu, v, menuInfo);

    MenuInflater inflater = getMenuInflater();
    inflater.inflate(R.menu.lovely_context, menu);

}
```
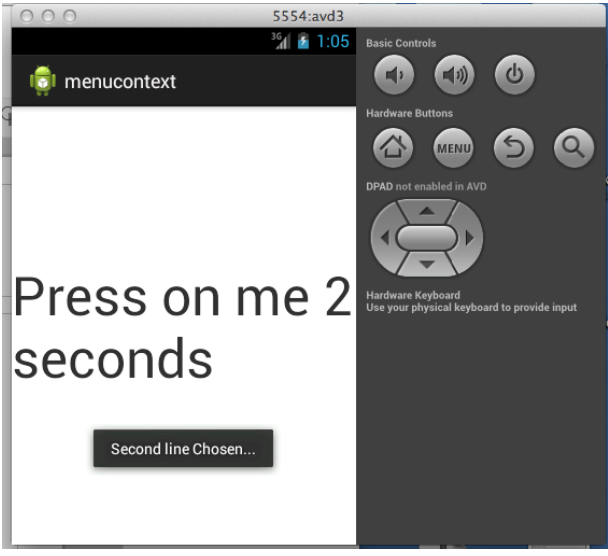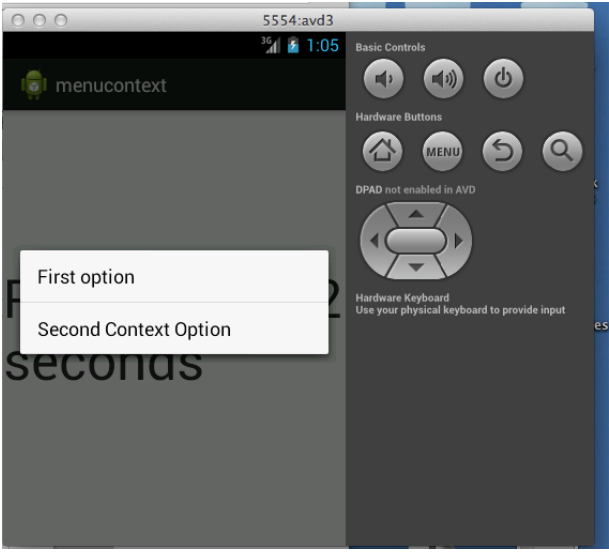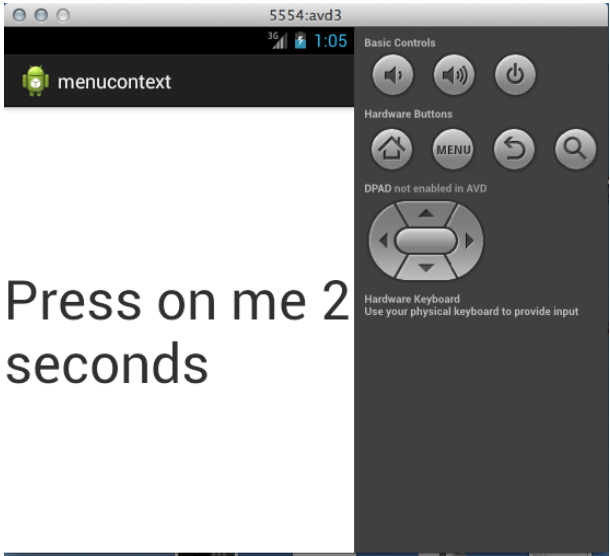
onContextItemSelected

```java
@Override
    public boolean onContextItemSelected(MenuItem item) {
            // TODO Auto-generated method stub
            //return super.onContextItemSelected(item);

            switch (item.getItemId()) {
            case R.id.firstline:
                    selectedFirstLine();
                    return true;
            case R.id.secondline:
                    selectedSecondLine();
                    return true;
            default:
                    return false;
        }

    }
```

טיפול בפונקציות שונות

```java
private void selectedFirstLine() {
        Toast.makeText(this, "First line Chosen...", Toast.LENGTH_LONG).show();
}


private void selectedSecondLine() {
        Toast.makeText(this, "Second line Chosen...", Toast.LENGTH_LONG).show();
}
```

דיאלוג טקסט

דיאלוג לדוגמה :

1. alert dialog
2. progress dialog
3. custom dialog

יצירת dialog

1. overide של onCreateDialog של המחלקה Activity
2. להצגת dialog נקרא לפונקציה showDialog
3. לשינוי dialog בזמן ריצה נקרא לפונקציה (onPrepareDialog(int,Dialog
4. dialog ניתן לסגר ע"י קריאה לפונקציה dismissDialog(int)
5. ניתן להאזין לארוע העלמות ה-dialog ע"י הפונקציה DialogInterface.OnDismissListener או על ידי הפונקציה : DialogInterface.OnDismissListener

Alert Dialog

bulid the activity

```java
public class MainActivity extends Activity implements android.view.View.OnClickListener {
        private static final int DIALOG_ALERT = 1;
    Button btn;
  @Override
  protected void onCreate(Bundle savedInstanceState) {
     super.onCreate(savedInstanceState);
     setContentView(R.layout.activity_main);
     btn=(Button)findViewById(R.id.button1);
     btn.setOnClickListener(this);

  }
```

bulid the layout

```xml
<RelativeLayout 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=".MainActivity" >
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerHorizontal="true"
        android:layout_centerVertical="true"
        android:text="@string/hello_world" />
    <Button
        android:id="@+id/button1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentLeft="true"
        android:layout_alignParentTop="true"
        android:layout_marginTop="16dp"
        android:text="Button" />
</RelativeLayout>
```

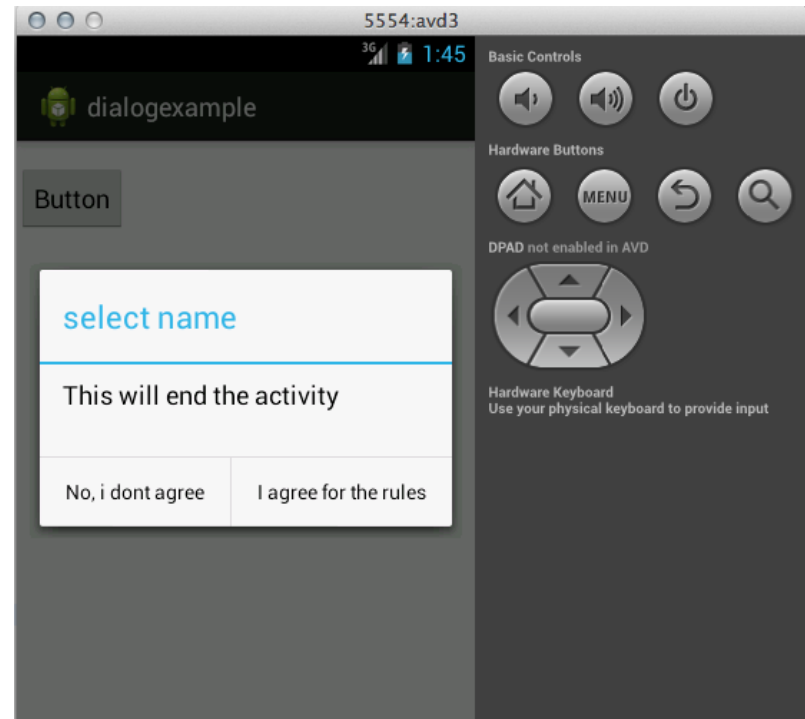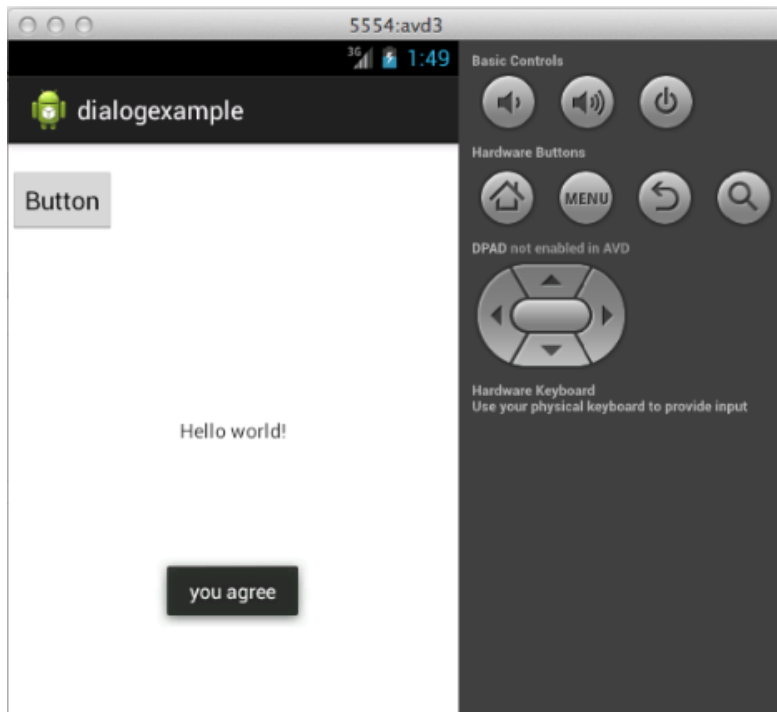# **overide** protected Dialog onCreateDialog(int id)

```java
@Override
protected Dialog onCreateDialog(int id) {
        // TODO Auto-generated method stub
   switch (id) {
   case DIALOG_ALERT:
    // Create out AlterDialog
    android.app.AlertDialog.Builder builder = new AlertDialog.Builder(this);
    builder.setTitle("select name");
    builder.setMessage("This will end the activity");
    builder.setCancelable(true);
    builder.setPositiveButton("I agree for the rules", new OkOnClickListener());
    builder.setNegativeButton("No, i dont agree", new CancelOnClickListener());
    AlertDialog dialog = builder.create();
    dialog.show();
   }
   return super.onCreateDialog(id);
}
```

Build class CancelOnClickListener and   OkOnClickListener

```java
private final class CancelOnClickListener implements  DialogInterface.OnClickListener
{

    public void onClick(DialogInterface dialog, int which)
    {
      Toast.makeText(MainActivity.this, "you agree",Toast.LENGTH_LONG).show();
    }

}




private final class OkOnClickListener implements    DialogInterface.OnClickListener
    {
      public void onClick(DialogInterface dialog, int which)
{

        MainActivity.this.finish();
    }
```

תמונת מסך

דוגמא 2

bulid the activity

```java
public class MainActivity extends Activity implements android.view.View.OnClickListener {
        private static final int DIALOG_ALERT = 1;
    Button btn;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        btn=(Button)findViewById(R.id.button1);
        btn.setOnClickListener(this);

    }
```

bulid the layout

```
<RelativeLayout 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=".MainActivity" >
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerHorizontal="true"
        android:layout_centerVertical="true"
        android:text="@string/hello_world" />
    <Button
        android:id="@+id/button1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentLeft="true"
        android:layout_alignParentTop="true"
        android:layout_marginTop="16dp"
        android:text="Button" />
</RelativeLayout>
```

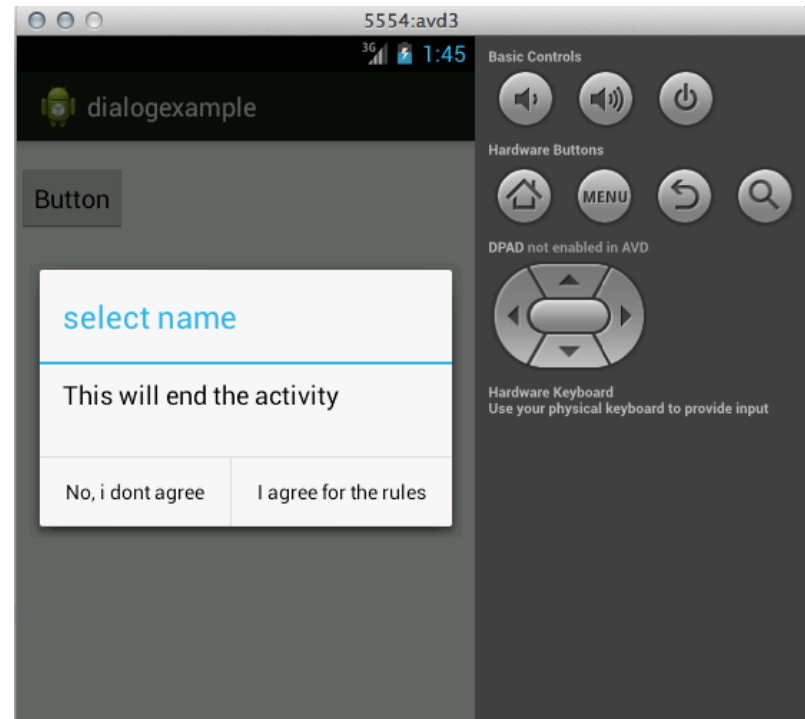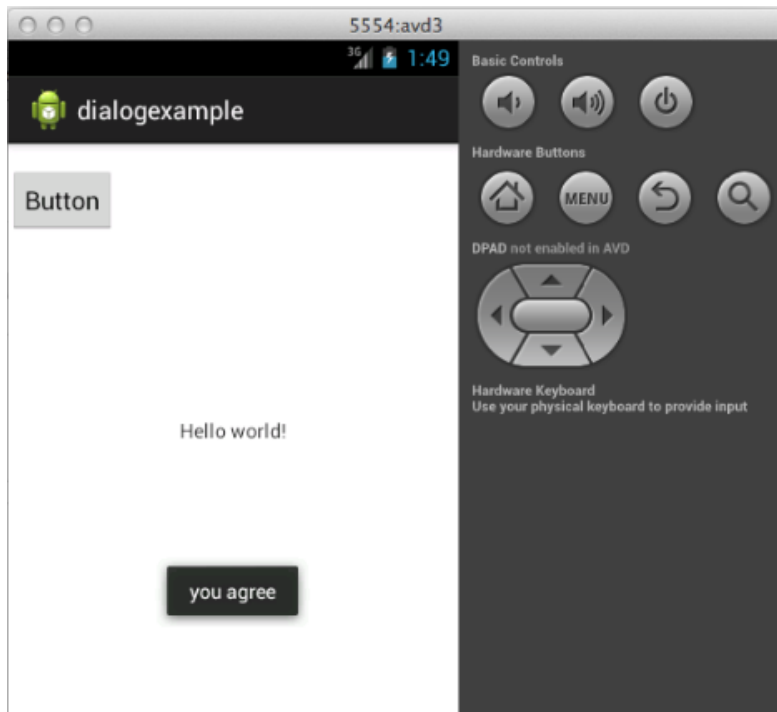# **overide** protected Dialog onCreateDialog(int id)

```java
@Override
protected Dialog onCreateDialog(int id) {
        // TODO Auto-generated method stub
    switch (id) {
    case DIALOG_ALERT:
     // Create out AlterDialog
     android.app.AlertDialog.Builder builder = new AlertDialog.Builder(this);
     builder.setTitle("select name");
     builder.setMessage("This will end the activity");
     builder.setCancelable(true);
     builder.setPositiveButton("I agree for the rules", new OkOnClickListener());
     builder.setNegativeButton("No, i dont agree", new CancelOnClickListener());
     AlertDialog dialog = builder.create();
     dialog.show();
    }
    return super.onCreateDialog(id);
}
```

Build class CancelOnClickListener and   OkOnClickListener

```java
        private final class CancelOnClickListener implements  DialogInterface.OnClickListener
 {
    public void onClick(DialogInterface dialog, int which)
    {
      Toast.makeText(MainActivity.this, "you agree",Toast.LENGTH_LONG).show();
    }

 }




  private final class OkOnClickListener implements    DialogInterface.OnClickListener
    {
       public void onClick(DialogInterface dialog, int which)
{
        MainActivity.this.finish();
  }
```

תמונת מסך

Progress dialog

Activity

```java
public class MainActivity extends Activity implements OnClickListener {
    ProgressDialog p;
    Button btn;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        Button btn=(Button) findViewById(R.id.button1);
        btn.setOnClickListener(this);
    }
```
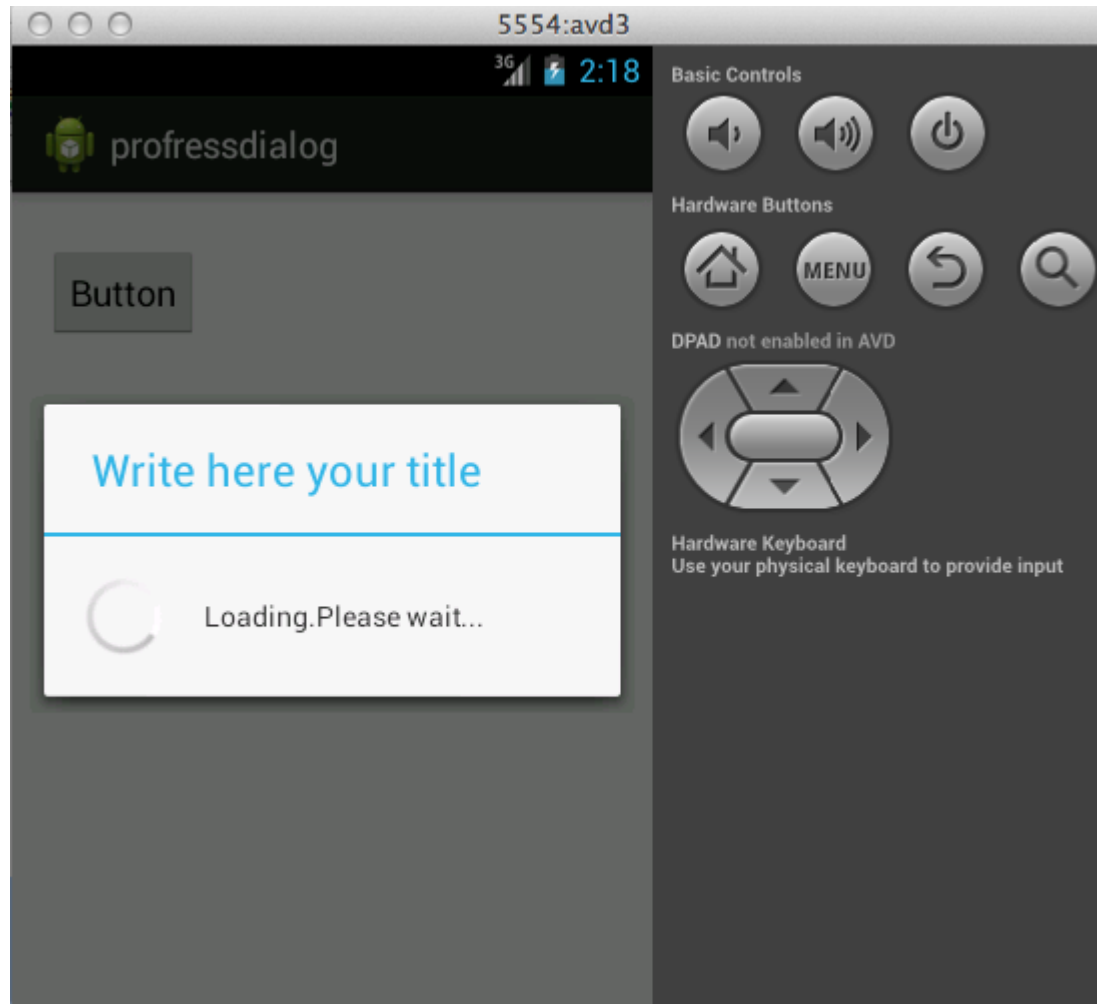
layout

```xml
<RelativeLayout 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=".MainActivity" >
    <Button
        android:id="@+id/button1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentLeft="true"
        android:layout_alignParentTop="true"
        android:layout_marginLeft="17dp"
        android:layout_marginTop="26dp"
        android:text="Button" />
</RelativeLayout>
```

הפעלת ה-progress

```java
@Override
public void onClick(View v) {
    // TODO Auto-generated method stub
p = ProgressDialog.show(this,"Write here your title","Loading.Please wait...", true);
p.setCancelable(true);//the user can cancell the dialog

p.setProgressStyle(ProgressDialog.STYLE_HORIZONTAL);
p.setMessage("Loading...");
p.show();
}
```

Date dialog

Activity

```java
public class MainActivity extends Activity implements OnClickListener {
    Button btn;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        Button btn=(Button) findViewById(R.id.button1);
        btn.setOnClickListener(this);

    }
```

layout

```xml
<RelativeLayout 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=".MainActivity" >
    <Button
        android:id="@+id/button1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentLeft="true"
        android:layout_alignParentTop="true"
        android:layout_marginLeft="17dp"
        android:layout_marginTop="26dp"
        android:text="Button" />
</RelativeLayout>
```

הפעלת ה-date dialog

```java
@Override
public void onClick(View arg0) {
        // TODO Auto-generated method stub
    final Calendar SystemCalender = Calendar.getInstance();
     int year = SystemCalender.get(Calendar.YEAR);
     int month = SystemCalender.get(Calendar.MONTH);
     int day = SystemCalender.get(Calendar.DAY_OF_MONTH);
     DatePickerDialog mypockerdate = new DatePickerDialog(this, new SetDate(), year, month,
day);
     mypockerdate.show();
    }
```

You must write this class

```
private class SetDate implements OnDateSetListener
{

        @Override
        public void onDateSet(DatePicker arg0, int arg1, int arg2, int arg3) {
                // TODO Auto-generated method stub


        }



}
```

Time dialog

Activity

```java
public class MainActivity extends Activity implements OnClickListener {
    Button btn;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        Button btn=(Button) findViewById(R.id.button1);
        btn.setOnClickListener(this);
    }
```

layout

```xml
<RelativeLayout 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=".MainActivity" >
    <Button
        android:id="@+id/button1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_alignParentLeft="true"
        android:layout_alignParentTop="true"
        android:layout_marginLeft="17dp"
        android:layout_marginTop="26dp"
        android:text="Button" />
</RelativeLayout>
```

הפעלת ה-time dialog

```java
@Override
public void onClick(View v) {
        // TODO Auto-generated method stub
        final Calendar SystemCalander = Calendar.getInstance();
    int hour = SystemCalander.get(Calendar.HOUR_OF_DAY);
        int minute = SystemCalander.get(Calendar.MINUTE);
        TimePickerDialog myTimePicker = new TimePickerDialog(this, new SetYourTime(),hour,
minute, true);
        myTimePicker.show();
    }
```
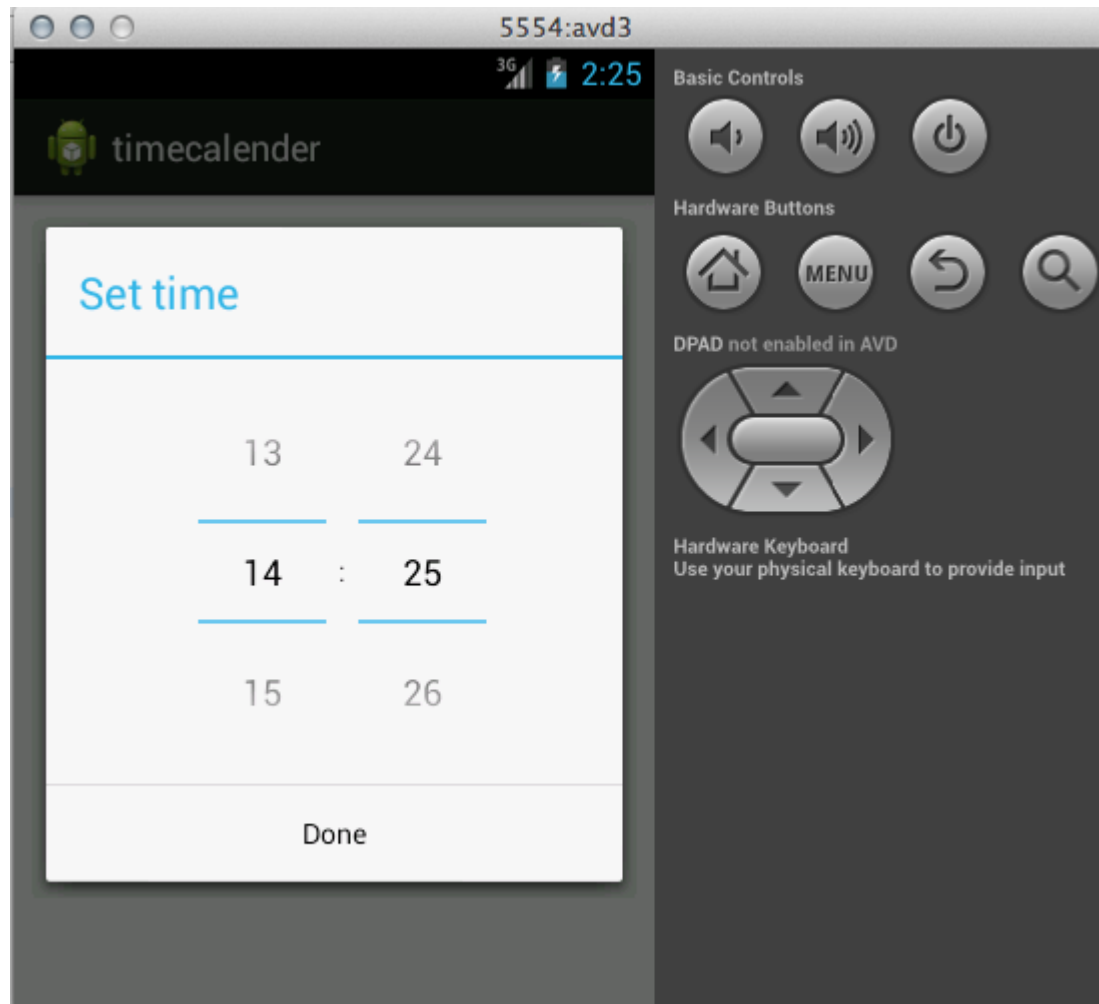
You must write this class

```java
private class SetYourTime implements OnTimeSetListener
{
    public SetYourTime()
    {

    }


    @Override
    public void onTimeSet(TimePicker arg0, int arg1, int arg2) {
        // TODO Auto-generated method stub

    }

}
```

תמונה מסך

יום ללא תכנות הוא יום מבוזבז!