Royal Education Society's

[Govt. of Maharashtra approved, affiliated to S.R.T. Marathwada University, Nanded and included under Section 2(f) and 12(B) of U.G.C. Act 1956]

COLLEGE OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY(COCSIT), LATUR

संगणकशास्त्र व माहितीतंत्रज्ञान महाविद्यालय(कॉक्सिट), लातूर.

Ambajogai Road, LATUR-413531 (Maharashtra)

COCSIT Ph.: 02382-229191, Fax : 02382-228646, Website : www.cocsit.org.in, E-mail : cocsit365@rediffmail.com

MAD/LAB/07   **- Create an application that will start mobile torch on toggle button on and off.**

Step-1 open android studio.

> If android studio start from welcome screen of android studio then

> Click on **New Project.**

> If you open previous created project then first close current open project.

> Goto File -> select close project options

> You can see the **wel-come screen** of android studio repeat step 1

> Click on **New Project.**

> Select **empty Activity** form right side panel and click on next button.

Step-2 Write the Application name as **MADLAB07**

> Select Language for Development is **Java**

> Select Minimum SDK, scroll upside and choose android version **4.1 JellyBean.**

> Click on **Finish** Button

Step-3 Your Application show two types of file in that select **activity_main.xml**

> Right click on design page area and select **GOTO XML.**

Change the page layout as relative layout.

```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"
    style="@style/Theme.MyDemoApp"
    tools:context=".MainActivity">

<ToggleButton
    android:id="@+id/tourch"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_centerInParent="true"
    android:background="@drawable/buttonbg"
    android:text="ToggleButton"
    android:textColor="@color/white"
    android:textSize="40sp" />

</RelativeLayout>
```

Step-4 GOTO MainActivity.java
1. Create object of respective controls(ToggleButton).
   ToggleButton t1;

2. Create anthor two object of
   String cameraId;
   CameraManager cameraManager;

3. Find the design layout id of EditText inside Oncreate Methods.
   t1=findViewById(R.id.tourch);

4. Register Camera service
   cameraManager=(CameraManager) getSystemService(Context.CAMERA_SERVICE);
   try {
       cameraId=cameraManager.getCameraIdList()[0];
   } catch (CameraAccessException e) {
       e.printStackTrace();
   }

5. Set Lister to Toggle Button object

```java
t1.setOnCheckedChangeListener(new CompoundButton.OnCheckedChangeListener()
{
   @RequiresApi(api = Build.VERSION_CODES.M)

   @Override
   public void onCheckedChanged(CompoundButton compoundButton, boolean b) {

      try {

         cameraManager.setTorchMode(cameraId,b);

      }
catch (CameraAccessException e) {

         e.printStackTrace();

      }

   }
});
```

FINISH