

In this laboratory work Nr.3 I used Android Studio , and made an application for Android platform. This application consists from 2 buttons (start and stop), 1 Text View for showing status, 1 edit text where you should input time as sec and 1 seekbar for showing time process.

### Source Code:

#### Code for activity\_main.xml layout file:

```
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="fill_parent"
    android:layout_height="fill_parent"
    tools:context="lab3.example.myapplication.Laborator3"
    android:contextClickable="false"
    android:focusable="false"
    android:focusableInTouchMode="false">

    <Button
        android:id="@+id/btnStart"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Start"

        android:layout_alignParentBottom="true"
        android:layout_toLeftOf="@+id/textViewTime"
        android:layout_toStartOf="@+id/textViewTime"
        android:layout_marginBottom="87dp" />

    <Button
        android:id="@+id/btnStop"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Stop"
        android:layout_alignTop="@+id/btnStart"
        android:layout_toRightOf="@+id/textViewTime"
        android:layout_toEndOf="@+id/textViewTime" />

    <TextView
        android:id="@+id/textViewTime"
        android:text="1212"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textSize="25sp"
        android:layout_centerVertical="true"
        android:layout_centerHorizontal="true" />

    <SeekBar
        android:layout_width="200dp"
        android:layout_height="wrap_content"
        android:id="@+id/seekBar"
        android:layout_marginTop="10dp"
        android:layout_below="@+id/textViewTime"
        android:layout_centerHorizontal="true" />

    <EditText
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:inputType="time"
```

```

        android:ems="10"
        android:id="@+id/editText"
        android:layout_marginTop="28dp"
        android:layout_alignParentTop="true"
        android:layout_centerHorizontal="true" />

```

```
</RelativeLayout>
```

## Code for MainActivity.java file, where i used 2 different Classes

```

public class CounterClass extends CountDownTimer {

    Laborator3 laborator3;
    long elapsed;

    public CounterClass(long millisInFuture, long countDownInterval,
Laborator3 laborator3) {
        super(millisInFuture, countDownInterval);
        this.laborator3 = laborator3;
        elapsed = millisInFuture;
    }

    @Override
    public void onTick(long millisUntilFinished) {
        long millis = millisUntilFinished;
        String hms = String.format("%02d:%02d:%02d",
TimeUnit.MILLISECONDS.toHours(millis),
        TimeUnit.MILLISECONDS.toMinutes(millis) -
TimeUnit.HOURS.toMinutes(TimeUnit.MILLISECONDS.toHours(millis)),
        TimeUnit.MILLISECONDS.toSeconds(millis) -
TimeUnit.MINUTES.toSeconds(TimeUnit.MILLISECONDS.toMinutes(millis)));
        System.out.println(hms);
        laborator3.setTime(hms);

laborator3.setProgressMethod((int) (millisUntilFinished/ (double)elapsed *
100));
    }

    @Override
    public void onFinish() {
        laborator3.setTime("Completed.");
    }
}

public class Laborator3 extends AppCompatActivity {

    Button btnStart, btnStop;
    TextView textViewTime;
    EditText editText;
    SeekBar seekBar;
    CounterClass timer;
    Laborator3 activity;

    @TargetApi (Build.VERSION_CODES.HONEYCOMB)
    @Override

```

```

protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_laborator3);
    activity = this;
    btnStart = (Button) findViewById(R.id.btnStart);
    btnStop = (Button) findViewById(R.id.btnStop);
    textViewTime = (TextView) findViewById(R.id.textViewTime);
    editText = (EditText) findViewById(R.id.editText);
    seekBar = (SeekBar) findViewById(R.id.seekBar);
    seekBar.setActivated(false);
    seekBar.setProgress(100);
    textViewTime.setText("Elapsed time");

    btnStart.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            timer = new
CounterClass(Long.parseLong(String.valueOf(editText.getText())), 1000,
activity);
            timer.start();
            Log.e("ewqewqe" , editText.getText().toString());
        }
    });
    btnStop.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            timer.cancel();
        }
    });
}

public void setTime(String time) {
    textViewTime.setText(time);
}

public void setProgressMethod(int progress) {
    seekBar.setProgress(progress);
}
}

```