Experiment No 1.2

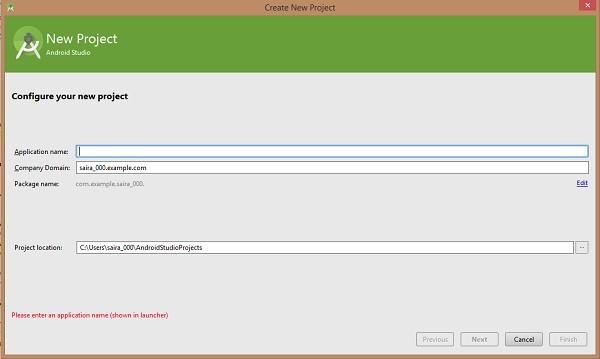
**Create a “HELLO WORLD” application.**

**AIM:** To design an android application to display Hello World

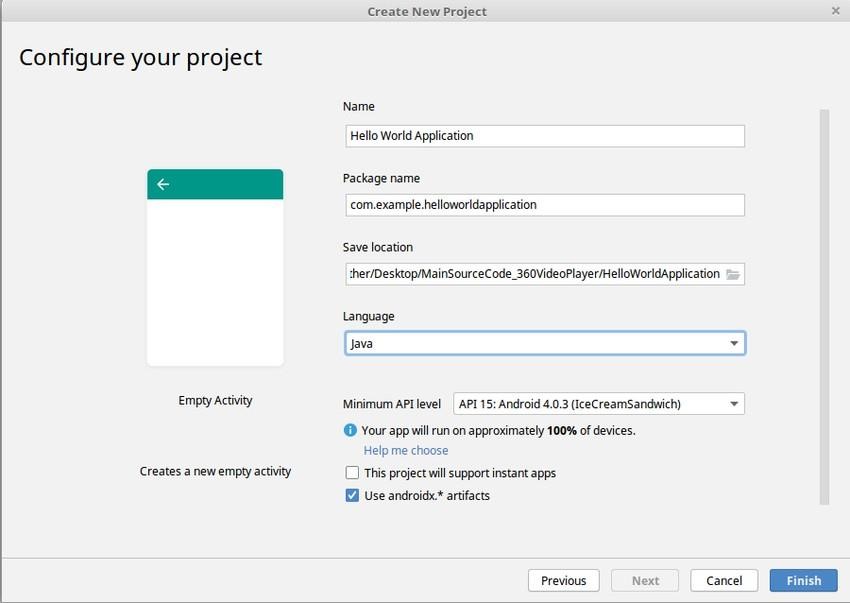
First step is to create a simple Android Application using Android studio. When you click on Android studio icon, it will show screen as shown below



You can start your application development by calling start a new android studio project.in a new installation frame should ask Application name, package information and location of the project.−

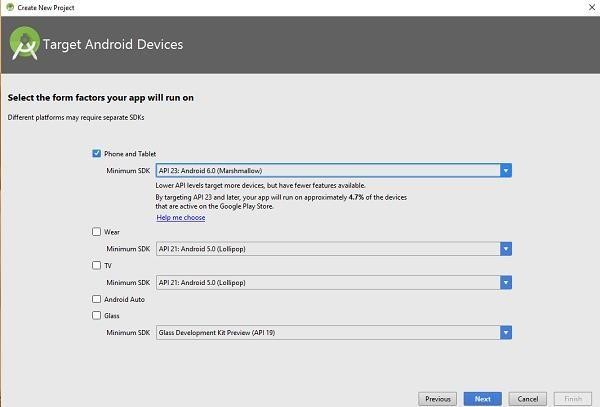


Configure the Hello World Project Details We'll finish creating the project by configuring some details about its name, location, and the API version it



Change the name of the application. Change the default **Project location** to your preferred directory or just leave it as the default location.

On the **minimum API level**, ensure that **API 15: Android 4.0.3 Ice Cream Sandwich** is set as the Minimum SDK. This ensures that your application runs on almost all devices.



Then ext level of installation should contain selecting the activity to mobile, it specifies the default layout for Applications.

**SOURCECODE:**

**The Main Activity File**

## The main activity code is a Java file Main Activity. java. This is the actual application file which ultimately gets converted to a Dalvik executable and runs your application

packagecom.example.helloworldapplication;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

public classMainActivityextendsAppCompatActivity{

@Override

protectedvoidonCreate(BundlesavedInstanceState){super.onCreate(savedInstanceState);setContentView(R.layout.activity\_main);

}

}

## TheLayoutFile

The **activity\_main.xml** is a layout file available in res/layout directory, that is referenced by your application when building its interface. You will modify this file very frequently to change the layout of your application. For your "HelloWorld!" application ,this file will have following content related to default layout −

<RelativeLayoutxmlns:android[="h](http://schemas.android.com/apk/res/android)tt[p://schemas.android.com/apk/res/android](http://schemas.android.com/apk/res/android)"xmlns:tools[="h](http://schemas.android.com/tools)tt[p://schemas.android.com/tools](http://schemas.android.com/tools)"android:layout\_width="match\_parent"android:layout\_height="match\_parent">

<TextViewandroid:layout\_width="wrap\_content"android:layout\_height="wrap\_content"android:layout\_centerHorizontal="true"android:layout\_centerVertical="true"android:padding="@dimen/padding\_medium"android:text="@string/hello\_world"tools:context=".MainActivity"/>

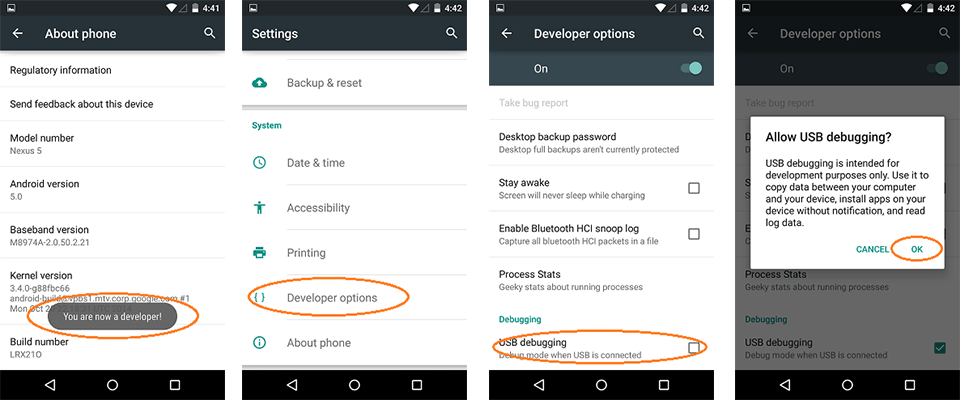
### I)RunningapponPhone:

***ConnectyourPhonetoComputer***

### PluginyourdevicetoyourcomputerwithaUSBcable.Ifyou'redevelopingonWindows,youmightneedtoinstallthis[universalADBUSBdriver](http://download.clockworkmod.com/test/UniversalAdbDriverSetup.msi)orfindyour[specificUSBdriverforyourdevice](https://developer.android.com/tools/extras/oem-usb.html).

***Enable USB Debugging***

The next step is to enable USB debugging so your phone can interact with your computer in a developer mode.



The following steps are needed:

1. (Windows Only) Install [this ADB Driver](http://download.clockworkmod.com/test/UniversalAdbDriverSetup.msi)
2. Plug-in your Android Device to Computer via USB
3. Open the "Settings" App on the Device
4. Scroll down to bottom to find "About phone" item
5. Scroll down to bottom to find "Build number" section
6. Tap on "Build Number" 7 times in quick success ion
7. You should see the message "You are now a developer!"
8. Go back to main "Settings" page
9. Scroll down bottom to find "Developer options" item
10. Turn on "USB Debugging" switch and hit "OK"
11. Unplug and re-plug the device
12. Dialogappears"AllowUSBDebugging?"
13. Check "Always allow from this computer" and then hit "OK"

### RunningyourApp

Now, we can launch apps from Android Studio on to our device:

1. Select one of your projects and click "Run" from the toolbar.
2. In the "Choose Device" window that appears, select the" Choose a running device" radio button, select the device, and click OK.

II) Running app on Emulator(AVD)

To run the app from Android studio, open one of your project's activity files and click Run Eclipse Run Iconicon from the toolbar. Android studio installs the app on your AVD and starts it and if everything is fine with your set-up andapplication,itwilldisplayfollowingEmulatorwindow−OnceGradlefinishesbuilding,AndroidStudioshouldinstalltheapponyourconnecteddeviceandstartit.

