PUNE INSTITUTE OF COMPUTER TECHNOLOGY, PUNE – 411043

Department of Electronics & Telecommunication Engineering

BATCH AND ROLL NO: P8 42405
EXPERIMENT NO.1
TITLE: Install Android studio. Create Hello World app.
DATE OF PERFORMANCE
DATE OF CHECKING

Title: Install Android Studio. Create Hello World app.

Requirements:
 1 Android studio
 2. Java SDK

Theory:

- Android studio is one of best program for Android app development.
- It offers a plethora of features and integrated tools for creating a professional Android apps.
- The program includes a features rich Android emulator, testing tools and consistent development environment. In addition to this it also features an intelligent code editor that provides you with advance code suggestions.
- Due to many configuration steps, Android Studio may be challenging to set up if you're a novice developer. Here, we show how to install Android Studio on Windows and create a sample application.

 Java JDK

- Before installing Android Studio, you first need to install the Java JDK and set up the Java environment to start working on it.
- The Java Development Kit (JDK) is a required development package for creating Java-based applications. Additionally, it also includes tools for developers for testing Java-coded applications.

Follow these steps to get the latest version of Java JDK for Windows and set it up:

1. Go to the official **Oracle Java Downloads** page.
2. Choose the most recent version of Java JDK and download the **x64 MSI Installer** under the **Windows** tab.
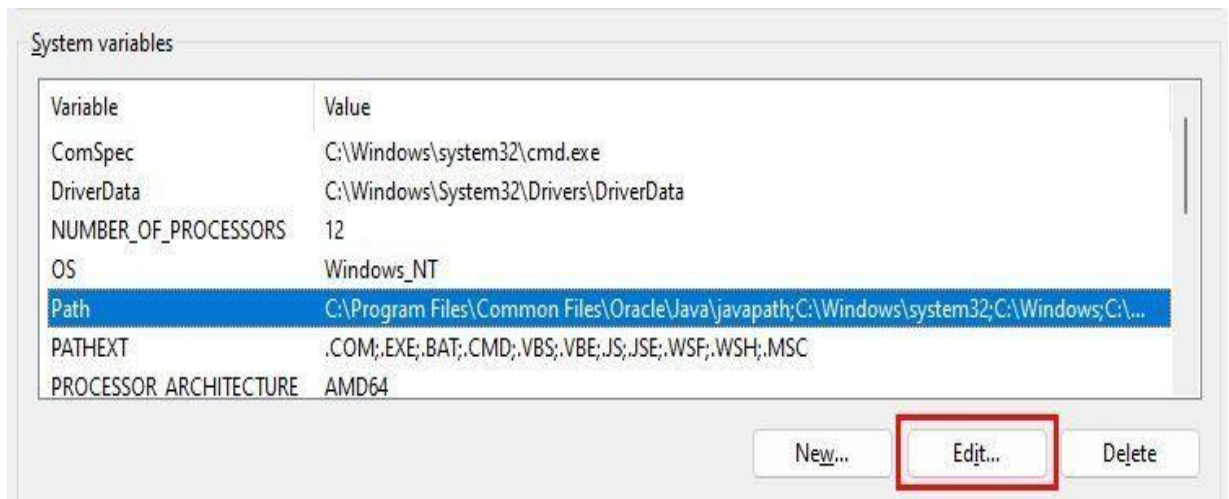

3. Open the file you've just downloaded from the **Downloads** folder.
4. Follow the on-screen instructions to install the latest Java JDK.

Once JDK installed successfully, next step is to set up a Java environment so that Android Studio can easily find the location of Java on desktop.

Steps for Setting Up the Java Environment

1. Open Windows search and type "Edit environment variables."
2. Hit the **Enter** key to open the **Environment Variables** window.
3. Now, under the **System variables** section, click **Path > Edit > New**

4. Copy the path of the folder where the JDK binaries are installed. For example, in our case, the path is **C:\Program Files\Java\jdk-18.0.1.1\bin.**
5. Switch to the Environment variables window and paste the path you've copied and save the changes.
6. Next, under the **User Variables** section, click **New**.
7. Add **PATH_HOME** in the variable name box and **C:\Program Files\Java\jdk-18.0.1.1** in the variable value box.
8. Finally, save the changes by clicking **OK**.

NOTE: [In general, you do not need to reconfigure any environment variables if you have already done so. But if it's your first time, setting the variables will help you reduce Java-based errors during compilation.]

Steps to Install Android Studio on Windows

1. Visit the **Android Developers** website and click on **Download Android Studio**.

android
studio

Android Studio provides the fastest tools for building apps on every type of Android device.

Download Android Studio

Android Studio Chipmunk | 2021.2.1 Patch 1 for Windows 64-bit (929 MiB)

Download options   Release notes

2. Now, open the downloaded file to install Android Studio.

3. Click **Next** to continue installing Android Studio.

Android Studio Setup — □ ✕

Welcome to Android Studio Setup

Setup will guide you through the installation of Android Studio.

It is recommended that you close all other applications before starting Setup. This will make it possible to update relevant system files without having to reboot your computer.

Click Next to continue.

Android Studio

< Back   Next >   Cancel

4. Further, click **Install** and wait while Android Studio is being installed on your PC.

5. Once done, click **Finish** to close the installer and start Android Studio.

6. Android Studio will now ask you to import settings. Click **OK** to continue to set up Android Studio.

The System Requirements for Android Studio on Windows

Your PC must meet the following requirements to run Android Studio efficiently:

- 64-bit Microsoft Windows OS 8/10/11.
- 1280 x 800 minimum screen resolution.
- x86_64 CPU architecture; 2nd generation Intel Core or newer; or AMD CPU with Hypervisor support.
- 8GB of RAM or more.
- 12GB of available disc space is required (IDE + Android SDK + Android Emulator).

CONCLUSION:

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CODE:

```xml
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
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"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/textView2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="308dp"
        android:text="Roll No.:          "
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.498"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="16dp"
        android:text="Hello Word"
        app:layout_constraintEnd_toEndOf="@+id/textView2"
        app:layout_constraintHorizontal_bias="0.518"
        app:layout_constraintStart_toStartOf="@+id/textView2"
        app:layout_constraintTop_toBottomOf="@+id/textView2" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

SAMPLE OUTPUT: