



**COCSIT**

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

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**DEPARTMENT OF COMPUTER SCIENCE**

**LAB WORK-MANUAL**

**for**

**Mobile Application Development**

<i>Class/ Year</i>	<i>B.Sc(CS) TY 2023</i>
<i>Subject code</i>	<i>BCS-606.Lab Course 1</i>
<i>Semester</i>	<i>Sixth semester</i>
<i>Language / package</i>	<i>Programming in C</i>
<i>Lecturer</i>	<i>Mr. G. P. Shinde</i>
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**Prepared by**

**Mr. G.P Shinde**

**HOD**

**Vice Principal**

**Principal**

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## List of practical for mobile application development

Sr. No.	Practical No.	Name of the practical	Page No	Remarks
01	MAD/LAB/01	Installing android studio		
02	MAD/LAB/02	Create "Hello World" application. That will display "Hello World" in the middle of the screen in the cyan color with background image and change the app icon.		
03	MAD/LAB/03	Demonstrate the use of Layout such as RelativeLayout, LinearLayout.		
04	MAD/LAB/04	Create user login application with username and password and switch to next activity by using intent		
05	MAD/LAB/05	Create application to read mobile no from user and call the mobile no using intent.		
06	MAD/LAB/06	Create an application that will display admin panel and student panel using fragment.		
07	MAD/LAB/07	Create an application that will start mobile torch on toggle button on and off.		
08	MAD/LAB/08	Create an application that will accept date and time from timepicker and datepicker dialog.		
09	MAD/LAB/09	Write an android code to show use of WebView.		
10	MAD/LAB/10	. Design android application for login activity. Write android code to check login credentials with username = "Admin" and password = "android". Display appropriate toast message to the user.		
11	MAD/LAB/11	Create an application that will display objective question layout using radio button and when option submitted show message "correct".		
12	MAD/LAB/12	Create an application to show 3 option menu of color name and after click on option menu change background of current activity		
13	MAD/LAB/13	Write an application to demonstrate Alert Dialog Box in android		
14	MAD/LAB/14	Write an application to demonstrate Custom Alert Dialog Box in android		
15	MAD/LAB/15	Demonstrate Array Adapter using List View to display list of fruits.		

16	MAD/LAB/16	Write an android application using SQLite to create table and perform CRUD operations (Example. COURSE table (ID, Name, Duration, and Description), perform ADD, UPDATE, DELETE and READ operations)		
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### General Instructions for Students:

1. Before entering the Lab the student should carry the following things (MANDATORY)
  - a. Identity card issued by the college.
  - b. Class notes
  - c. Lab observation book
  - d. Lab Manual
  - e. Lab Record
2. Student must sign in and sign out in the Lab Attendance register provided when attending the lab session without fail.
3. Student should come to the laboratory in time. Students, who are late more than 15 min., will not be allowed to attend the lab.
4. Students need to maintain 100% attendance in lab if not a strict action will be taken.
5. All students must follow a Dress Code while in the laboratory
6. All bags must be left at the indicated places
7. Respect the laboratory and its other users.
8. Workspace must be kept clean and tidy after experiment is completed.
9. Read the Manual carefully before coming to the laboratory and be sure about what you are supposed to do.
10. Do the experiments as per the instructions given in the manual.
11. Write each the programs in practical book after completions
12. Students are not supposed to use pen drives, Mobile data cables without permission of lab- in charge.
13. Lab records need to be submitted on or before the date of submission.

### Instructions for Preparing Each Lab Manuals:

1. **Write the Lab Experiment title/ Program title**
2. **Write the Objective/Expected output after completion of the Practical**
3. **Write the description of the experiment /concepts.**
4. **Write the steps to open the editor/ software needed for experiments**
  - a. **Write the steps needed for doing experiment/program**
  - b. **Write the concepts and explanation required for the experiment/methods**
5. **Write the experiment/Program output.**

**Step1** – before installing android studio you must have to check system configuration.

The following are the system requirements for Android Studio on Windows.

64-bit Microsoft® Windows® 8/10/11

X86\_64 CPU architecture; 2nd generation Intel Core or newer, or AMD CPU with support for a Windows Hypervisor

8 GB of available disk space minimum (IDE + Android SDK + Android Emulator)

**Step2** - Open any web browser and navigate to the <https://developer.android.com/>

Click **Download Android Studio**. The **Terms and Conditions** page with the Android Studio **License Agreement** opens.

Read the **License Agreement**.

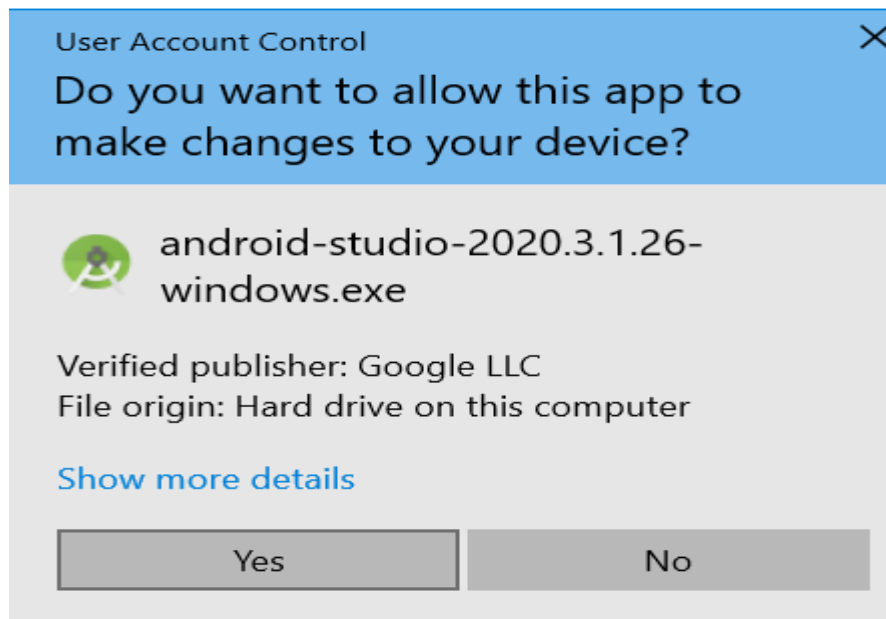
At the bottom of the page, if you agree with the terms and conditions, select the **I have read and agree with the above terms and conditions** checkbox.

Click **Download Android Studio** to start the download.

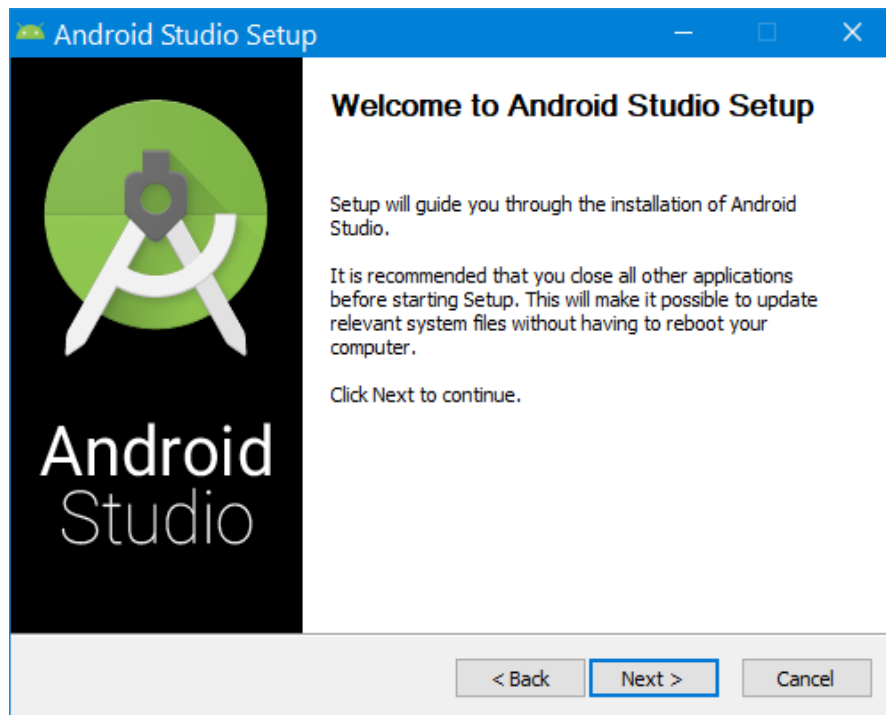
**Step3**- Open the folder where you downloaded and saved the Android Studio installation file.

Double-click the downloaded file.

If you see a **User Account Control** dialog about allowing the installation to make changes to your computer, click **Yes** to confirm the installation.

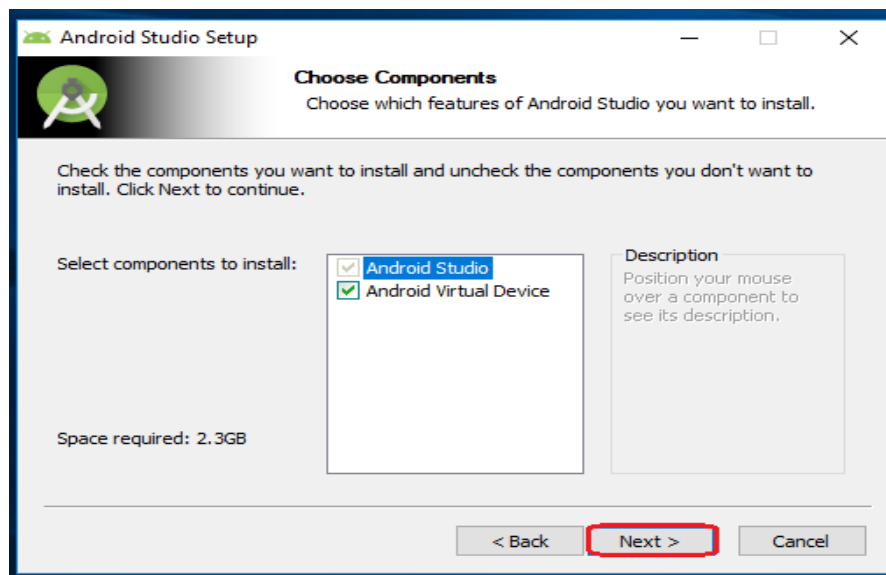


**Step4** - The **Welcome to Android Studio Setup** dialog displays.



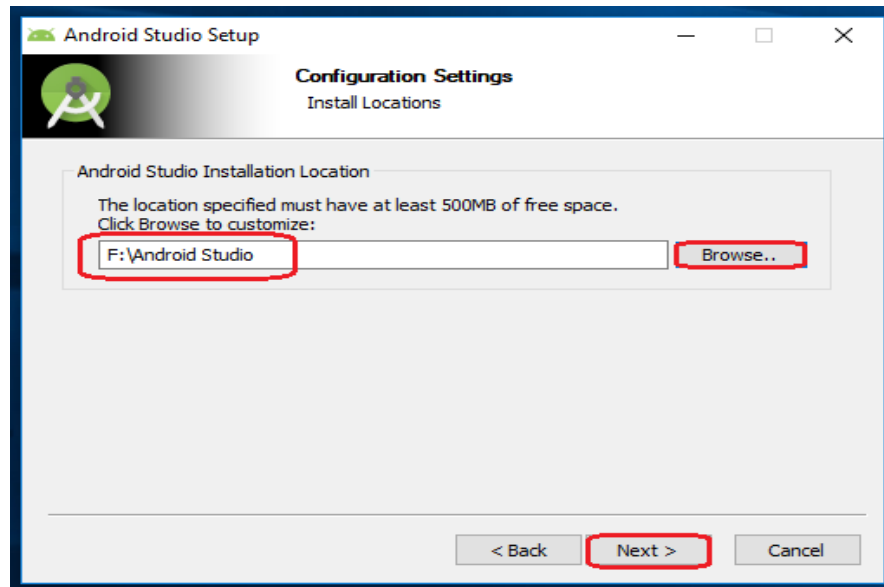
Click **Next** to start the installation.

**Step 5** - Select the components that you want to install



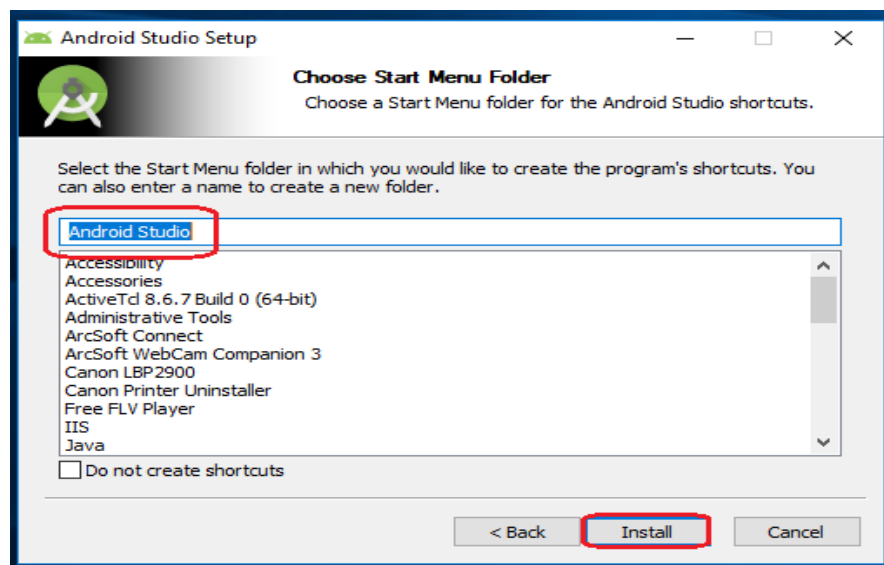
and click on the "Next" button.

**Step 6** - Now, browse the location where you want to install the Android Studio



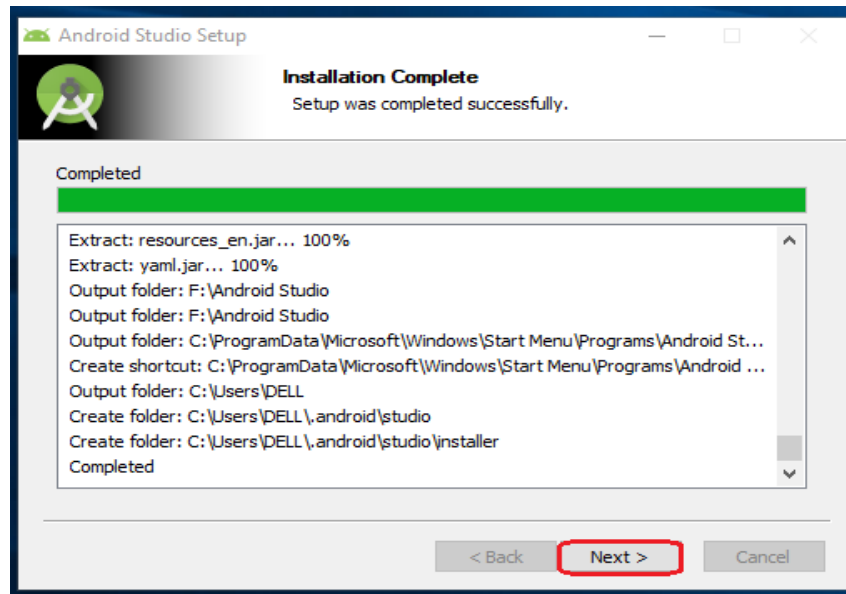
and click "Next" to proceed.

**Step 7** - Choose a start menu folder for the "Android Studio" shortcut



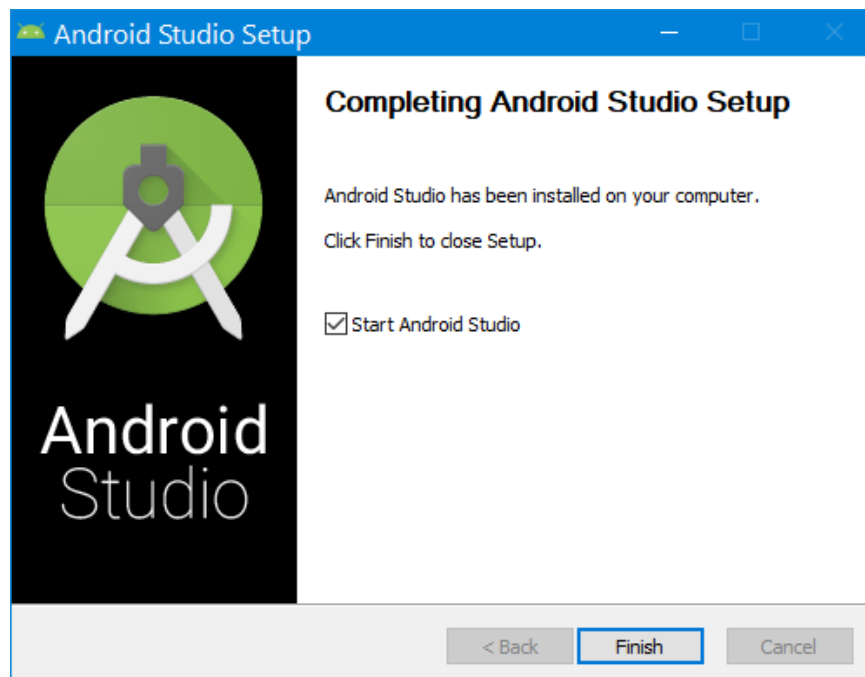
and click the "Install" button to proceed.

**Step 8** - After the successful completion of the installation,

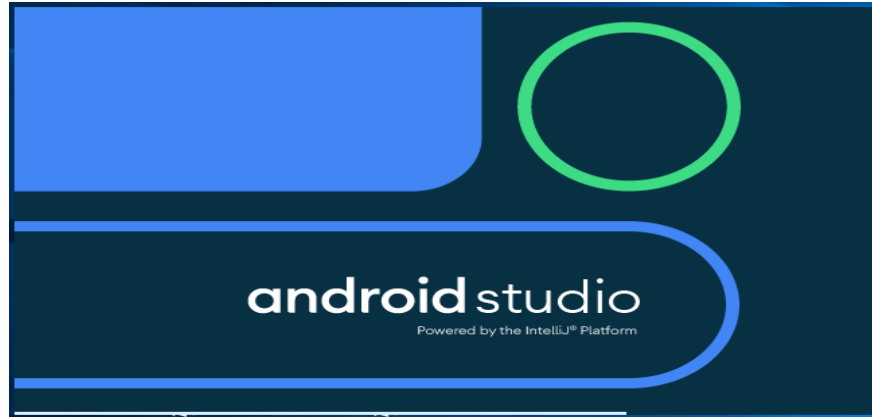


click on the "Next" button.

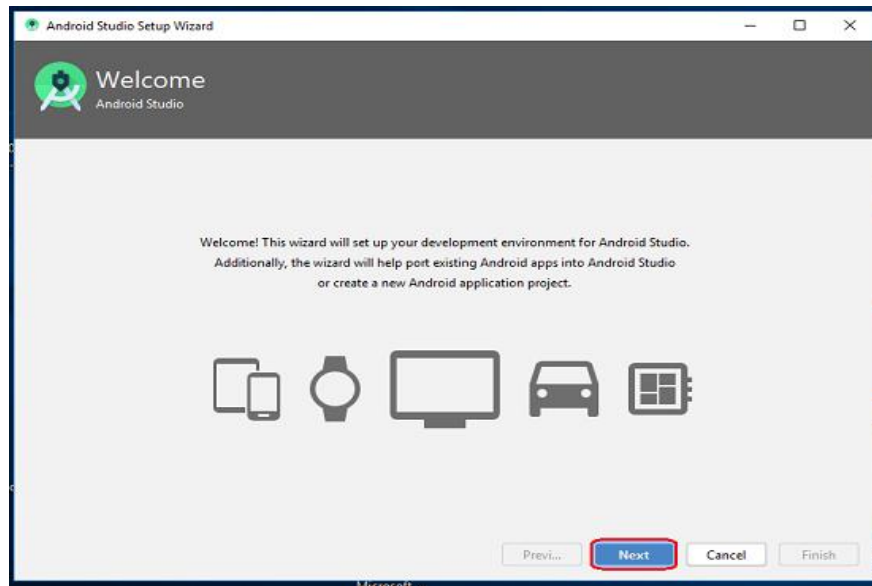
**Step 9** - Click **Finish** when the installation is done to launch Android Studio.



Now, your Android studio welcome screen will appear on the screen.



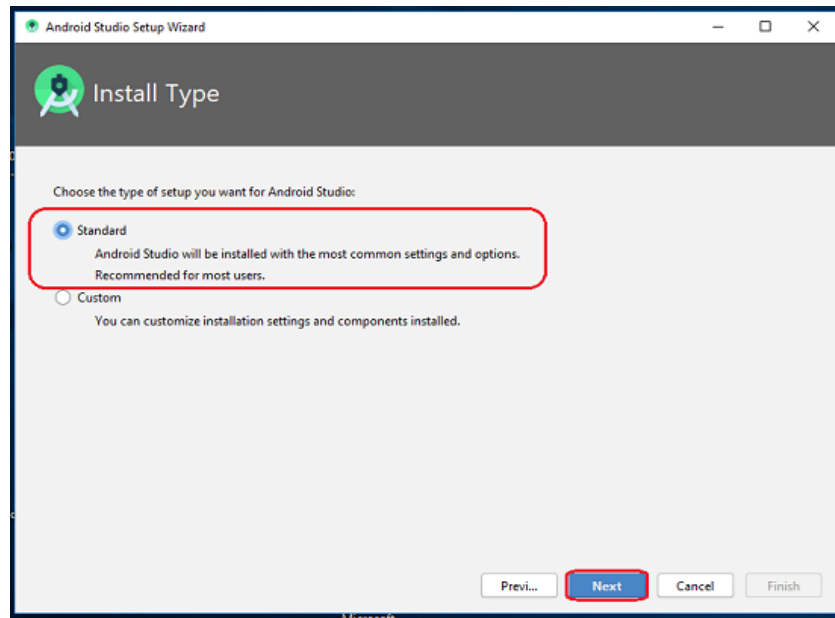
**Step 10** - "Android Studio Setup Wizard" will appear on the screen with the welcome wizard.



Click on the "Next" button.

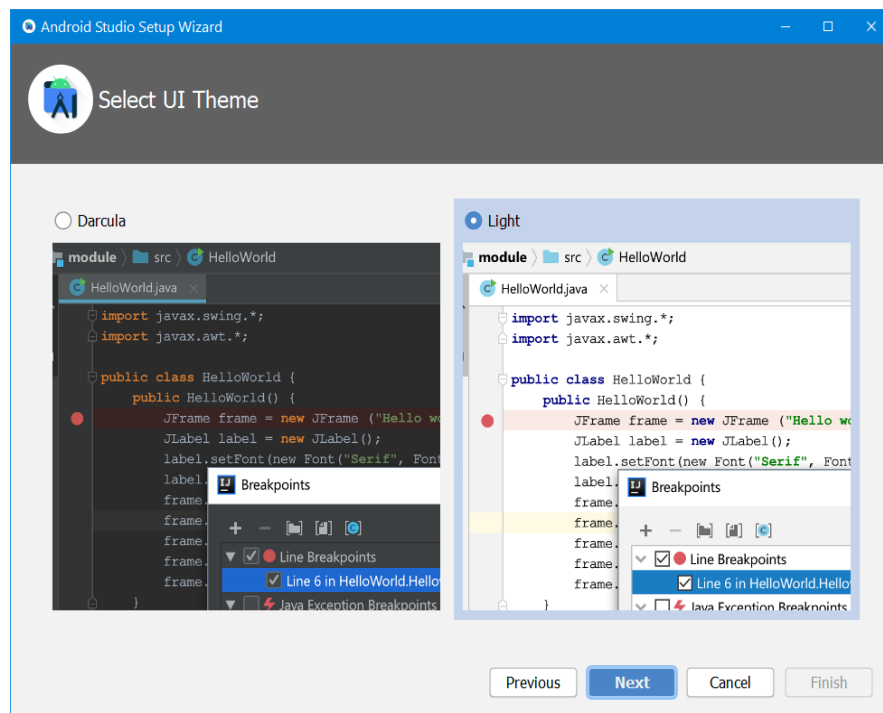


**Step 11** - Select (check) the "Standard" option if you are a beginner and do not have any idea about Android Studio. It will install the most common settings and options for you.



Click "Next" to proceed.

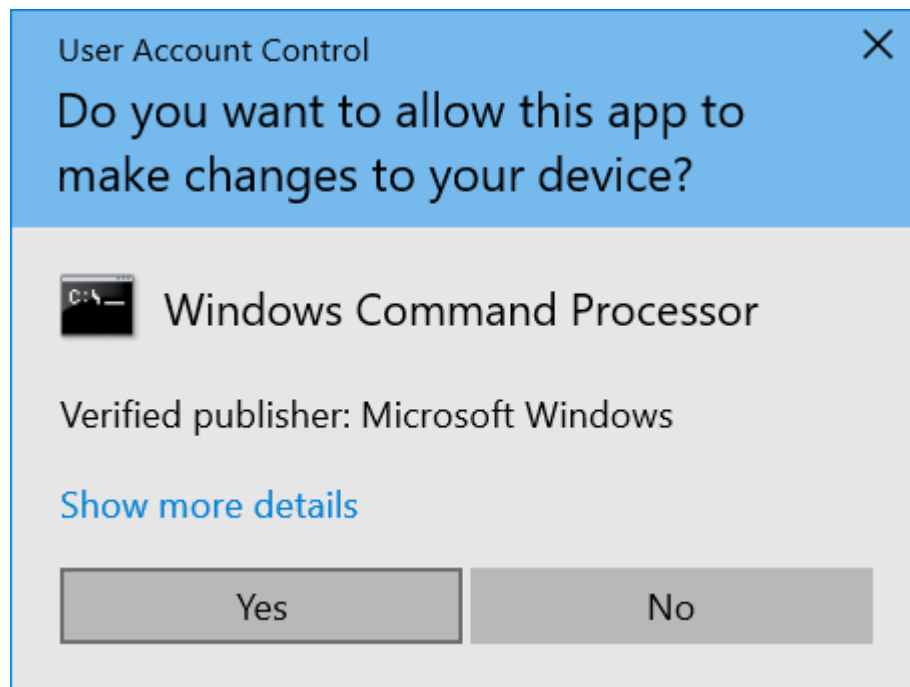
**Step12-** Choose your preference of light or dark theme when Android Studio first launches. Screenshots in this course use the light theme, but choose whichever one you prefer.



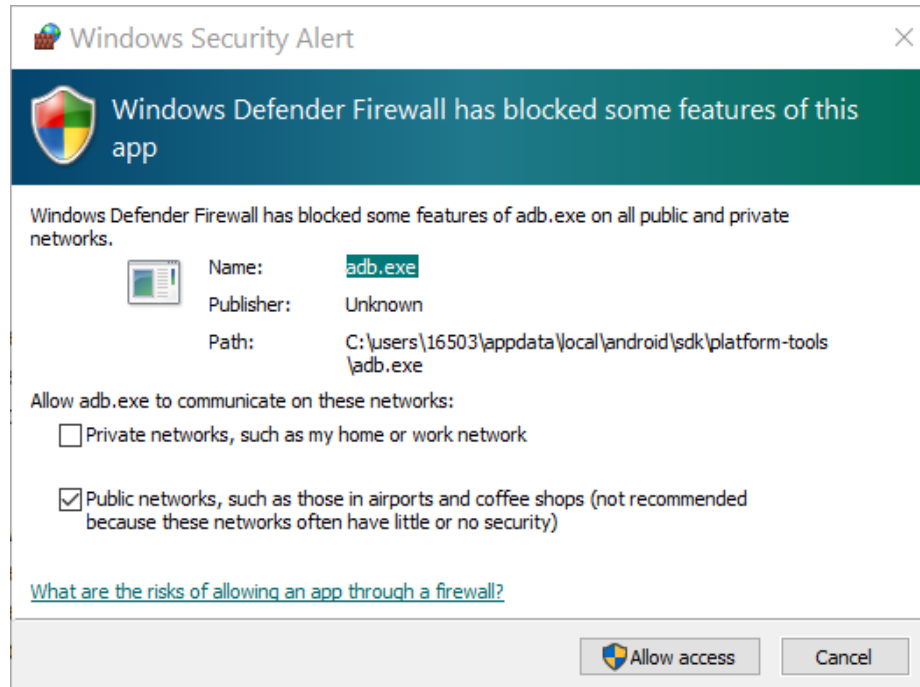
### Step 13

Now, click on the "Finish" button to download all the SDK components.

**Step6** - see a **User Account Control** dialog for **Windows Command Processor**. Click **Yes** to accept the dialog.

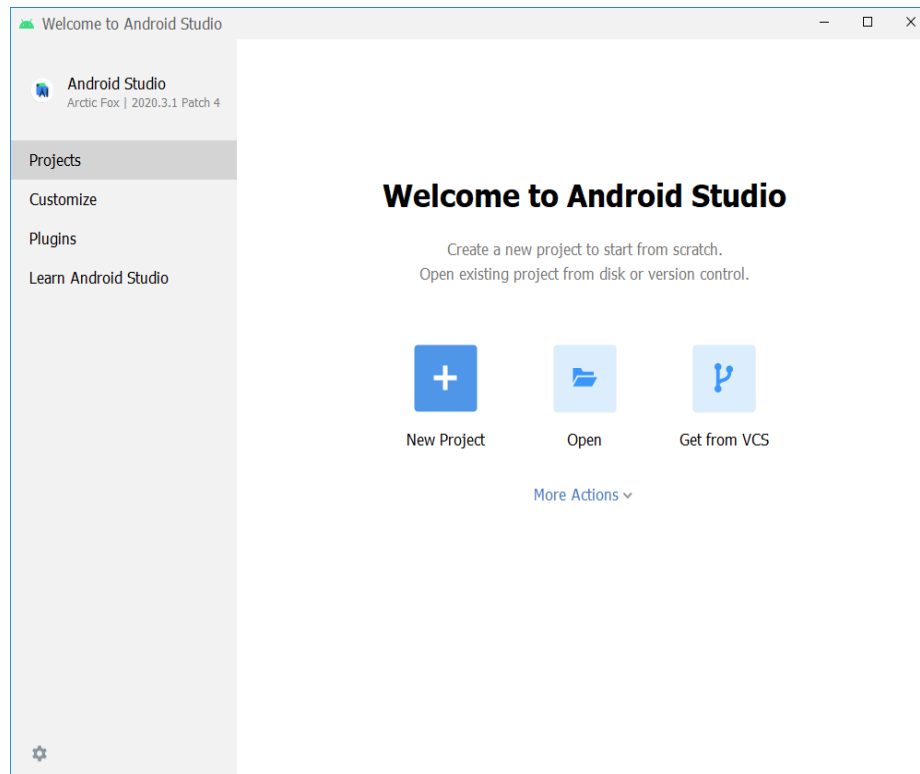


**Step6** - You may also receive a **Windows Security Alert** about adb.exe. Click **Allow Access**, if needed, to continue the installation.



**Step7** - When the download and installation completes, click **Finish**.

The **Welcome to Android Studio** window displays and you're ready to start creating apps!



**FINISH**