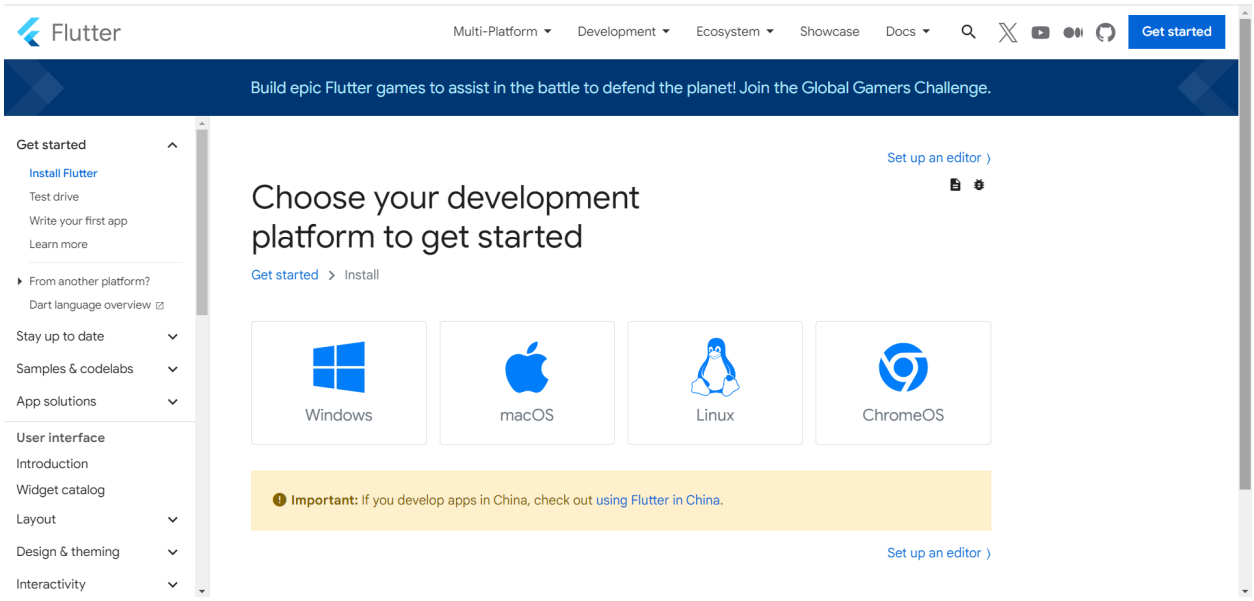
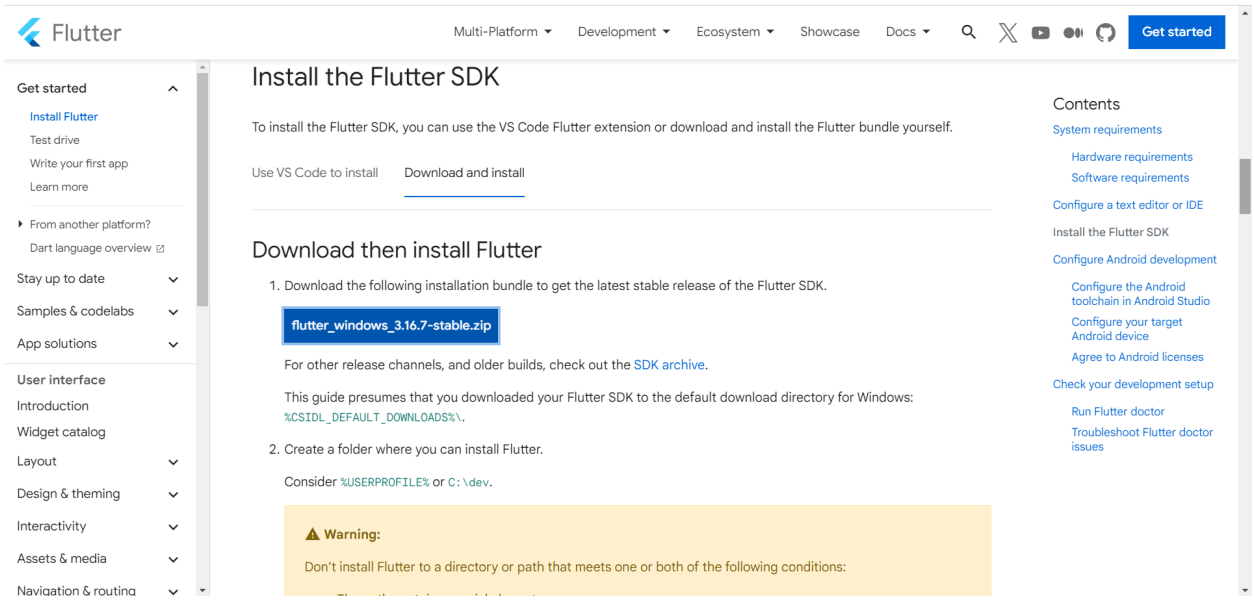
EXPERIMENT:1

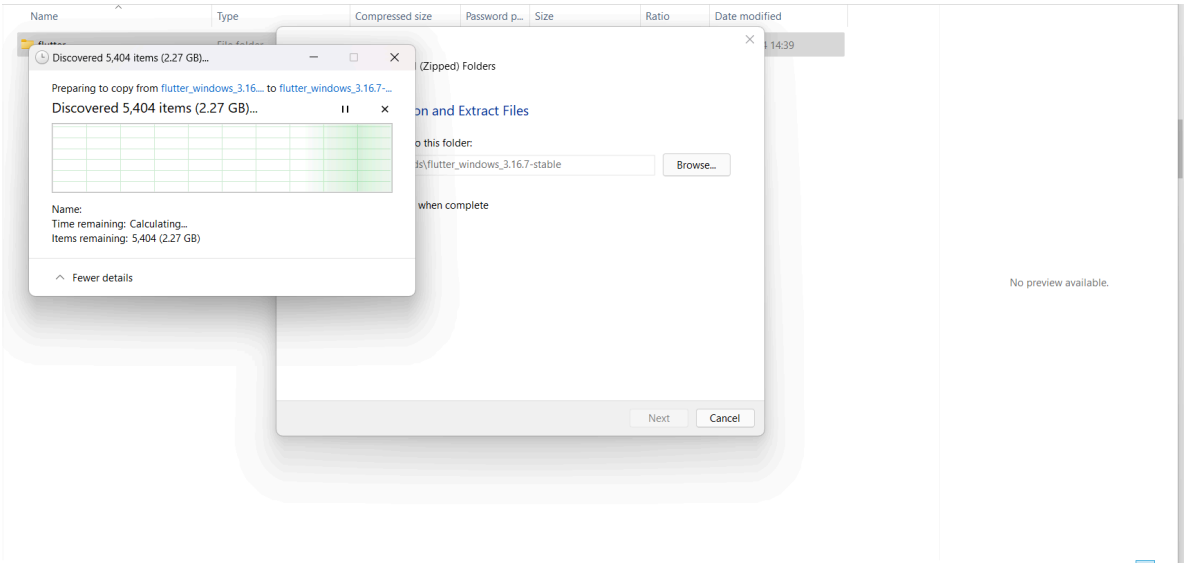
AIM: INSTALLATION AND CONFIGURATION OF FLUTTER ENVIRONMENT

STEP 1: Install the Flutter SDK Download the Flutter Software Development Kit from the official website for Windows.



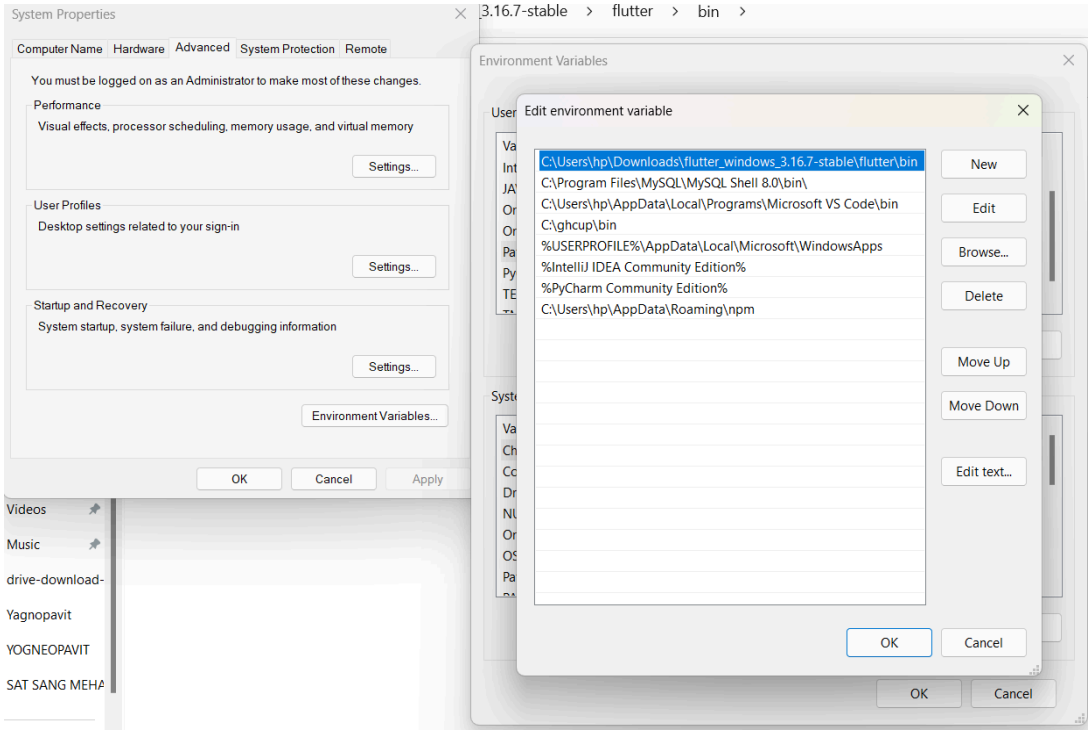


STEP 2: Once the download is complete extract the zip file and place it in the desired folder

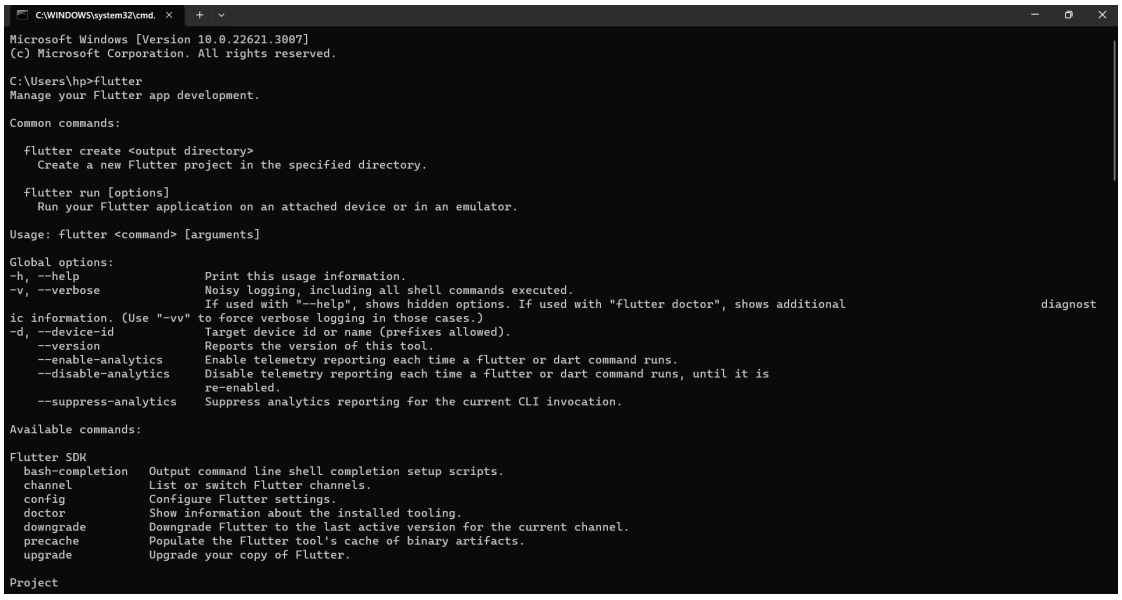


STEP 3: To run the Flutter command in the regular windows console, you need to update the system path to include the flutter bin directory. The following steps are required to do this: Go to THIS PC -> Properties -> Advanced system settings -> Environment variables

STEP 4: Select the Path -> click on Edit and add the path to the Flutter bin folder



STEP 5: Run the flutter command in the Command Prompt

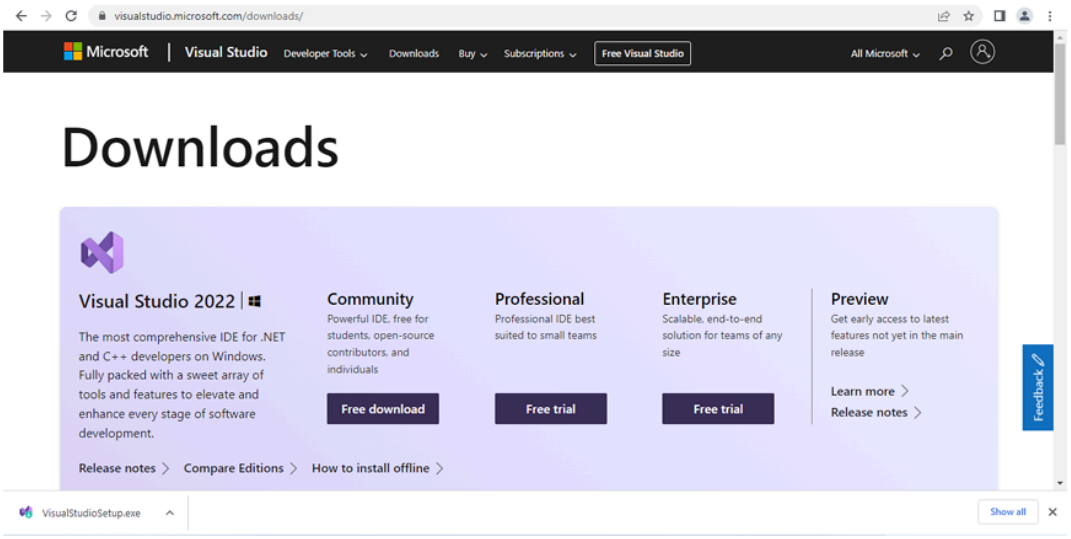


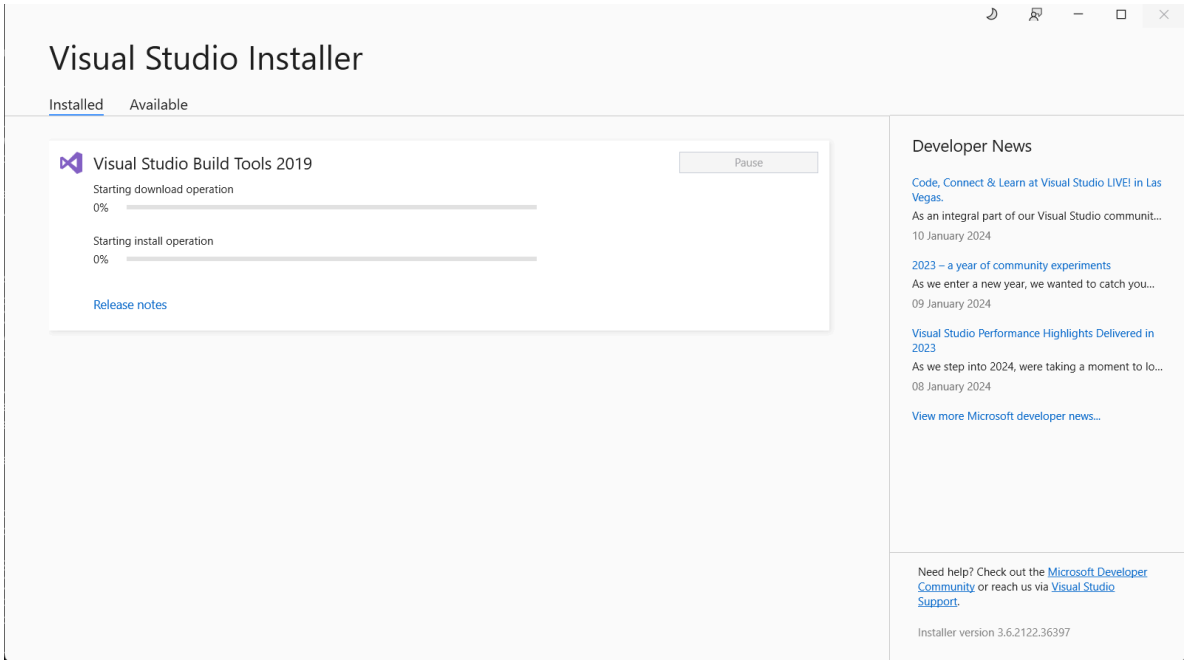
Also, run the flutter doctor command. This command checks for all the requirements of Flutter app development and displays a report of the status of your Flutter installation

```
C:\Users\hp>flutter doctor
Doctor summary (to see all details, run flutter doctor -v):
[√] Flutter (Channel stable, 3.16.7, on Microsoft Windows [Version 10.0.22621.3007], locale en-IN)
[√] Windows Version (Installed version of Windows is version 10 or higher)
[X] Android toolchain - develop for Android devices
    X Unable to locate Android SDK.
      Install Android Studio from: https://developer.android.com/studio/index.html
      On first launch it will assist you in installing the Android SDK components.
      (or visit https://flutter.dev/docs/get-started/install/windows#android-setup for detailed instructions).
      If the Android SDK has been installed to a custom location, please use
      `flutter config --android-sdk` to update to that location.

[√] Chrome - develop for the web
[!] Visual Studio - develop Windows apps (Visual Studio Build Tools 2019 16.11.30)
    X The current Visual Studio installation is incomplete.
      Please use Visual Studio Installer to complete the installation or reinstall Visual Studio.
[!] Android Studio (not installed)
[√] VS Code (version 1.83.1)
[√] Connected device (3 available)
[√] Network resources

! Doctor found issues in 3 categories.
```

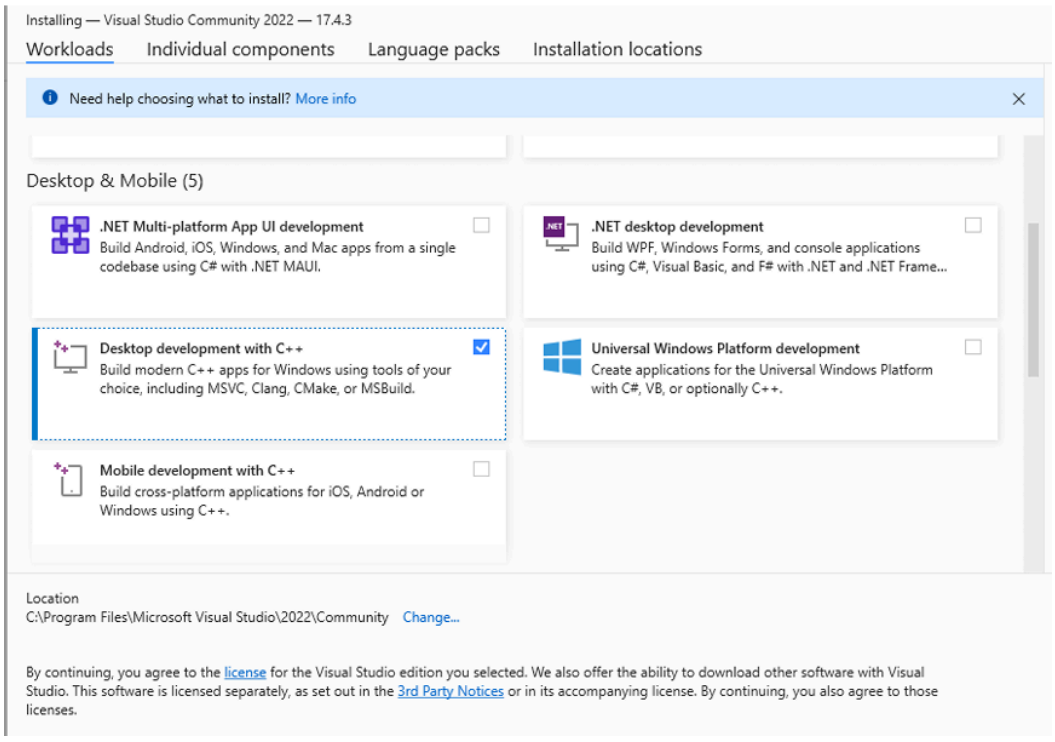
STEP 6: Now we will resolve all the issues and install and add the missing tools required for Flutter app development

6.1: Download and install Visual Studio.



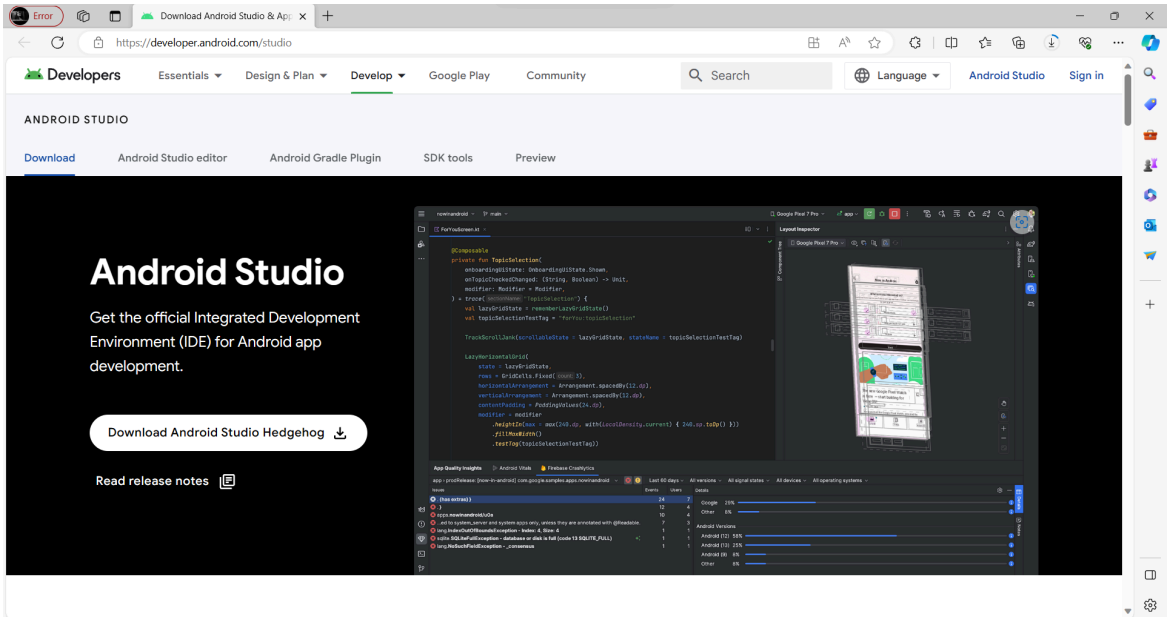


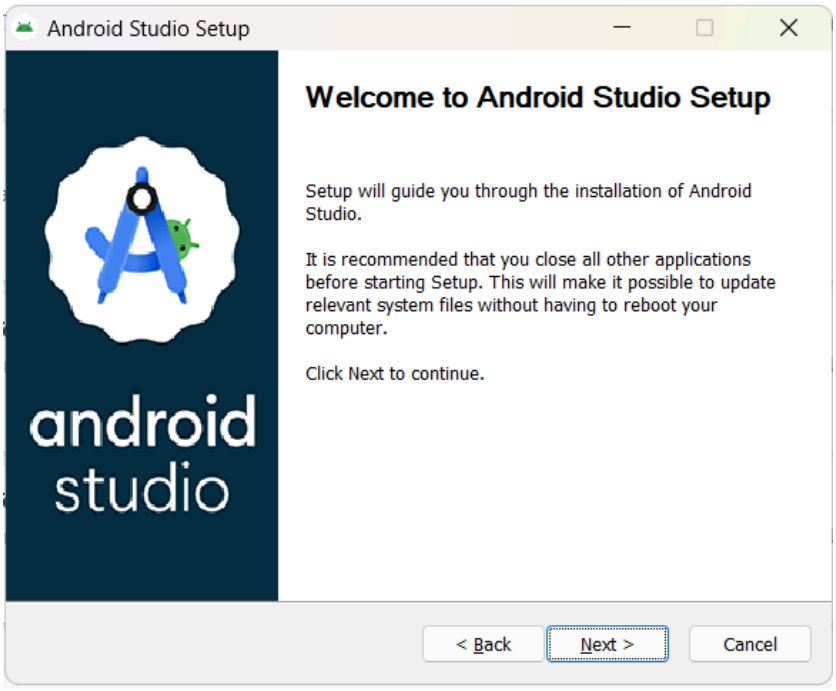
While Installing Visual Studio, make sure to select Desktop development with C++



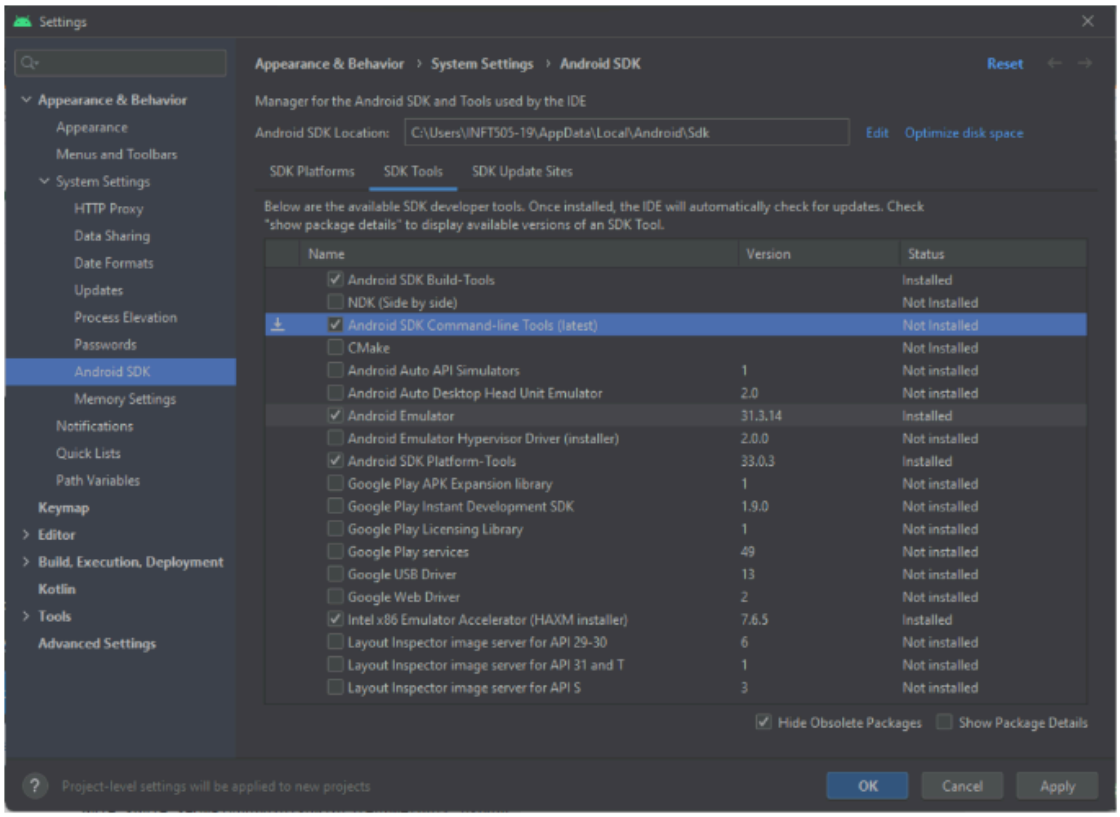
Now the issues which were there has been solved

STEP 6.2: Install the Android SDK. If the flutter doctor command does not find the Android SDK tool in your system, then you need first to install the Android Studio IDE



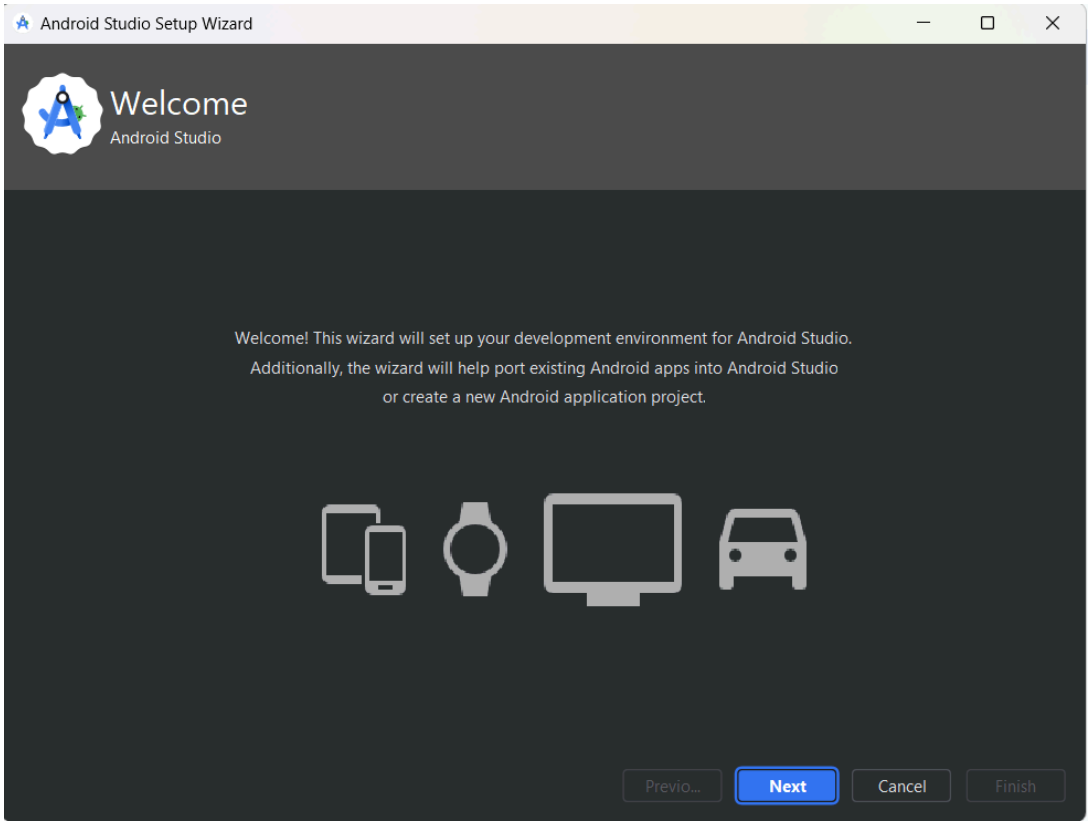


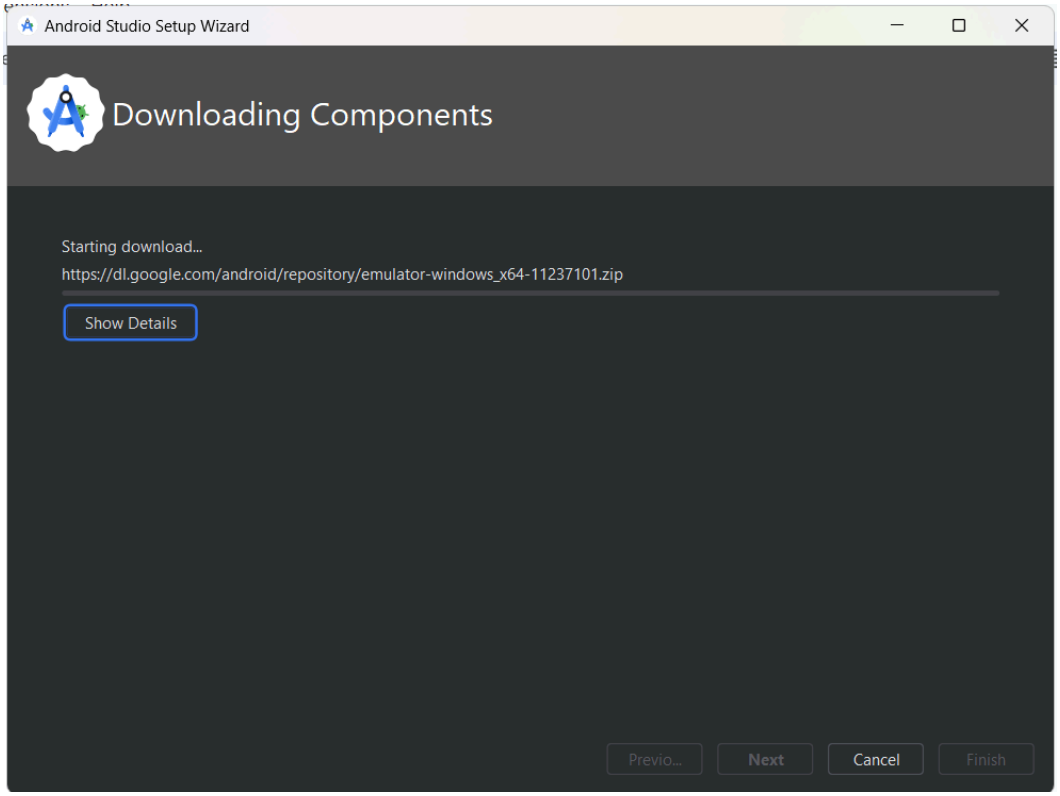
Once the android Studio is installed, Download the Android SDK Command-Line Tools present in the Android SDK section in Android Studio.

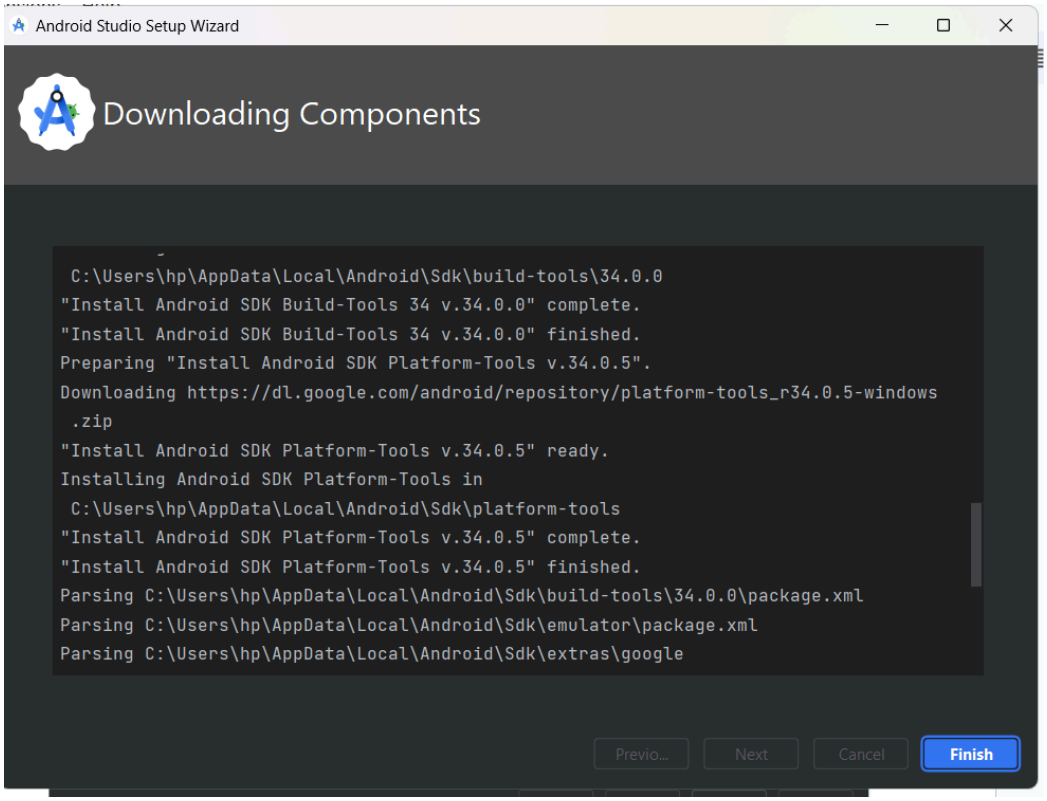


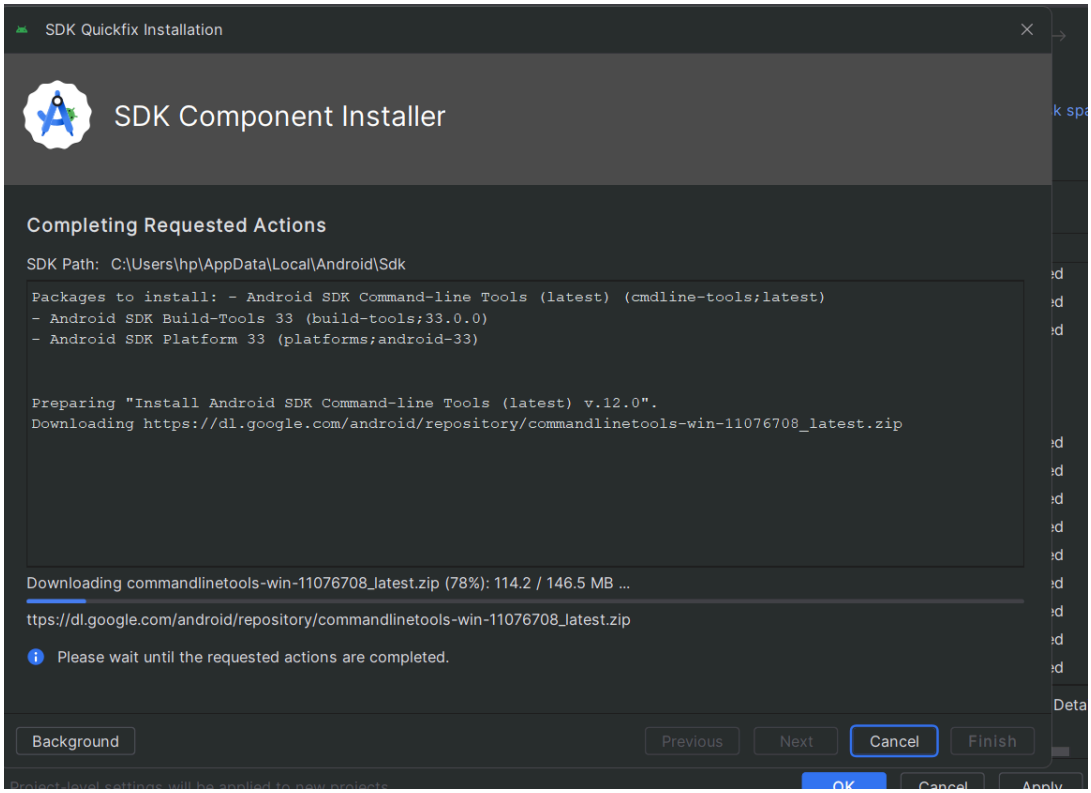
Run the flutter doctor command and run flutter doctor –android licenses to accept all the required licenses.

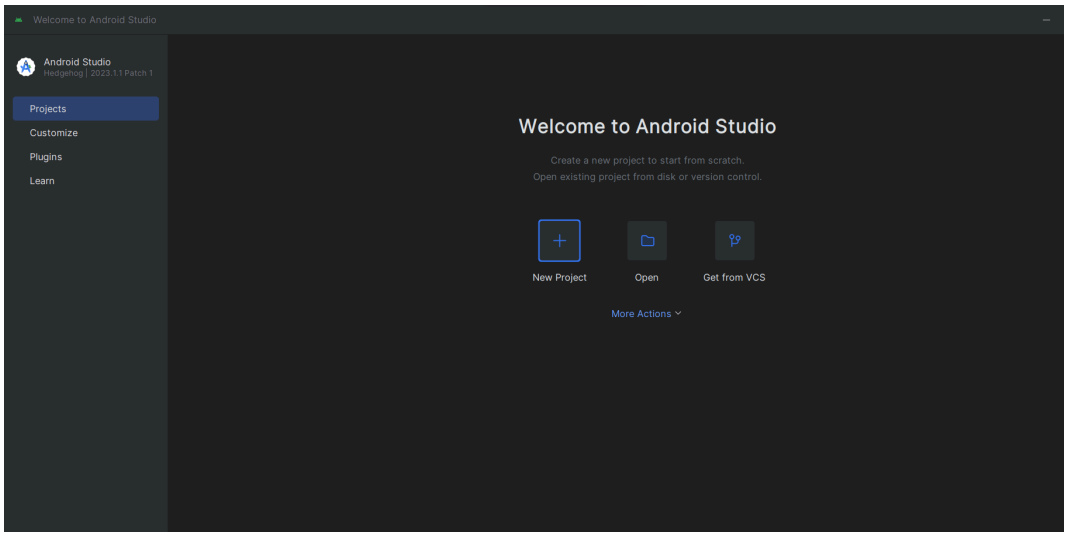
STEP 7: Next, you need to set up an Android emulator. It is responsible for running and testing the Flutter application.




Android Studio Setup Wizard
Downloading Components
Starting download...
https://dl.google.com/android/repository/emulator-windows_x64-11237101.zip
Show Details
Previo...
Next
Cancel
Finish

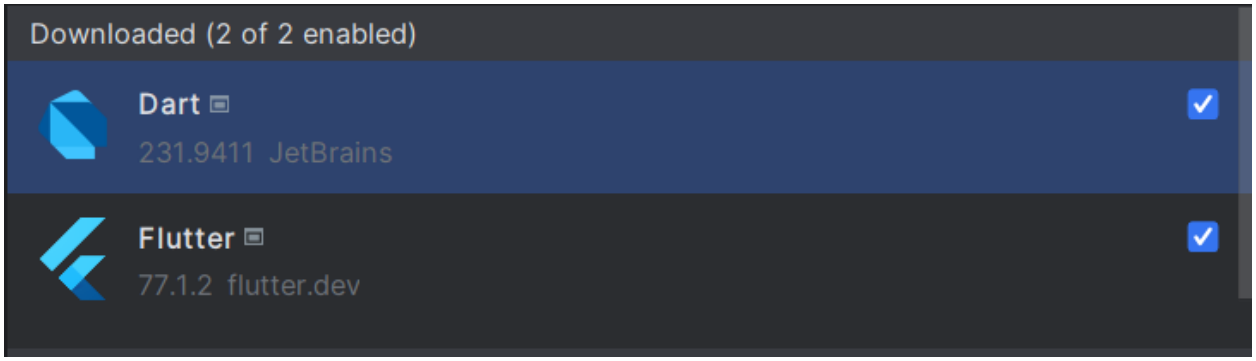

Android Studio Setup Wizard
Downloading Components
C:\Users\hp\AppData\Local\Android\Sdk\build-tools\34.0.0
"Install Android SDK Build-Tools 34 v.34.0.0" complete.
"Install Android SDK Build-Tools 34 v.34.0.0" finished.
Preparing "Install Android SDK Platform-Tools v.34.0.5".
Downloading https://dl.google.com/android/repository/platform-tools_r34.0.5-windows
.zip
"Install Android SDK Platform-Tools v.34.0.5" ready.
Installing Android SDK Platform-Tools in
C:\Users\hp\AppData\Local\Android\Sdk\platform-tools
"Install Android SDK Platform-Tools v.34.0.5" complete.
"Install Android SDK Platform-Tools v.34.0.5" finished.
Parsing C:\Users\hp\AppData\Local\Android\Sdk\build-tools\34.0.0\package.xml
Parsing C:\Users\hp\AppData\Local\Android\Sdk\emulator\package.xml
Parsing C:\Users\hp\AppData\Local\Android\Sdk\extras\google
Previo...
Next
Cancel
Finish


SDK Quickfix Installation
SDK Component Installer
Completing Requested Actions
SDK Path: C:\Users\hp\AppData\Local\Android\Sdk
Packages to install: - Android SDK Command-line Tools (latest) (cmdline-tools;latest)
- Android SDK Build-Tools 33 (build-tools;33.0.0)
- Android SDK Platform 33 (platforms;android-33)
Preparing "Install Android SDK Command-line Tools (latest) v.12.0".
Downloading https://dl.google.com/android/repository/commandlinetools-win-11076708_latest.zip
Downloading commandlinetools-win-11076708_latest.zip (78%): 114.2 / 146.5 MB ...
ttps://dl.google.com/android/repository/commandlinetools-win-11076708_latest.zip
Please wait until the requested actions are completed.
Background
Previous
Next
Cancel
Finish


Welcome to Android Studio
Android Studio
Projects
Customize
Plugins
Learn
Welcome to Android Studio
Create a new project to start from scratch.
Open existing project from disk or version control.
New Project
Open
Get from VCS
More Actions

STEP 7: Now, install Flutter and Dart plugins for building the Flutter application in Android Studio. These plugins provide a template to create a Flutter application and give the option to run and debug the Flutter application in the Android Studio itself.

Open the Android Studio and then go to File->Settings->Plugins. Now, search the Flutter plugin. If found, select the Flutter plugin and click install. When you click on install, it will ask you to install Dart plugin as below screen. Click Install to proceed.



Finally when all these steps are followed restart the Android Studio once and then your Flutter environment is successfully configured