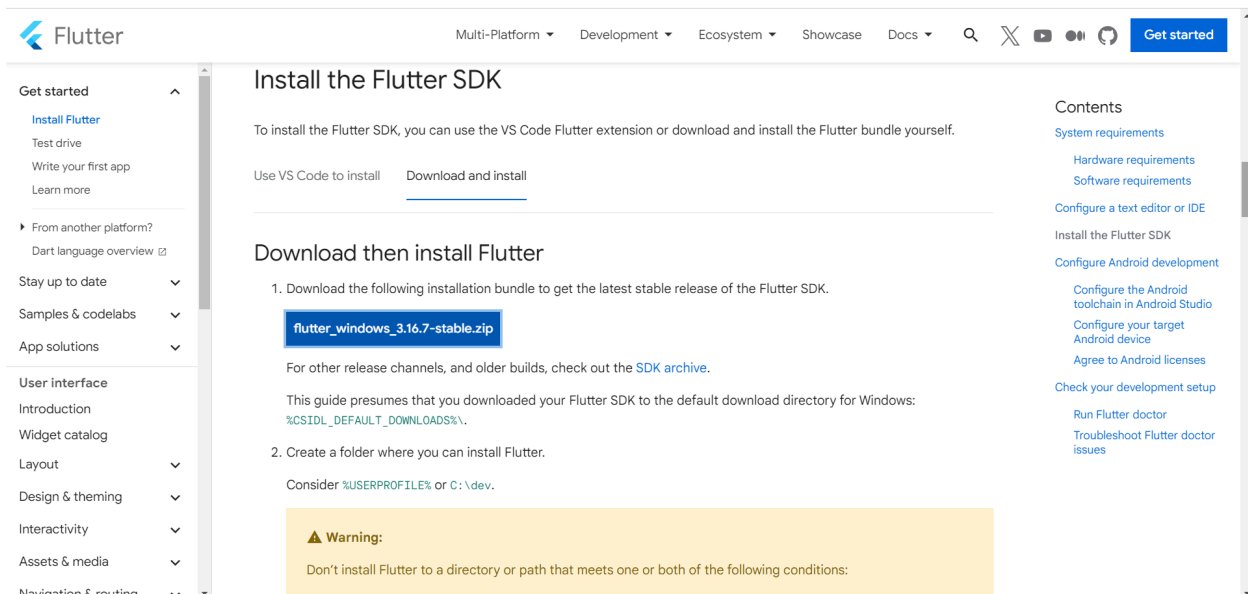
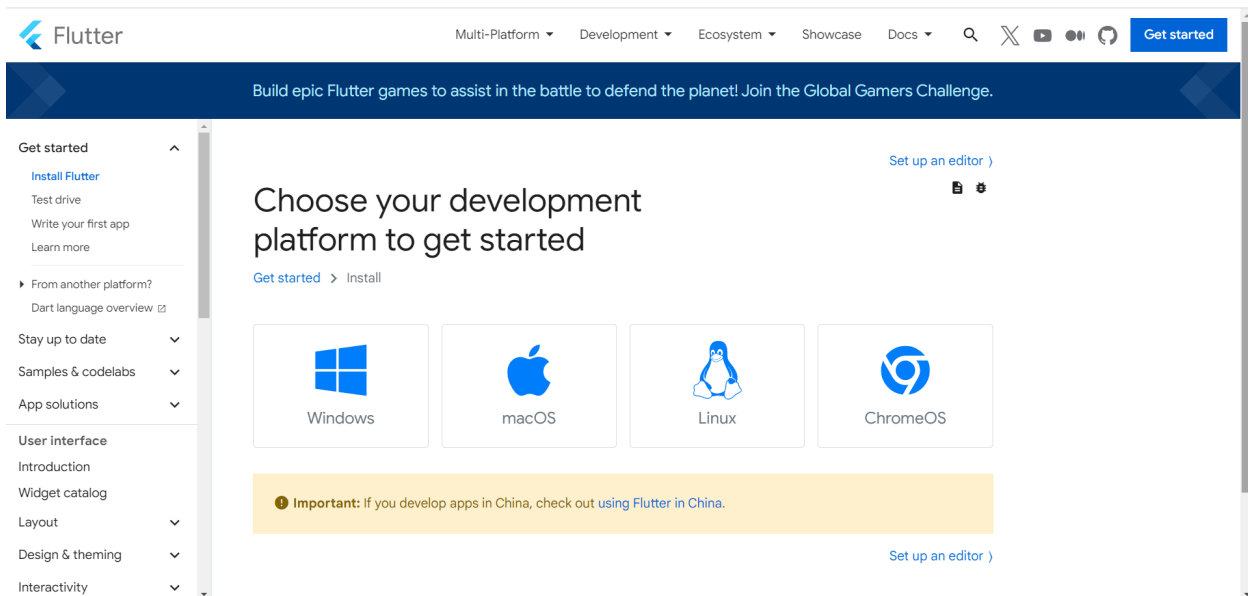


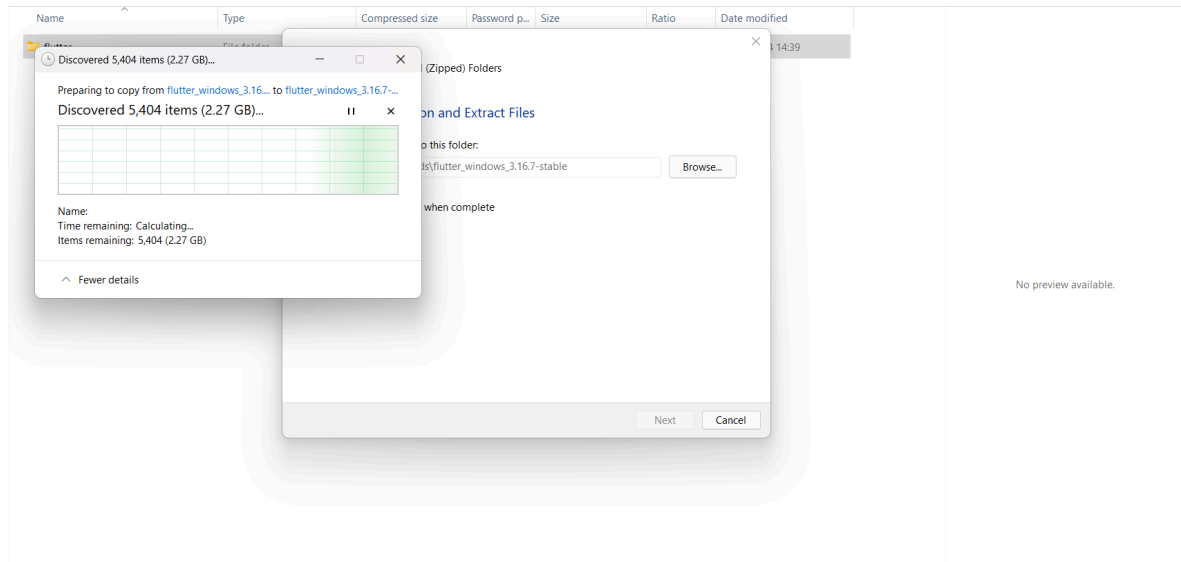
## EXPERIMENT:01

### 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.

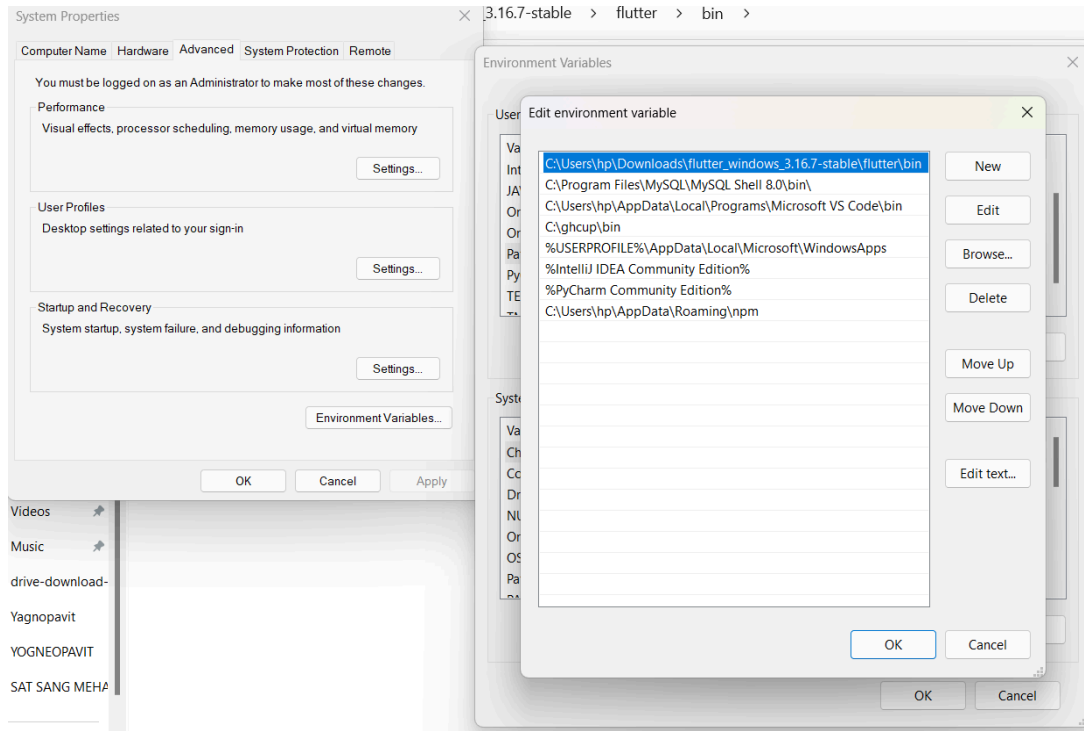


**STEP 2:** Once the download is complete extract the zip file and place it in the desired folder



**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

```
C:\WINDOWS\system32\cmd. x + v
Microsoft Windows [Version 10.0.22621.3807]
(c) Microsoft Corporation. All rights reserved.

C:\Users\hp>flutter
Manage your Flutter app development.

Common commands:

  flutter create <output directory>
    Create a new Flutter project in the specified directory.

  flutter run [options]
    Run your Flutter application on an attached device or in an emulator.

Usage: flutter <command> [arguments]

Global options:
-h, --help          Print this usage information.
-v, --verbose       Noisy logging, including all shell commands executed.
                    If used with "--help", shows hidden options. If used with "flutter doctor", shows additional
                    diagnostic information. (Use "-vv" to force verbose logging in those cases.)
-d, --device-id     Target device id or name (prefixes allowed).
--version           Reports the version of this tool.
--enable-analytics  Enable telemetry reporting each time a flutter or dart command runs.
--disable-analytics Disable telemetry reporting each time a flutter or dart command runs, until it is
                    re-enabled.
--suppress-analytics Suppress analytics reporting for the current CLI invocation.

Available commands:

Flutter SDK
bash-completion  Output command line shell completion setup scripts.
channel          List or switch Flutter channels.
config          Configure Flutter settings.
doctor          Show information about the installed tooling.
downgrade       Downgrade Flutter to the last active version for the current channel.
precache        Populate the Flutter tool's cache of binary artifacts.
upgrade         Upgrade your copy of Flutter.

Project
```

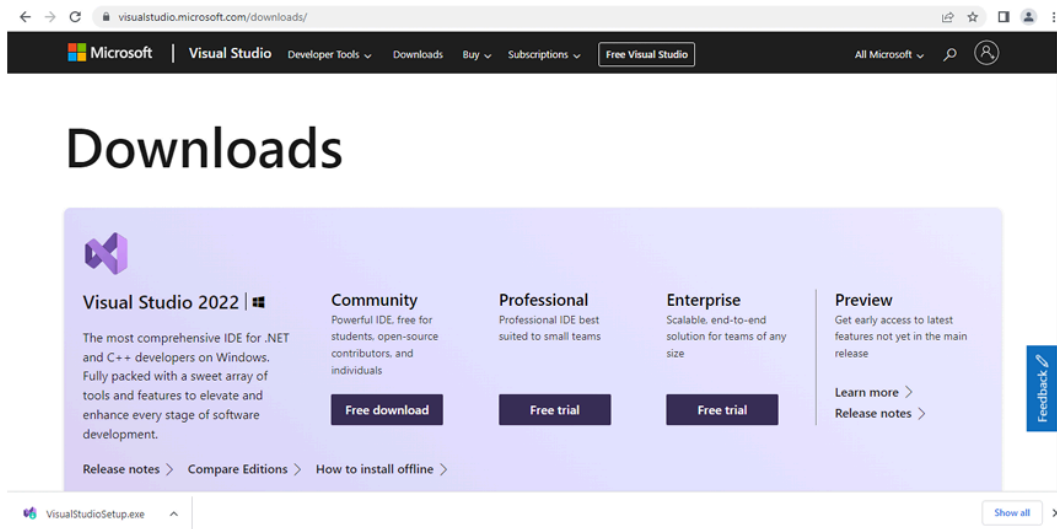
Also, run the flutter doctor command. This command checks for all the requirements of Flutter app development and displays a report of the status of your Flutter installation

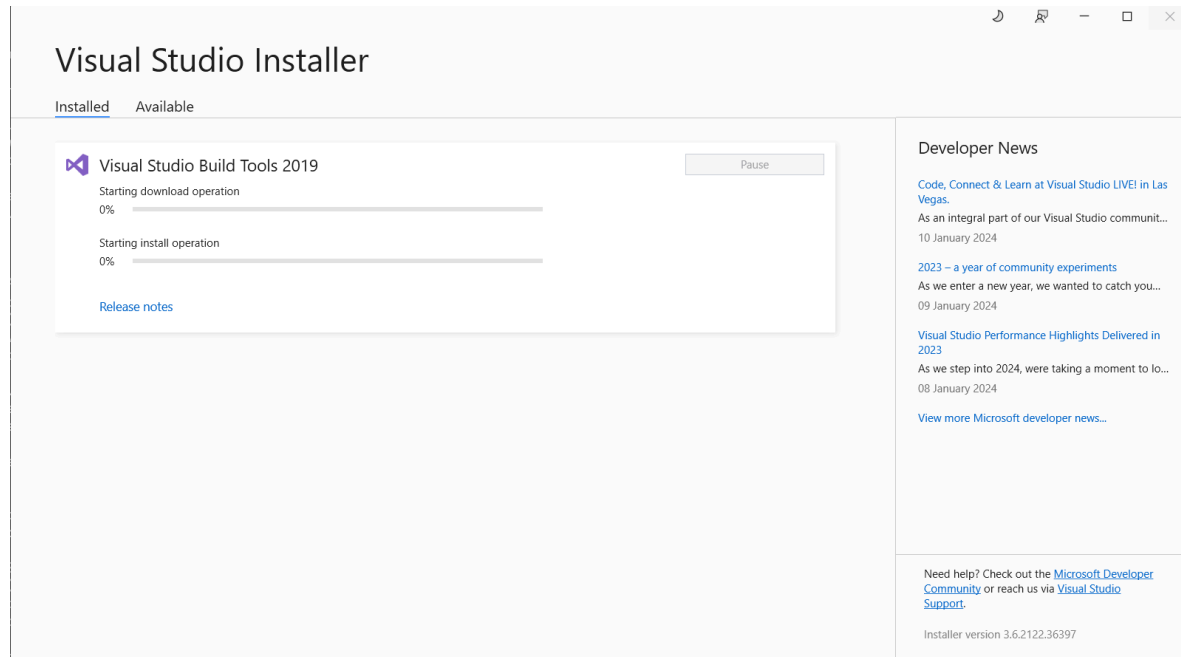
```
C:\Users\hp>flutter doctor
Doctor summary (to see all details, run flutter doctor -v):
[✓] Flutter (Channel stable, 3.16.7, on Microsoft Windows [Version 10.0.22621.3007], locale en-IN)
[✓] Windows Version (Installed version of Windows is version 10 or higher)
[X] Android toolchain - develop for 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.
```

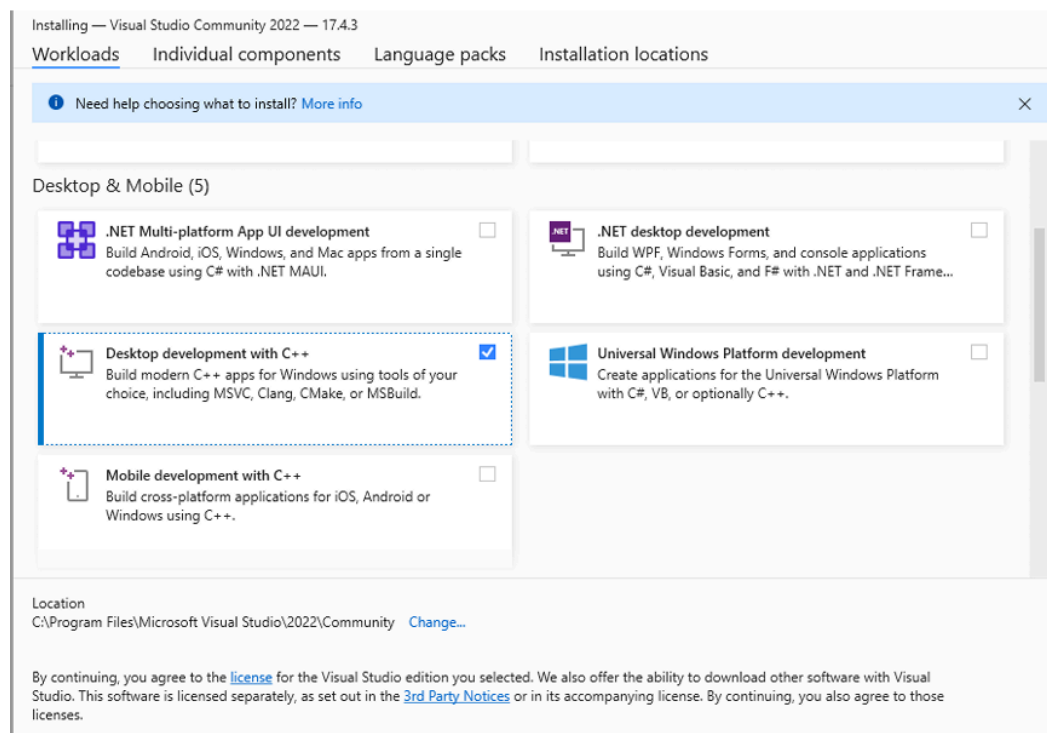
**STEP 6:** Now we will resolve all the issues and install and add the missing tools required for Flutter app development

### 6.1: Download and install Visual Studio.



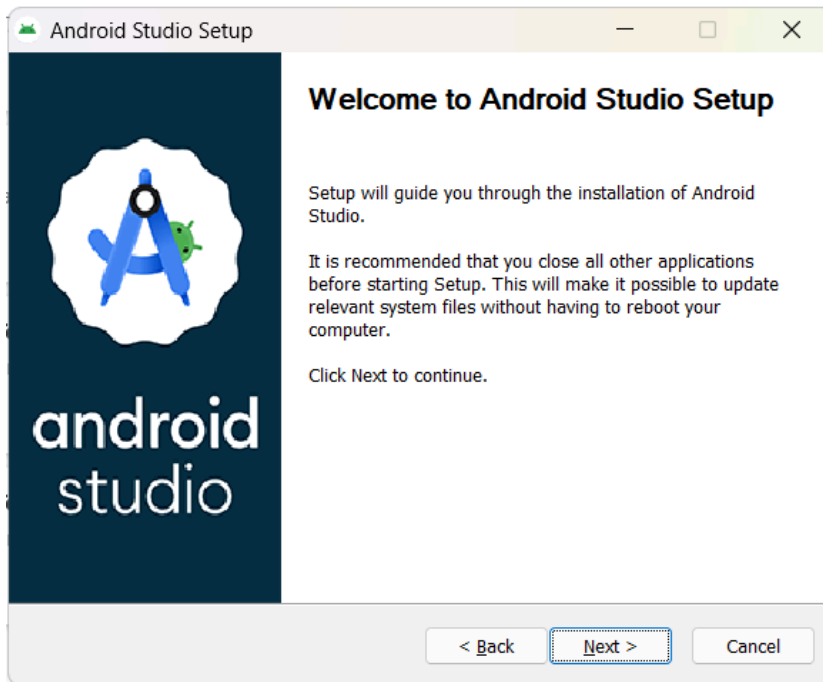
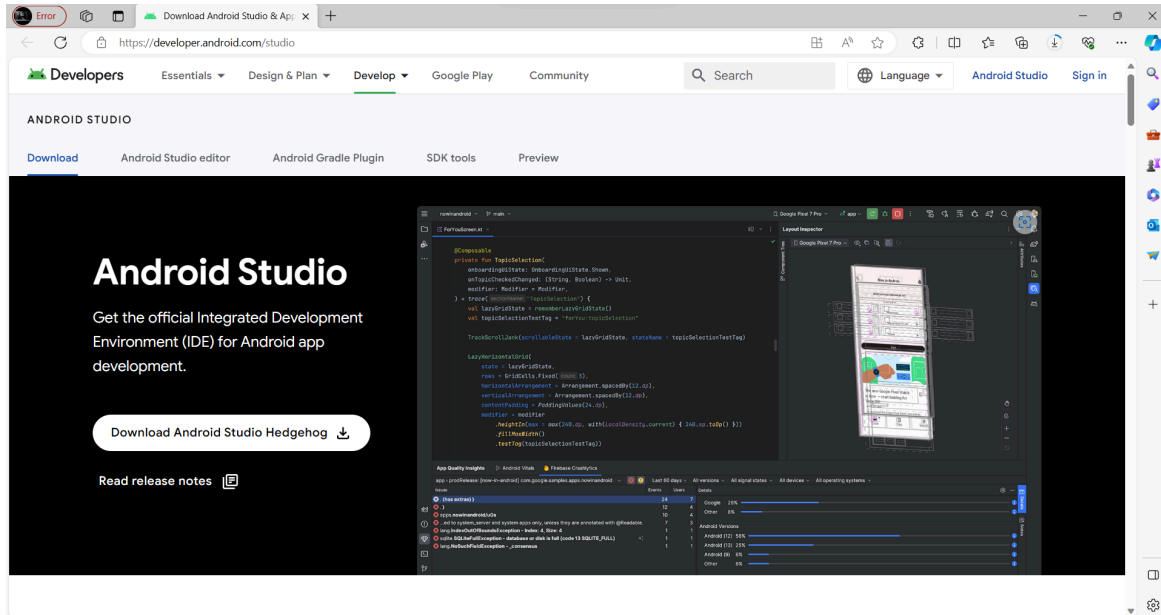


While Installing Visual Studio, make sure to select Desktop development with C++

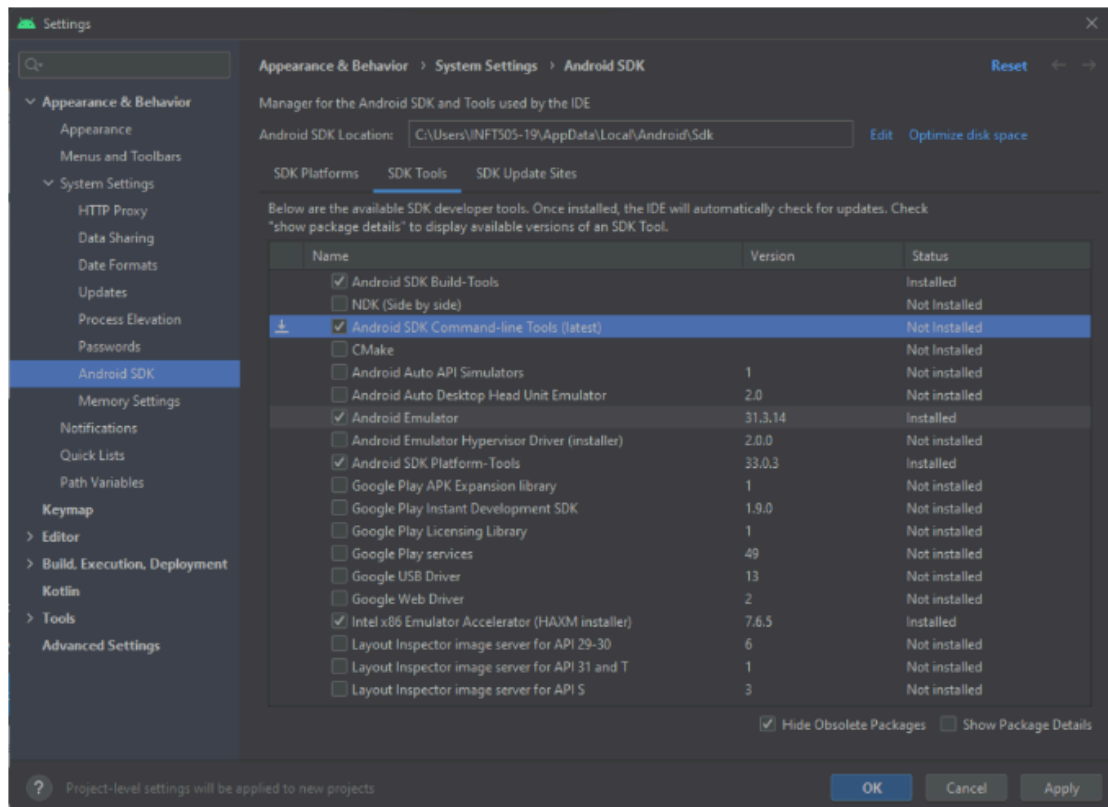


Now the issues which were there has been solved

**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

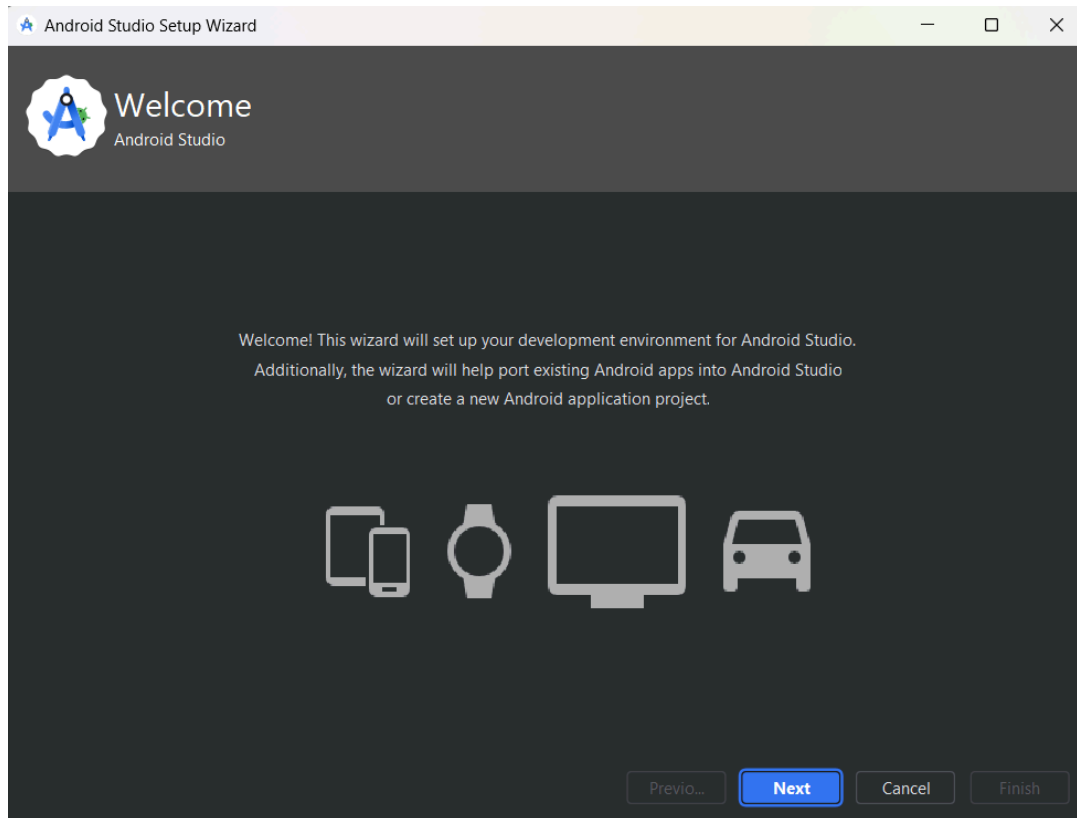


Once the android Studio is installed, Download the Android SDK Command-Line Tools present in the Android SDK section in Android Studio.

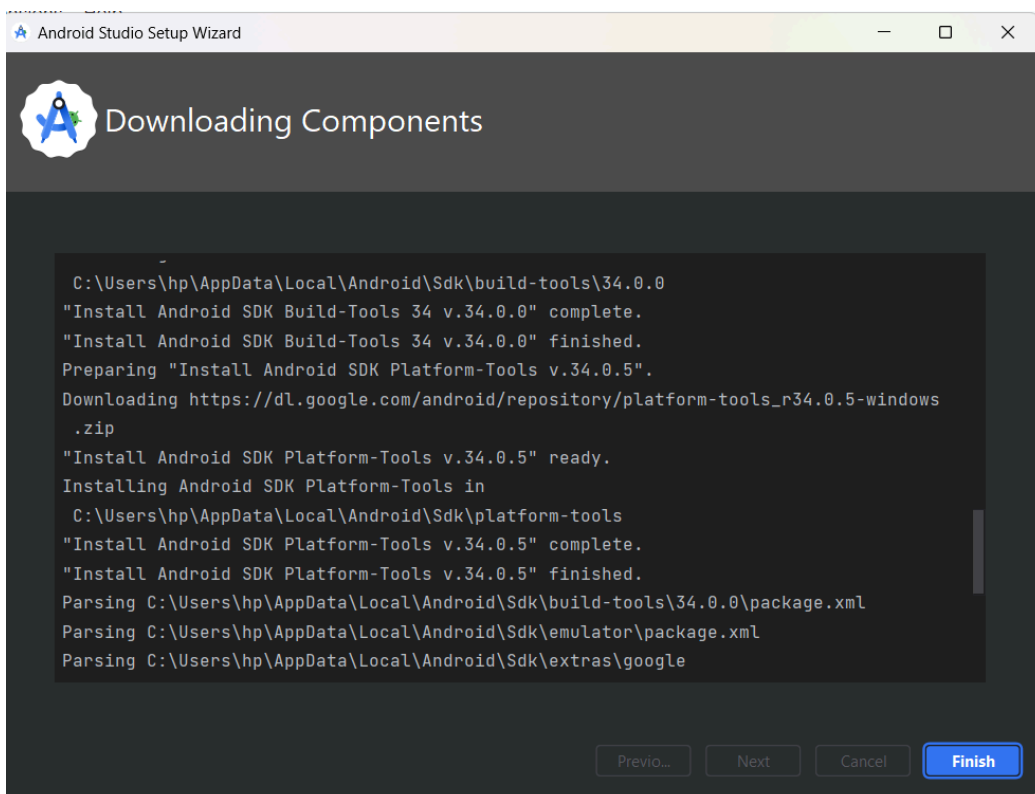
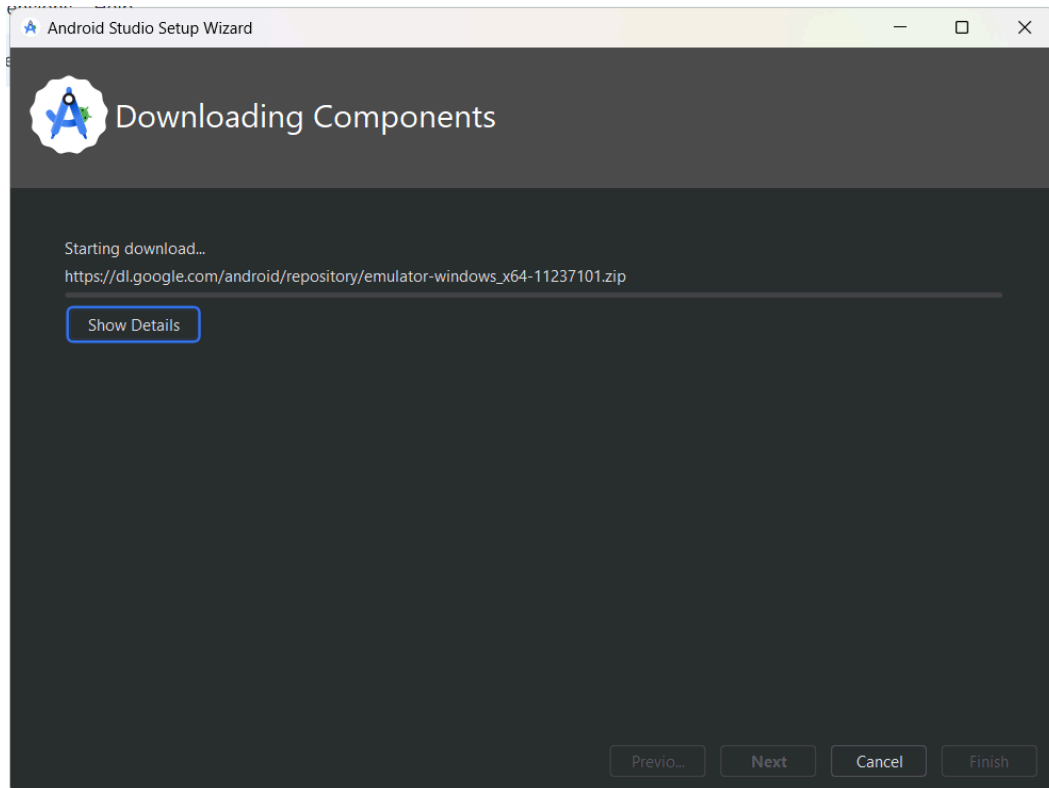


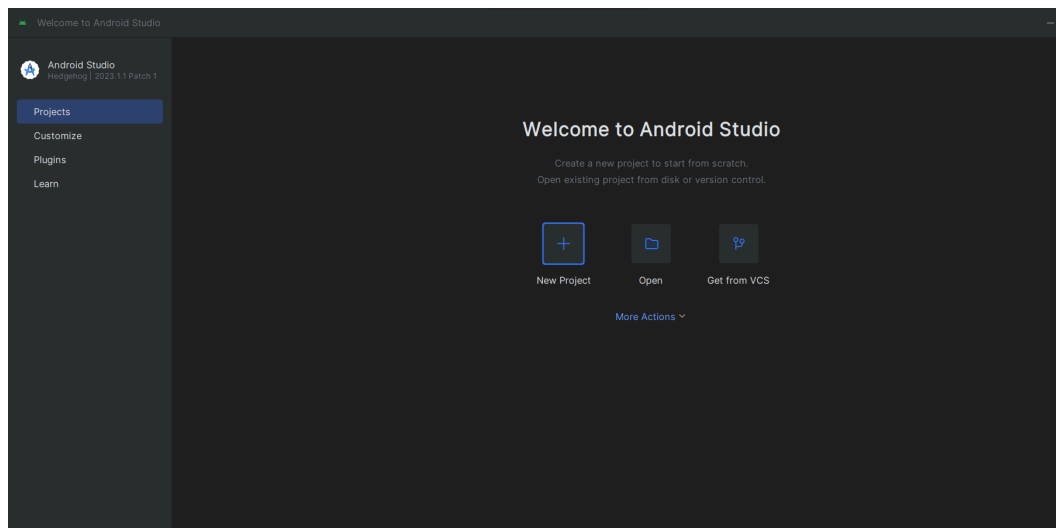
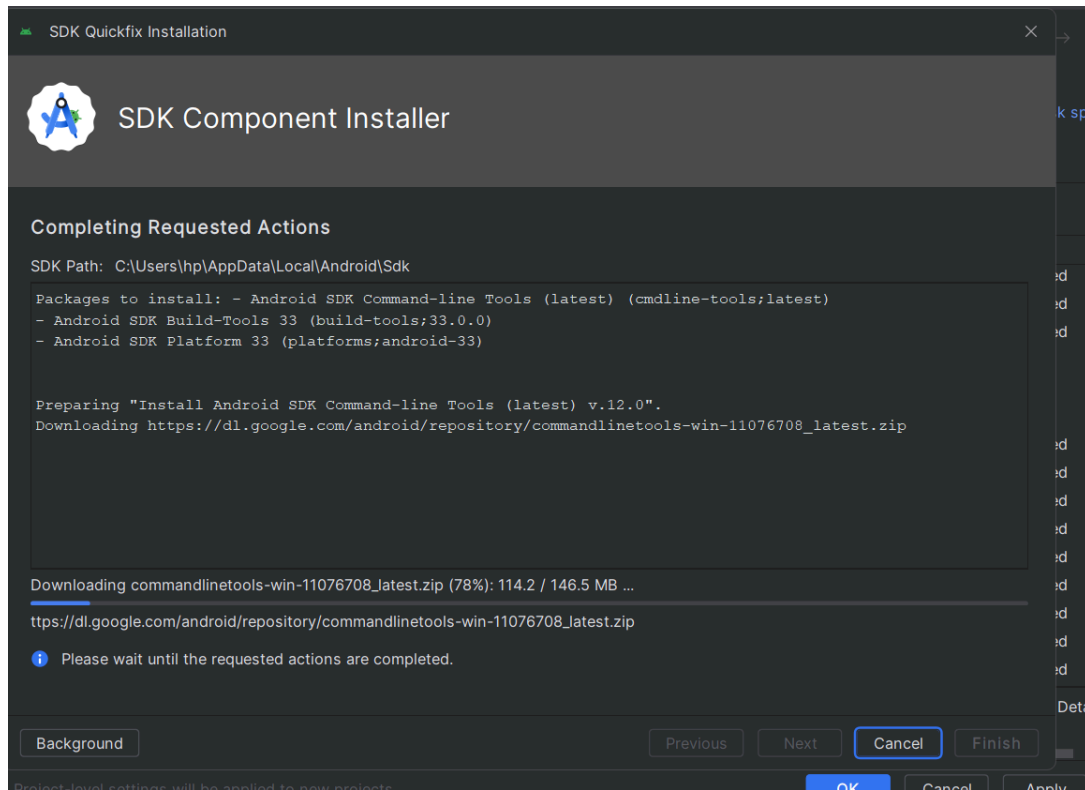
Run the flutter doctor command and run flutter doctor –android licenses to accept all the required licenses.

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



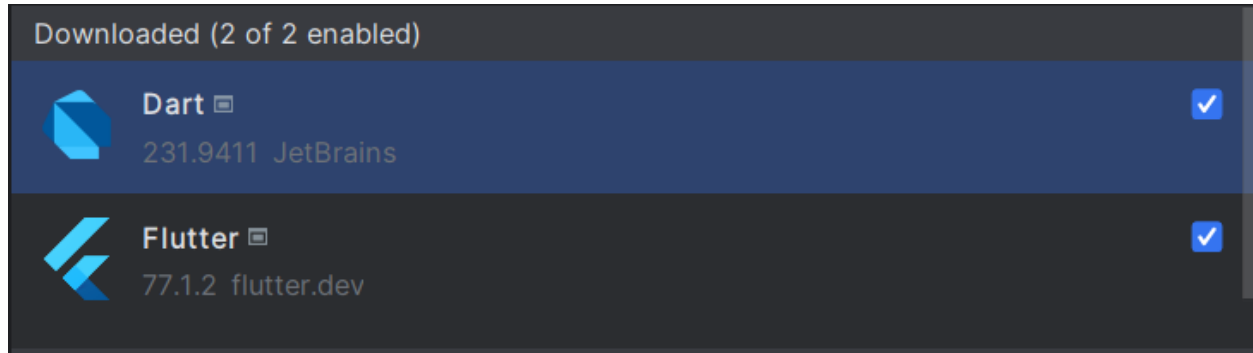






**STEP 8:** Now, install Flutter and Dart plugins for building the Flutter application in Android Studio. These plugins provide a template to create a Flutter application and give the option to run and debug the Flutter application in the Android Studio itself.

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