

## **EXPERIMENT NO: - 01**

**Name:-** Devansh Wadhwani

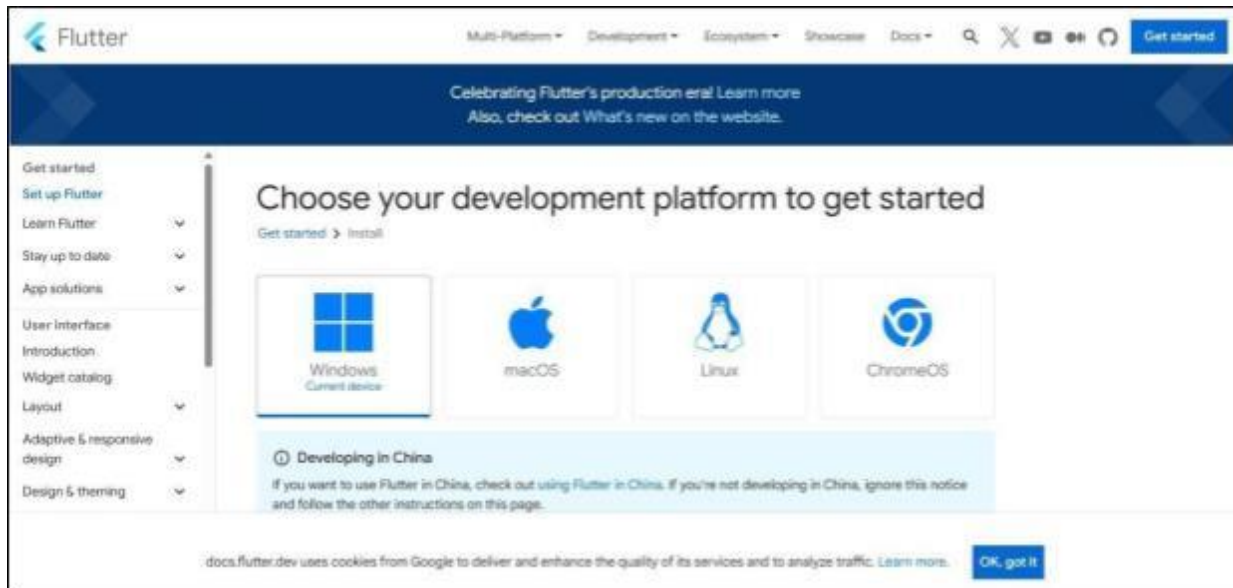
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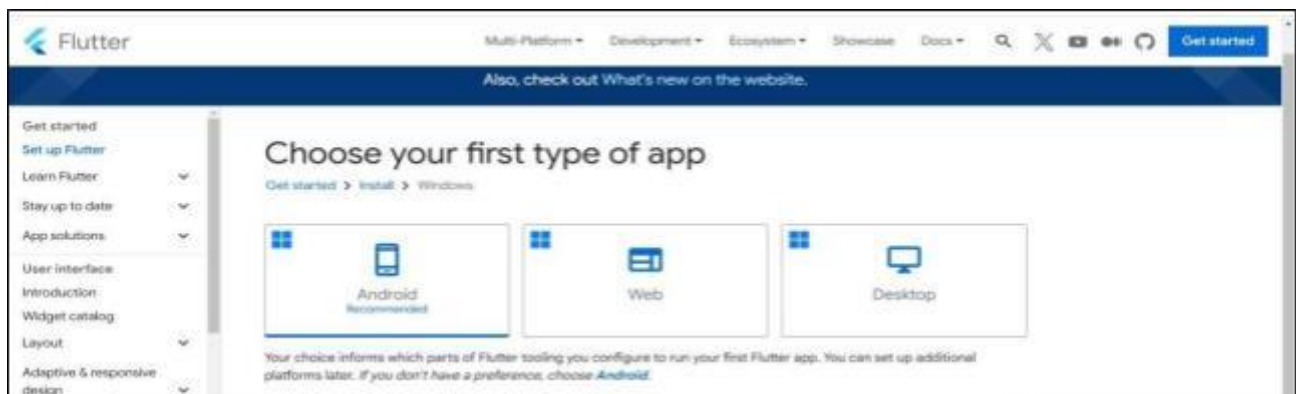
**AIM: -** Installation and Configuration of Flutter Environment.

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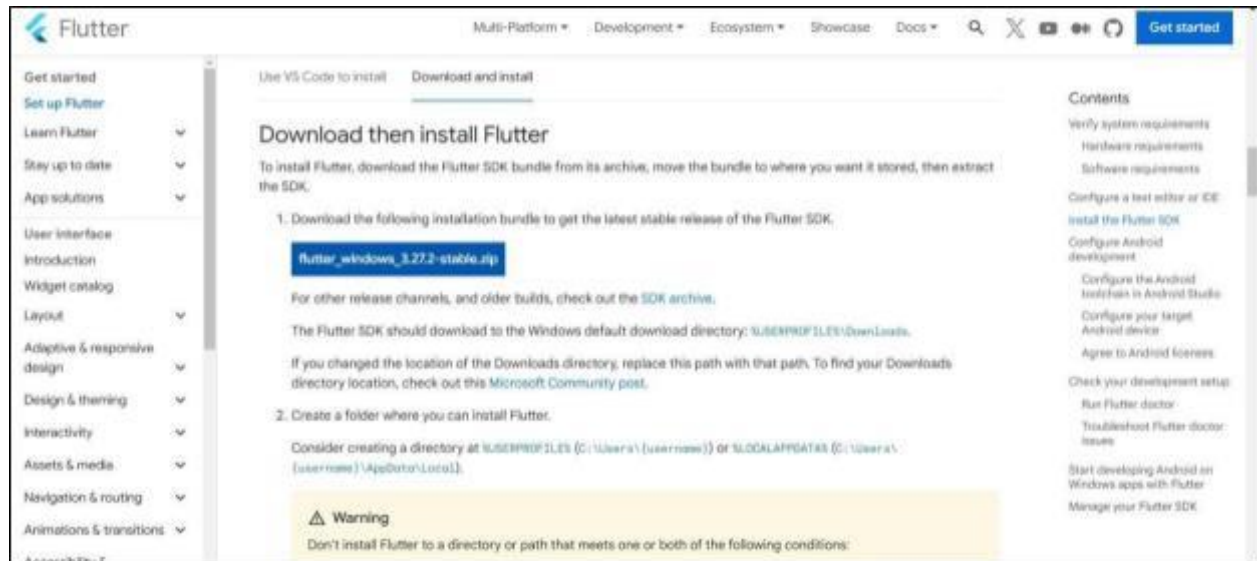
**Step 1:** Go to the official Flutter website: <https://docs.flutter.dev/get-started/install>



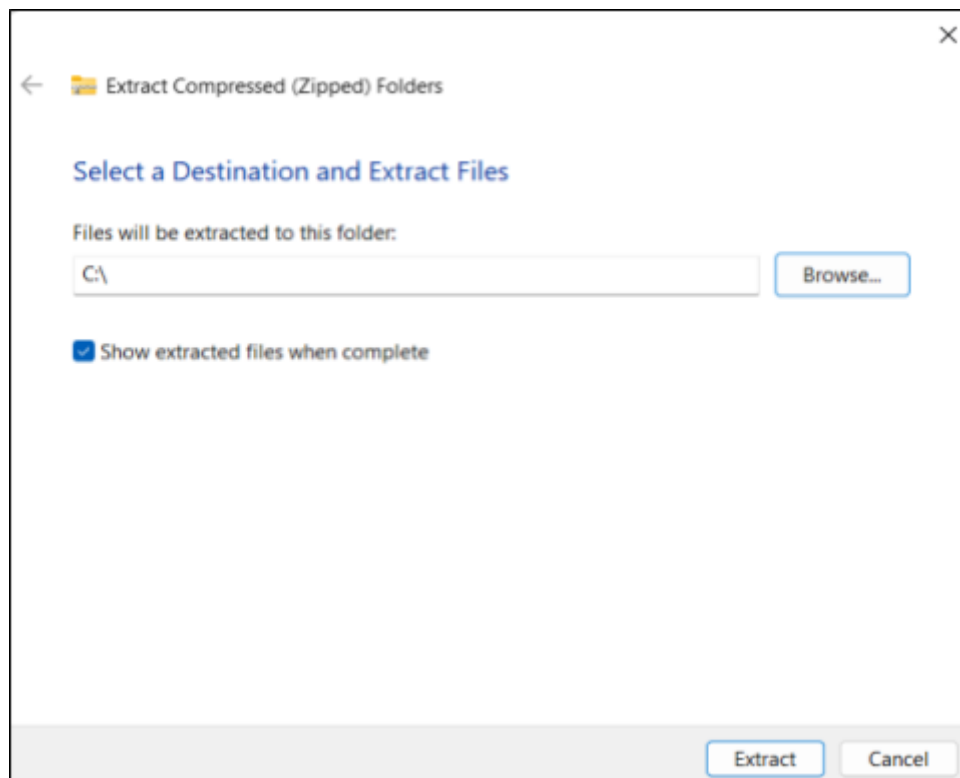
**Step 2:** To download the latest Flutter SDK, click on the Windows icon > Android



**Step 3:** For Windows, download the stable release (a .zip file).



**Step 4:** Extract the ZIP file to a folder (e.g., C:\flutter).

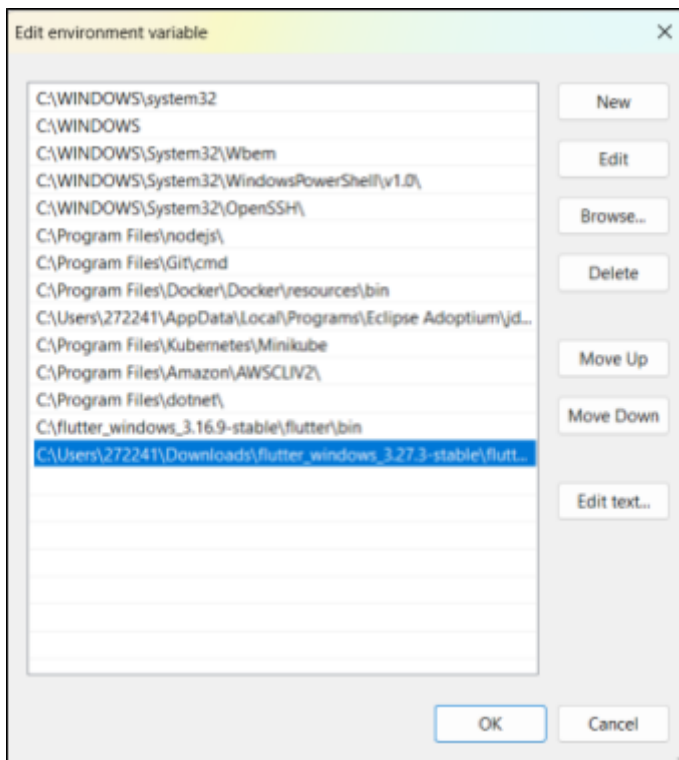


### **Step 5 :-** Add Flutter to System PATH

Right-click on the Start Menu > System > Advanced system settings > Environment Variables.

Under System Variables, find Path and click Edit.

Add the full path to the flutter/bin directory (e.g., C:\flutter\bin).



**Step 6 :-** Now, run the \$ flutter command in command prompt.

```
Command Prompt - flutter
Microsoft Windows [Version 10.0.22631.4751]
(c) Microsoft Corporation. All rights reserved.

C:\Users\272241>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 "--verbose", shows diagnostic information. (Use "-vv" to force verbose
                           logging.)
-d, --device-id            Target device id or name (prefixes allowed).
```

**Step 7:-** 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\272241>flutter doctor
Doctor summary (to see all details, run flutter doctor -v):
[✓] Flutter (Channel stable, 3.27.3, on Microsoft Windows [Version 10.0.22631.4751], locale en-US)
[✓] Windows Version (Installed version of Windows is version 10 or higher)
[✓] Android toolchain - develop for Android devices (Android SDK version 34.0.0)
[✓] Chrome - develop for the web
[!] Visual Studio - develop Windows apps (Visual Studio Community 2022 17.12.4)
    X Visual Studio is missing necessary components. Please re-run the Visual Studio installer with "C++ development with C++" workload, and include these components:
      MSVC v142 - VS 2019 C++ x64/x86 build tools
        - If there are multiple build tool versions available, install the latest
      C++ CMake tools for Windows
      Windows 10 SDK
[✓] Android Studio (version 2023.1)
[✓] VS Code (version 1.96.4)
[✓] Connected device (3 available)
[✓] Network resources

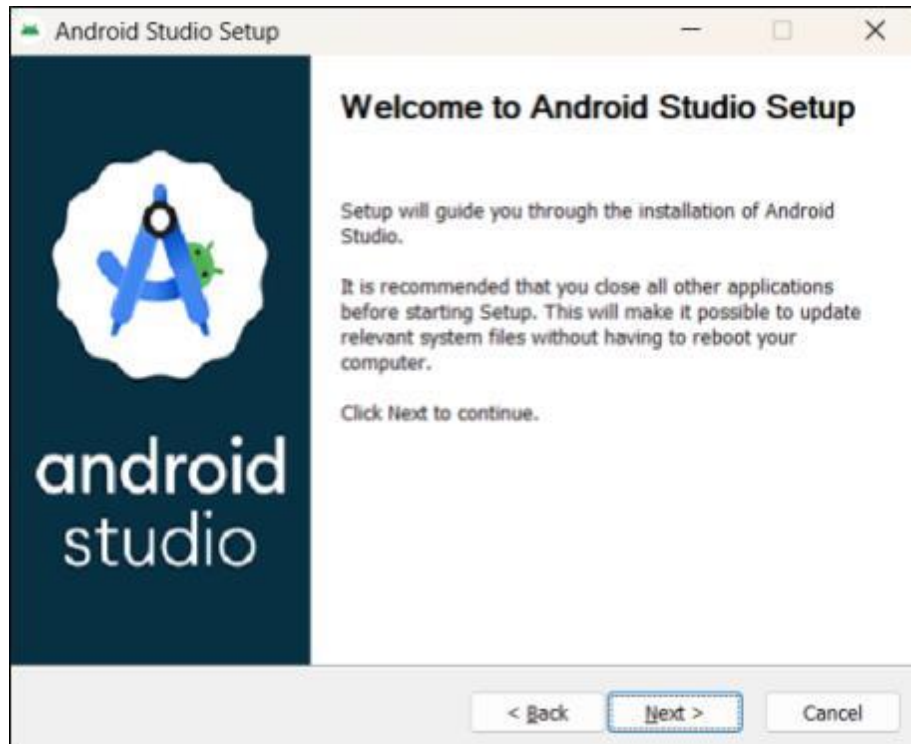
! Doctor found issues in 1 category.
```

**Step 8 :-** Go to Android Studio and download the installer.

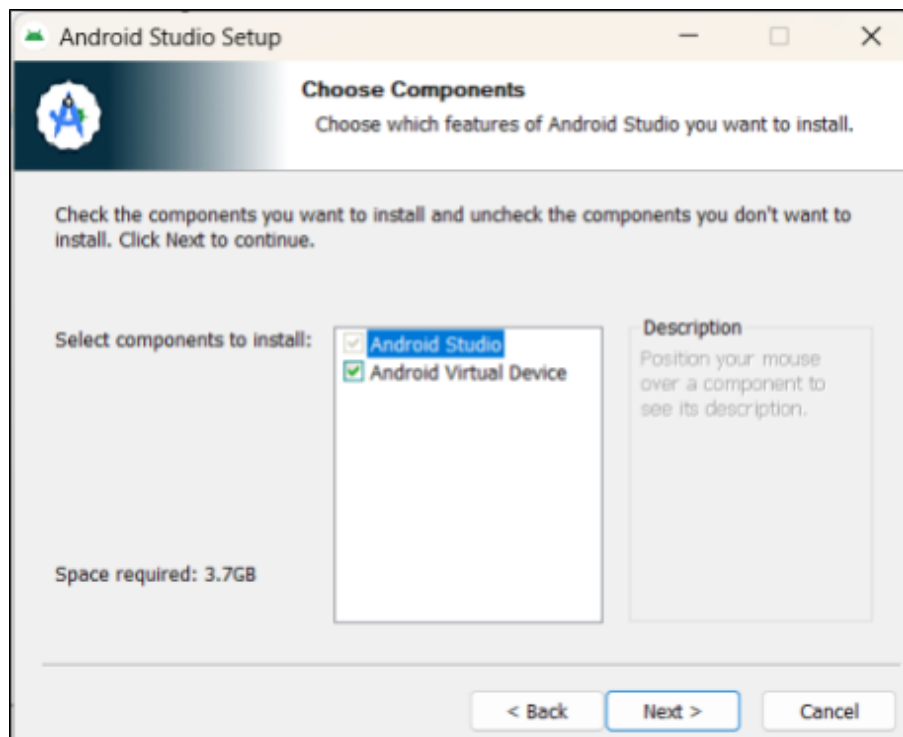
Download the latest version of Android Studio. For more information, see the [Android Studio release notes](#).

Platform	Android Studio package	Size	SHA-256 checksum
Windows (64-bit)	<a href="#">android-studio-2024.2.2.13-windows.exe</a> Recommended	1.2 GB	7d93a39bf3539f948fc09c6f6a8507b9f502b6f65d3d44b336e7ff26c5bd0a
Windows (64-bit)	<a href="#">android-studio-2024.2.2.13-windows.zip</a> No exe installer	1.2 GB	8259d51e2f9b684ea9ce3f6e0b1489d8f457e037a6fd799f0a03b046b7f7
Mac (64-bit)	<a href="#">android-studio-2024.2.2.13-mac.dmg</a>	1.3 GB	acfbde54d8ce6c12ff9b643830c7a88d6f0de2824282f203f13376e77d2e613
Mac (64-bit, ARM)	<a href="#">android-studio-2024.2.2.13-mac_arm.dmg</a>	1.3 GB	488fb3007e612f3fc8f31e179079dc45a5f93dbcf6ea7da80c4cfcx30e4ff
Linux (64-bit)	<a href="#">android-studio-2024.2.2.13-linux.tar.gz</a>	1.3 GB	b7f6ed4a7959f6dca7a8d57461b8b9a205eb23cc276cd826ed85b8b796b55

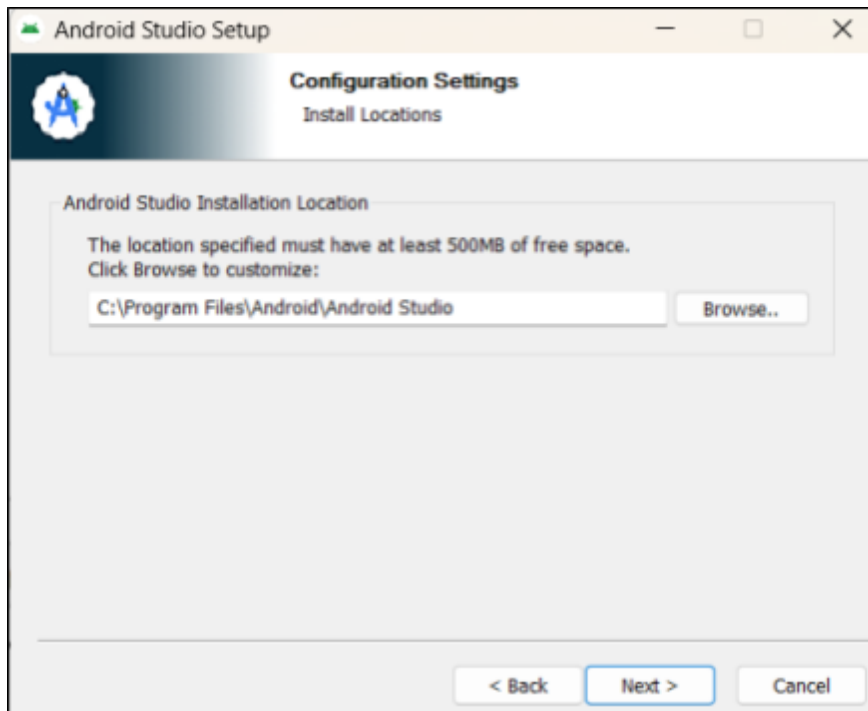
**Step 8.1:** - When the download is complete, open the .exe file and run it. You will get the following dialog box



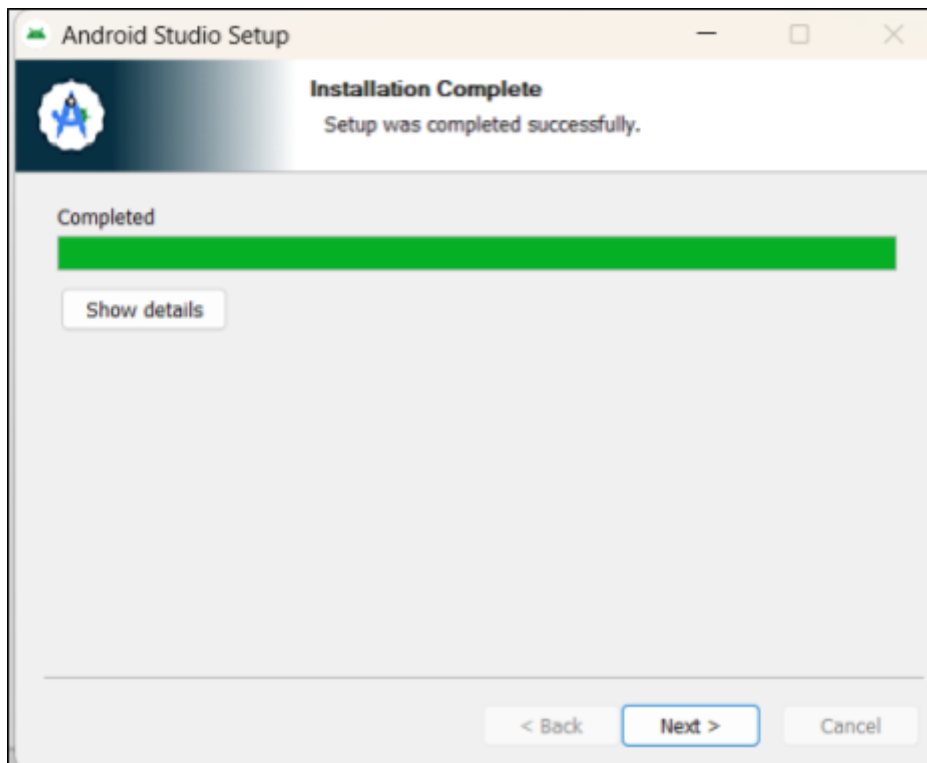
**Step 8.2:** - Select all the Checkboxes and Click on 'Next' Button.

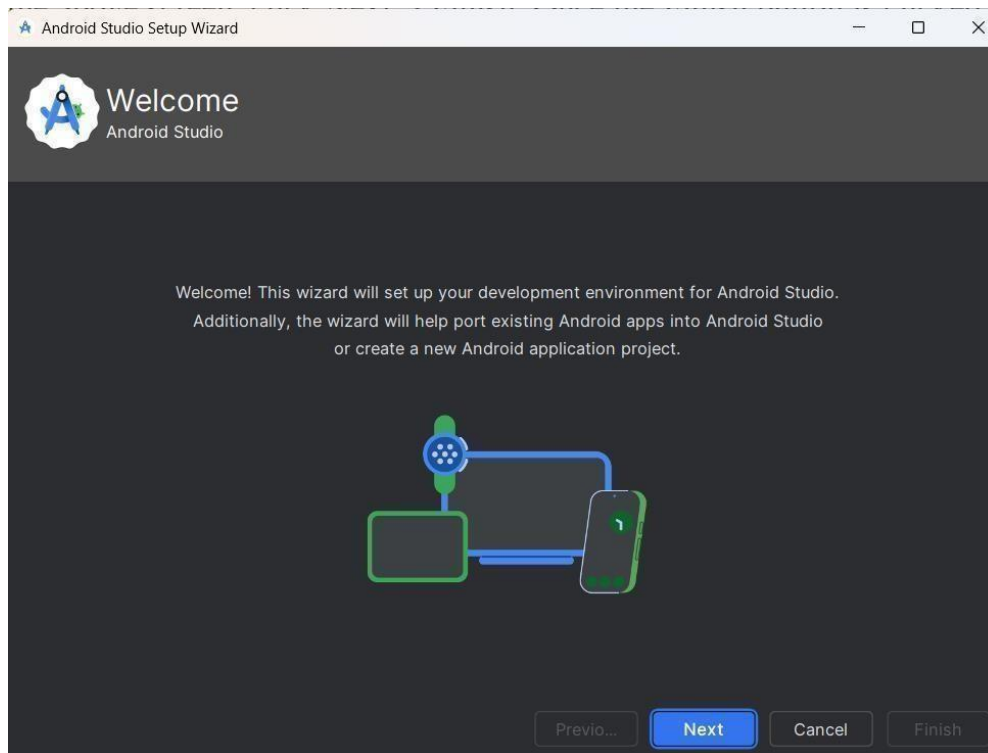


**Step 8.3:** - Change the destination as per your convenience and click on 'Next' Button.

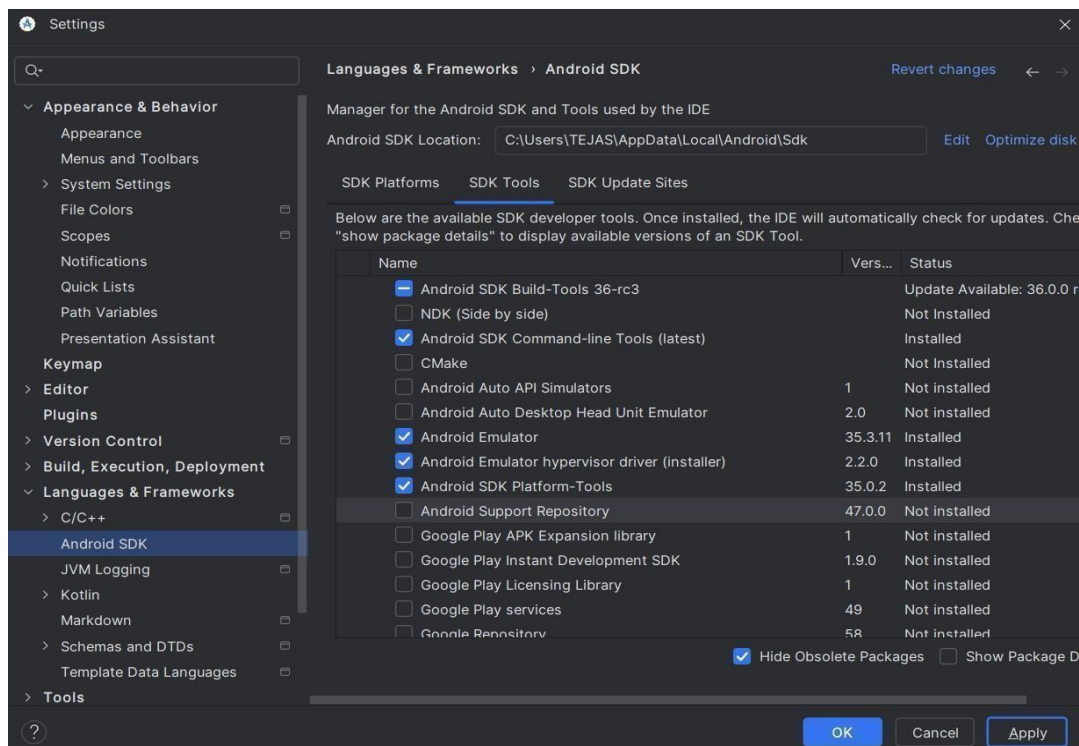


**Step 8.4:** - Follow the steps of the installation wizard. Once the installation wizard completes, you will get the following screen.





**Step 8.5: -** Go to Preferences > Appearance & Behavior > System Settings > Android SDK. Select the SDK Tools tab and check Android SDK Command-line Tools and Install it.





**Step 9: -** Open a terminal and run the following command

```
C:\Users\272241>flutter doctor --android-licenses

Warning: Errors during XML parse:
Warning: Additionally, the fallback loader failed to parse the XML.
Warning: Errors during XML parse:      ] 64% Fetch remote repository...
Warning: Additionally, the fallback loader failed to parse the XML.ry...
[=====] 100% Computing updates...
All SDK package licenses accepted.

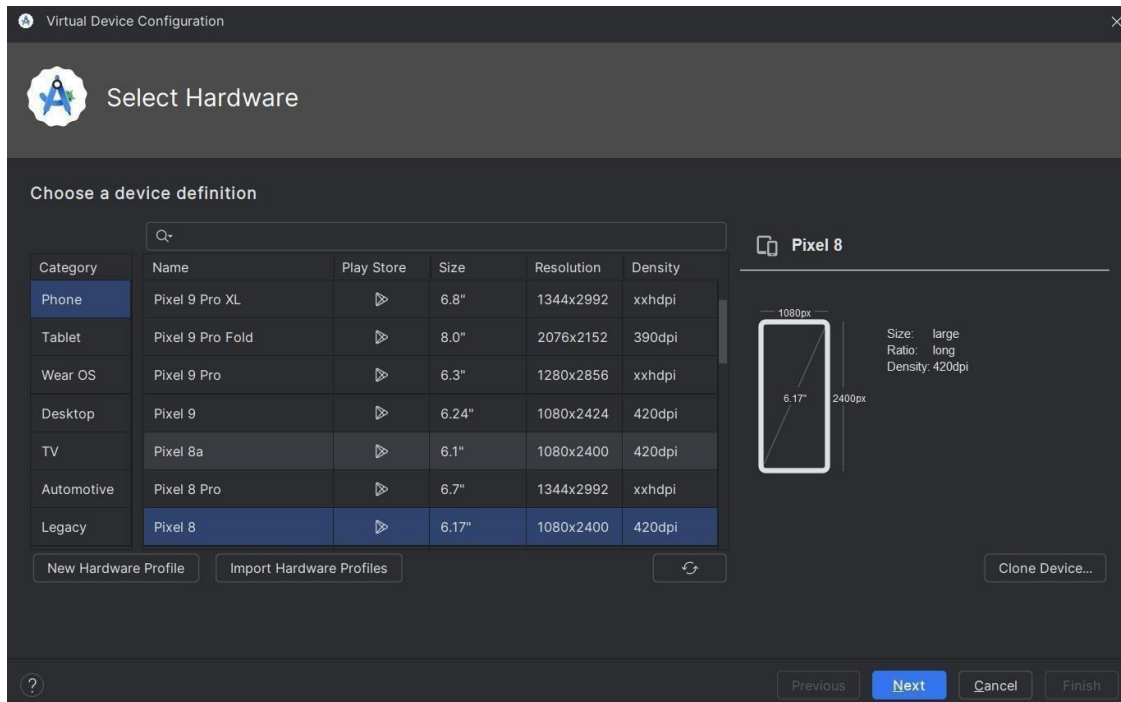
C:\Users\272241>
```

```
C:\Users\272241>flutter doctor
Doctor summary (to see all details, run flutter doctor -v):
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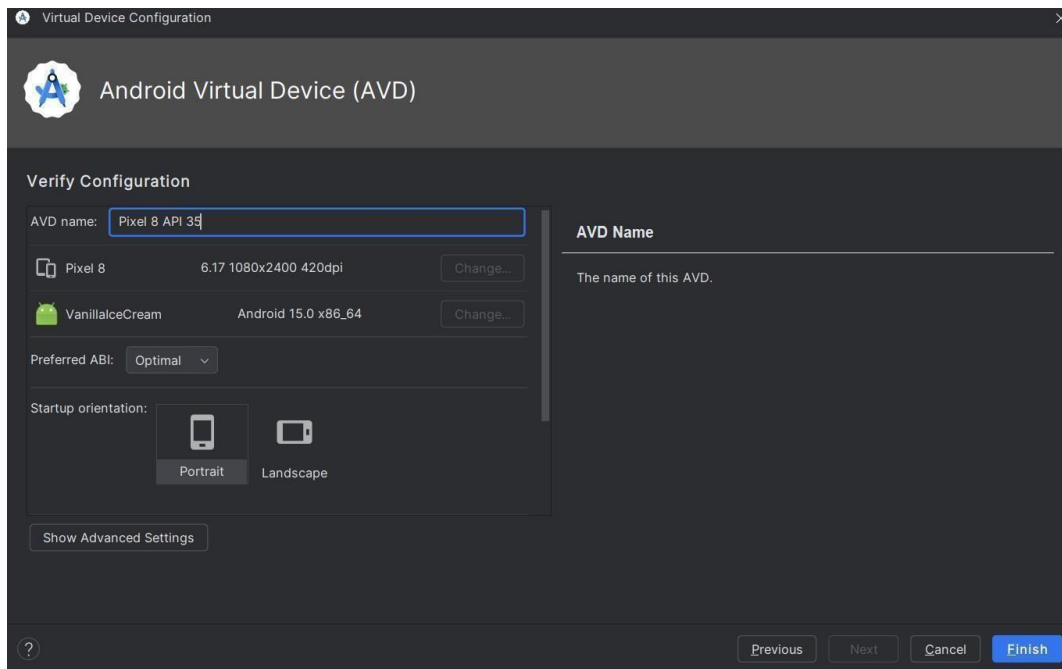
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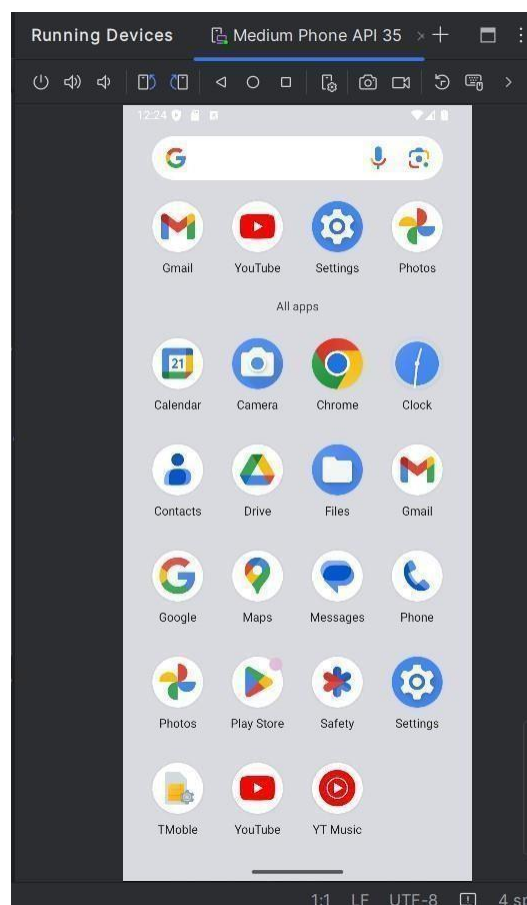
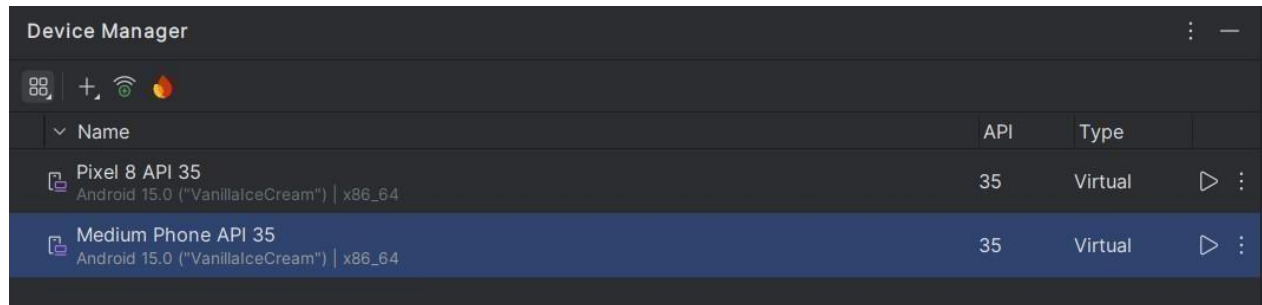
**Step 10: -** Next, you need to set up an Android emulator. It is responsible for running and testing the Flutter application



**Step 10.1: -** Open Android Studio and go to Tools > AVD Manager. Create a new virtual device.

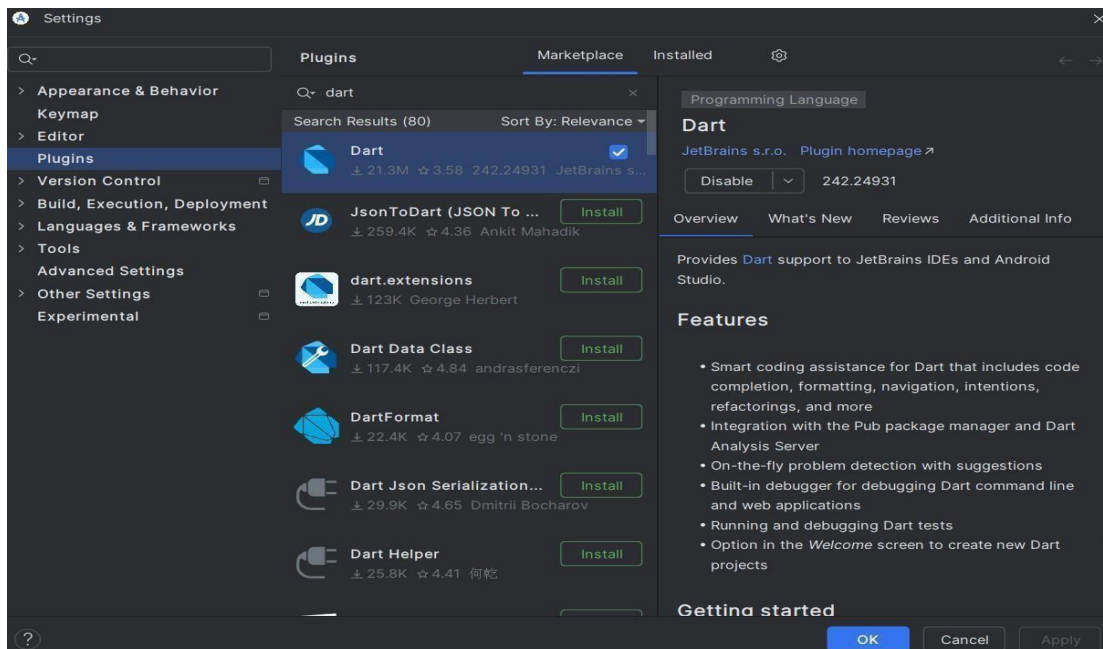
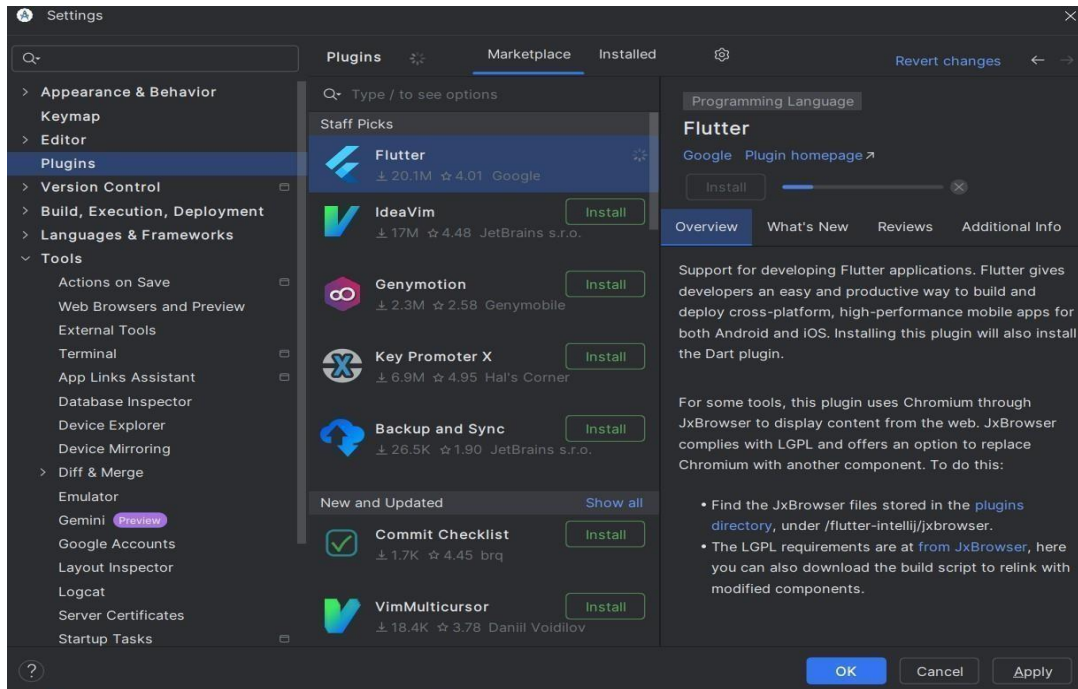


**Step 10.2: -** Click on the icon pointed into the red color rectangle. The Android emulator displayed as below screen



**Step 11:** - Now, install Flutter and Dart plugin for building Flutter application in Android Studio. These plugins provide a template to create a Flutter application, give an option to run and debug Flutter application in the Android Studio itself

**Step 11.1:** - Open the Android Studio and then go to File->Settings->Plugins. Now, search the Flutter plugin. If found, select Flutter plugin and click install



**Step 11.2:** - Restart the Android Studio

**Step 12: -** Go to File > New Project > Create Flutter Project, then select the project name and location, and click Next to proceed.

