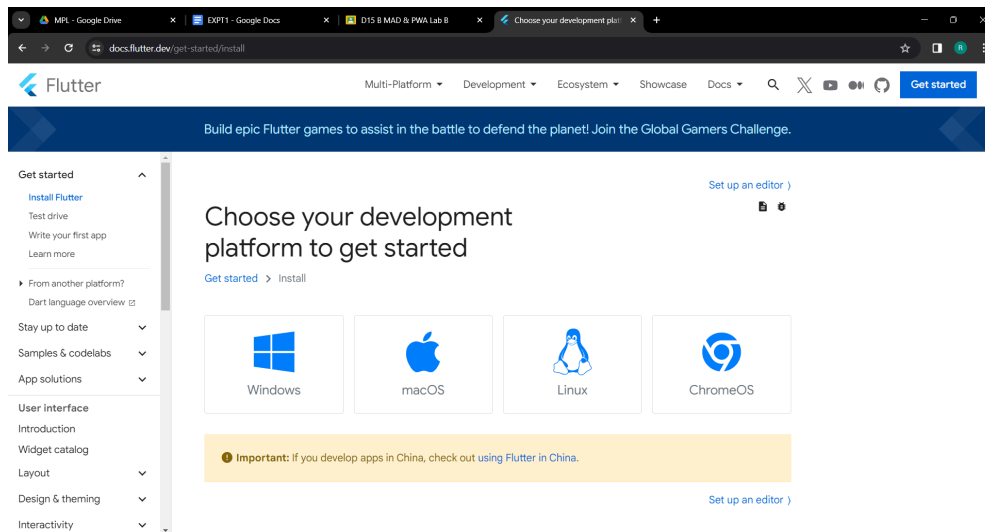


**Aim :** Installation and configuration of flutter

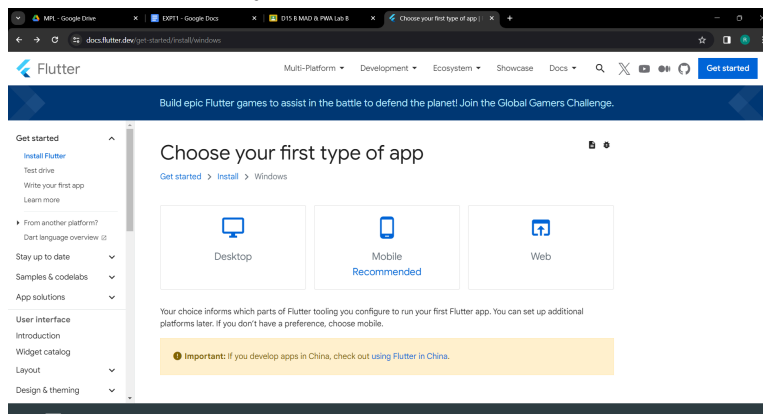
**Theory:** Flutter is an open-source UI software development kit created by Google. It is used to develop cross platform applications from a single codebase for any web browser, Fuchsia, Android, iOS, Linux, macOS, and Windows.

## Install the Flutter SDK

**Step 1:** Go to the official website of flutter.



**Step 2:-**Select the type of App



## Step 3:- Download Flutter SDK

The image shows two screenshots of the Flutter documentation website. The first screenshot displays the 'Start building Flutter Android apps on Windows' page. The second screenshot displays the 'Download then install Flutter' page.

**Flutter** Multi-Platform Development Ecosystem Showcase Docs [Get started](#)

Build epic Flutter games to assist in the battle to defend the planet! Join the Global Gamers Challenge.

**Get started**

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- [Test drive](#)
- [Write your first app](#)
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- [Layout](#)
- [Design & theming](#)
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**Start building Flutter Android apps on Windows** [Create a test app](#)

[Get started](#) > [Install](#) > [Windows](#) > [Android app](#)

**Important:** Perform this guide in sequence. Skipping steps can cause errors.

**System requirements**

To install and run Flutter, your Windows environment must meet these requirements:

**Hardware requirements**

Your Windows Flutter development environment must meet the following minimal hardware requirements.

Requirement	Minimum	Recommended
-------------	---------	-------------

**Contents**

- [System requirements](#)
  - [Hardware requirements](#)
  - [Software requirements](#)
- [Configure a text editor or IDE](#)
- [Install the Flutter SDK](#)
- [Configure Android development](#)
  - [Configure the Android toolchain in Android Studio](#)
  - [Configure your target Android device](#)
  - [Agree to Android licenses](#)
- [Check your development setup](#)
  - [Run Flutter doctor](#)
  - [Troubleshoot Flutter doctor issues](#)

**Download then install Flutter**

1. Download the following installation bundle to get the latest stable release of the Flutter SDK.

[flutter\\_windows\\_3.16.7-stable.zip](#)

For other release channels, and older builds, check out the [SDK archive](#).

This guide presumes that you downloaded your Flutter SDK to the default download directory for Windows: `%CSIDL_DEFAULT_DOWNLOADS%\`.

2. Create a folder where you can install Flutter.

Consider `%USERPROFILE%` or `C:\dev`.

**Warning:**

Don't install Flutter to a directory or path that meets one or both of the following conditions:

- The path contains special characters or spaces.
- The path requires elevated privileges.

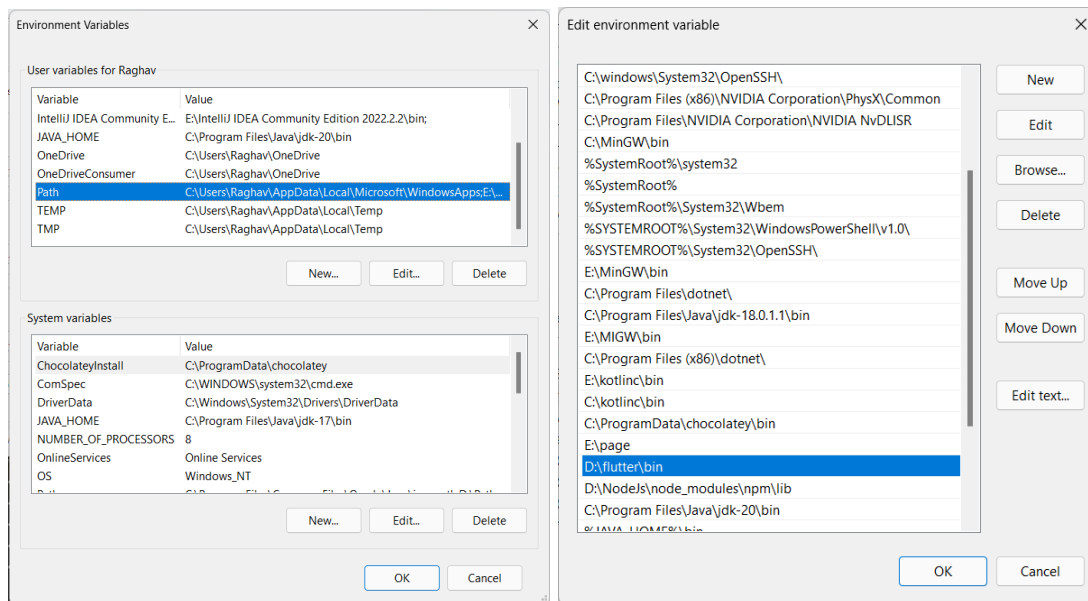
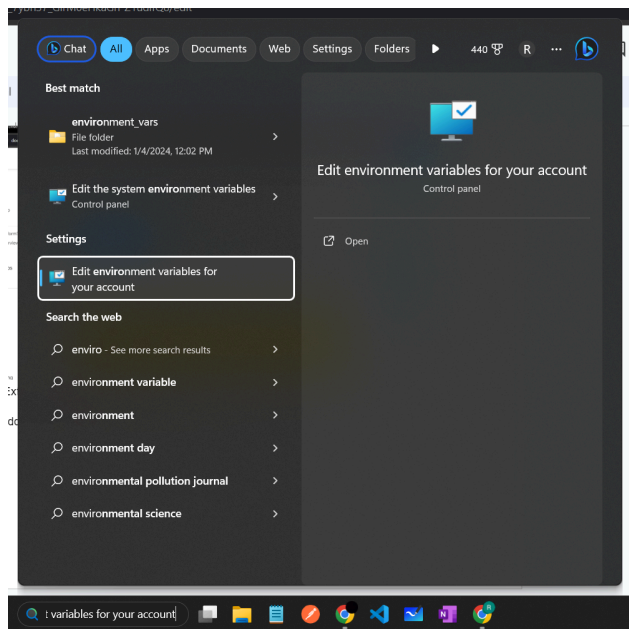
As an example, `C:\Program Files\` fails both conditions.

**Contents**

- [System requirements](#)
  - [Hardware requirements](#)
  - [Software requirements](#)
- [Configure a text editor or IDE](#)
- [Install the Flutter SDK](#)
- [Configure Android development](#)
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- [Check your development setup](#)
  - [Run Flutter doctor](#)
  - [Troubleshoot Flutter doctor issues](#)

Step 4:- Extract the ZIP File

Step 5:-Add Flutter SDK path to environment variables



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

Now, 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.

```
Command Prompt - flutter di X + v
Microsoft Windows [Version 10.0.22621.3007]
(c) Microsoft Corporation. All rights reserved.

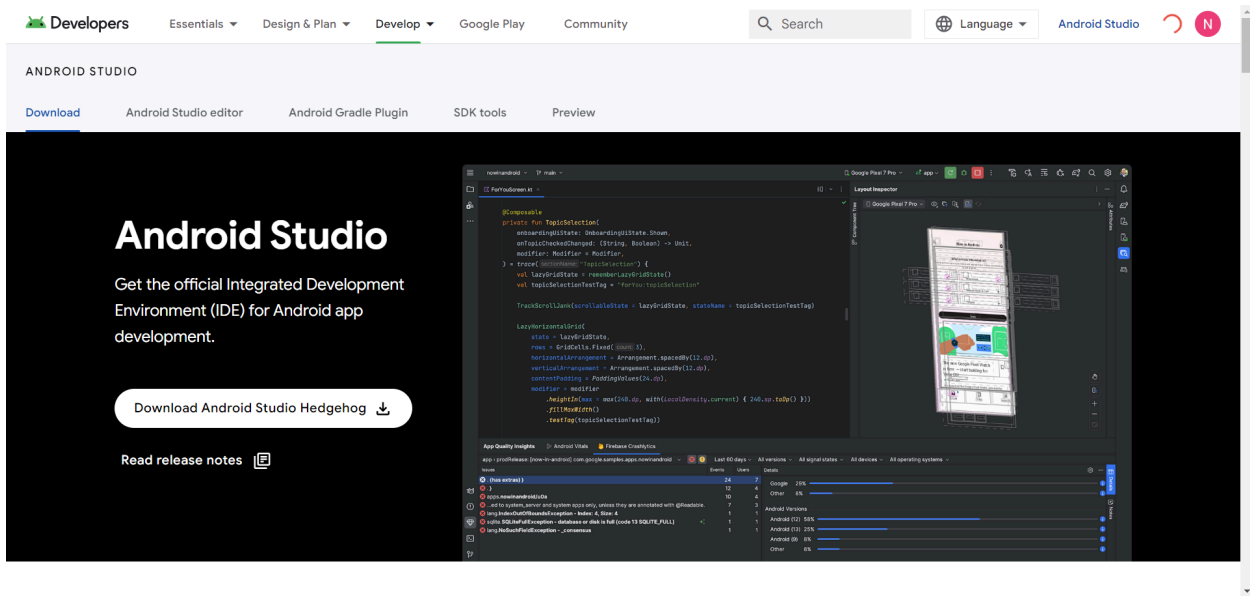
C:\Users\Joshi>flutter doctor
Doctor summary (to see all details, run flutter doctor -v):
[✓] Flutter (Channel stable, 3.16.3, on Microsoft Windows [Version 10.0.22621.3007], locale en-IN)
[✓] Windows Version (Installed version of Windows is version 10 or higher)
[✓] Android toolchain - develop for Android devices (Android SDK version 34.0.0)
[✓] Chrome - develop for the web
[✗] Visual Studio - develop Windows apps
    X Visual Studio not installed; this is necessary to develop Windows apps.
      Download at https://visualstudio.microsoft.com/downloads/.
      Please install the "Desktop development with C++" workload, including all of its default components
[!] Android Studio (version 2021.2)
    X Unable to determine bundled Java version.
[✓] Android Studio (version 2023.1)
[✓] VS Code (version 1.85.1)
[✓] Connected device (3 available)
[✓] Network resources

! Doctor found issues in 2 categories.

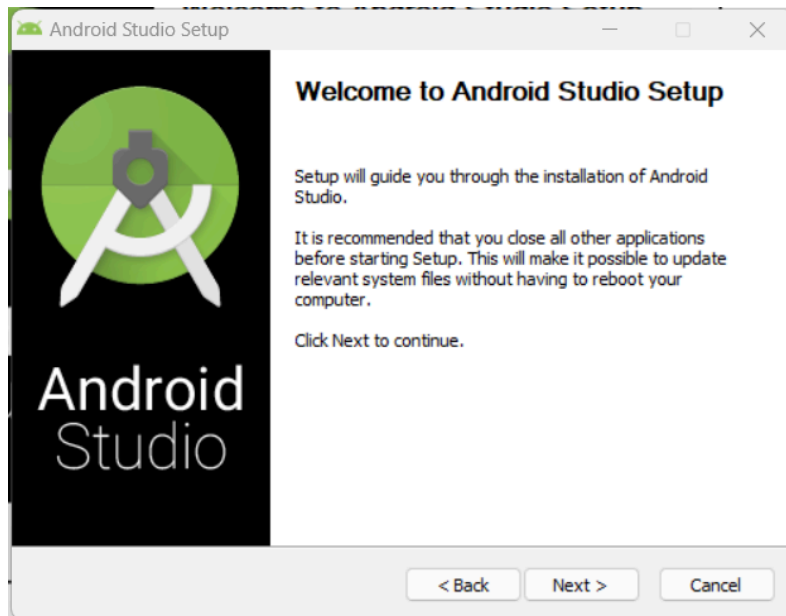
C:\Users\Joshi>
```

**Step 7:** When you run the above command, it will analyze the system and show its report, as shown in the below image. Here, you will find the details of all missing tools, which required to run Flutter as well as the development tools that are available but not connected with the device.

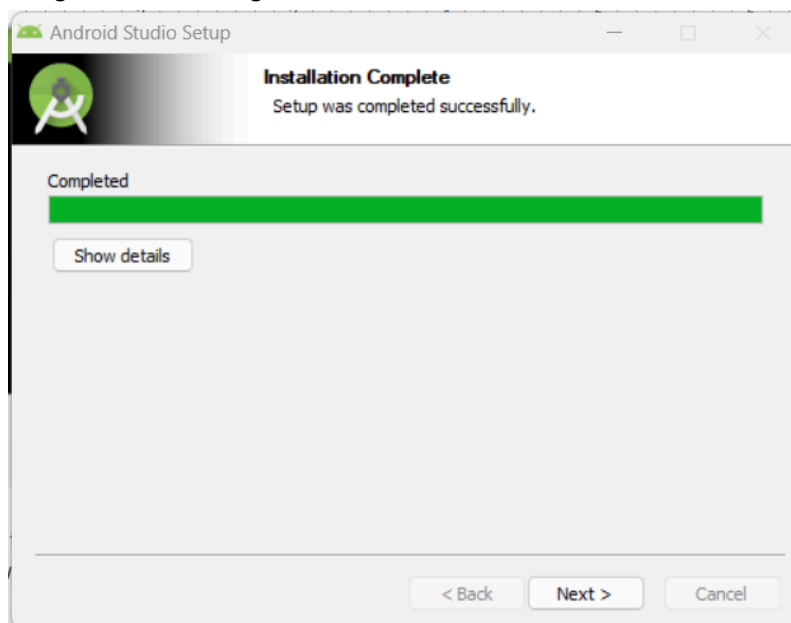
**Step 8:** Install the Android SDK. If the flutter doctor command does not find the Android SDK tool in your system, then you need first to install the Android Studio IDE. To install Android Studio IDE, do the following steps.



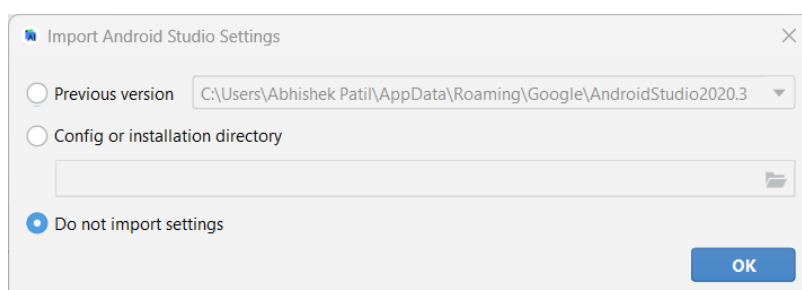
**Step 9:** When the download is complete, open the .exe file and run it. You will get the following dialog box.



**Step 10:** Follow the steps of the installation wizard. Once the installation wizard completes, you will get the following screen.



**Step 11:** In the above screen, click Next-> Finish. Once the Finish button is clicked, you need to choose the 'Don't import Settings' option and click OK. It will start the Android Studio.



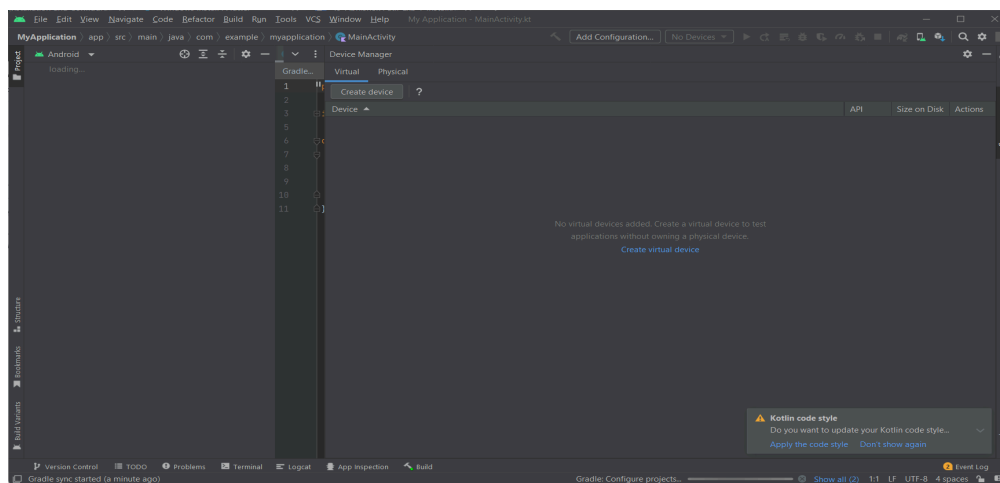
**Step 12:** run the \$ flutter doctor command and Run flutter doctor --android-licenses command.

```
C:\Users\Joshi>flutter doctor --android-licenses
[=====] 100% Computing updates...
All SDK package licenses accepted.

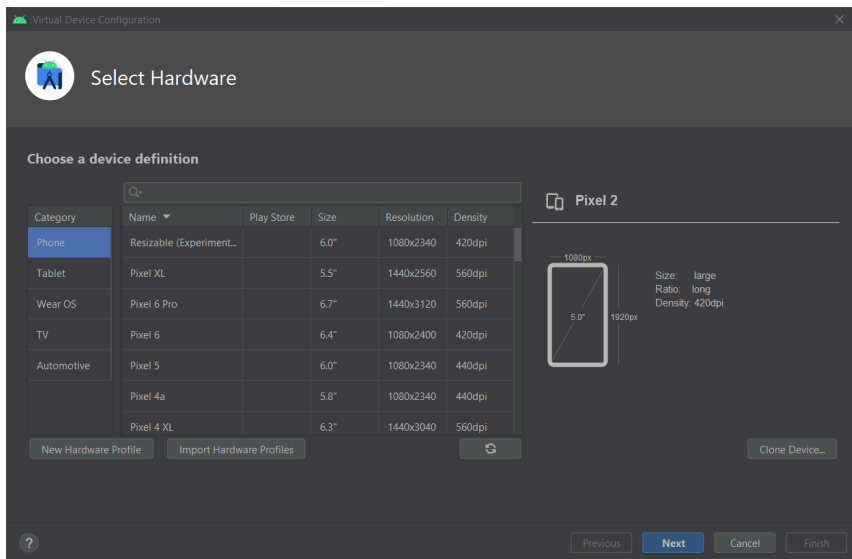
C:\Users\Joshi>
```

**Step 13:** Next, you need to set up an Android emulator. It is responsible for running and testing the Flutter application.

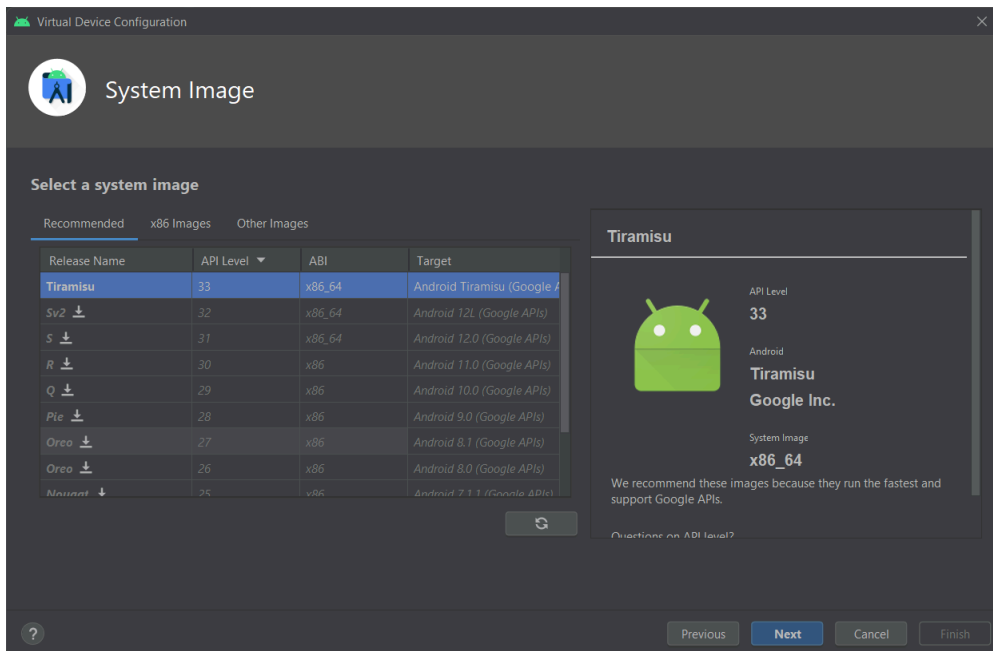
**Step 14:** To set an Android emulator, go to Android Studio > Tools > Android > AVD Manager and select Create Virtual Device. Or, go to Help->Find Action->Type Emulator in the search box. You will get the following screen.



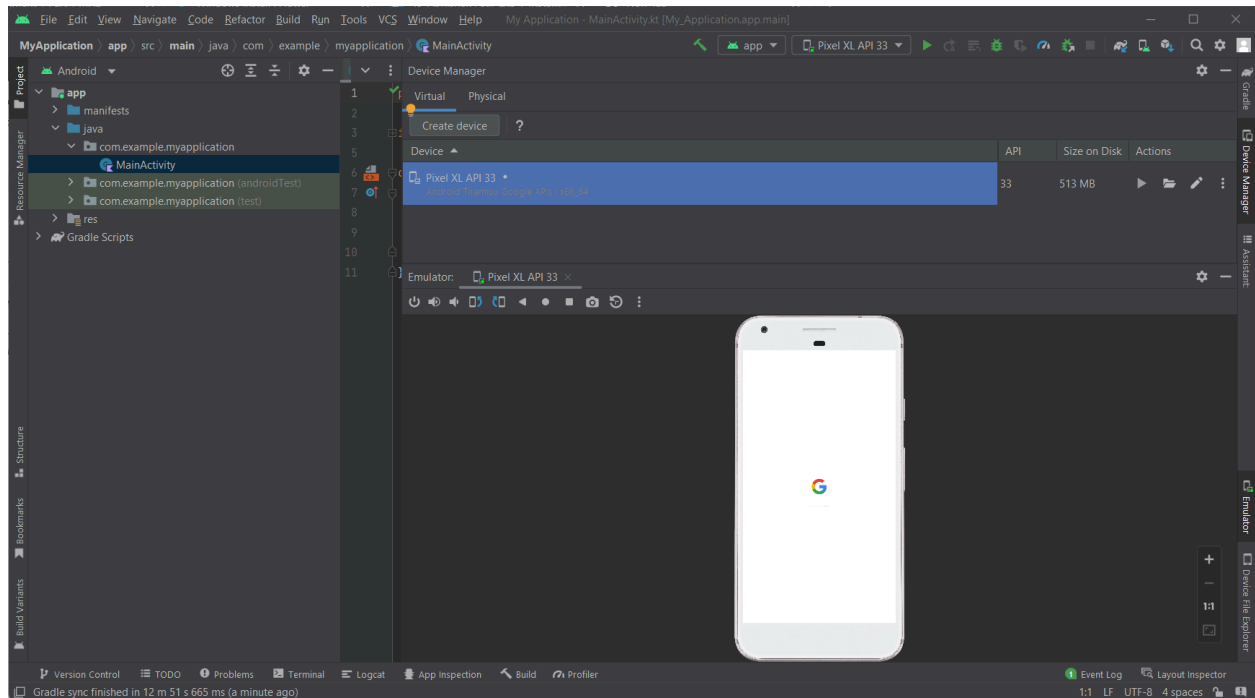
**Step 15:** Choose your device definition and click on Next.



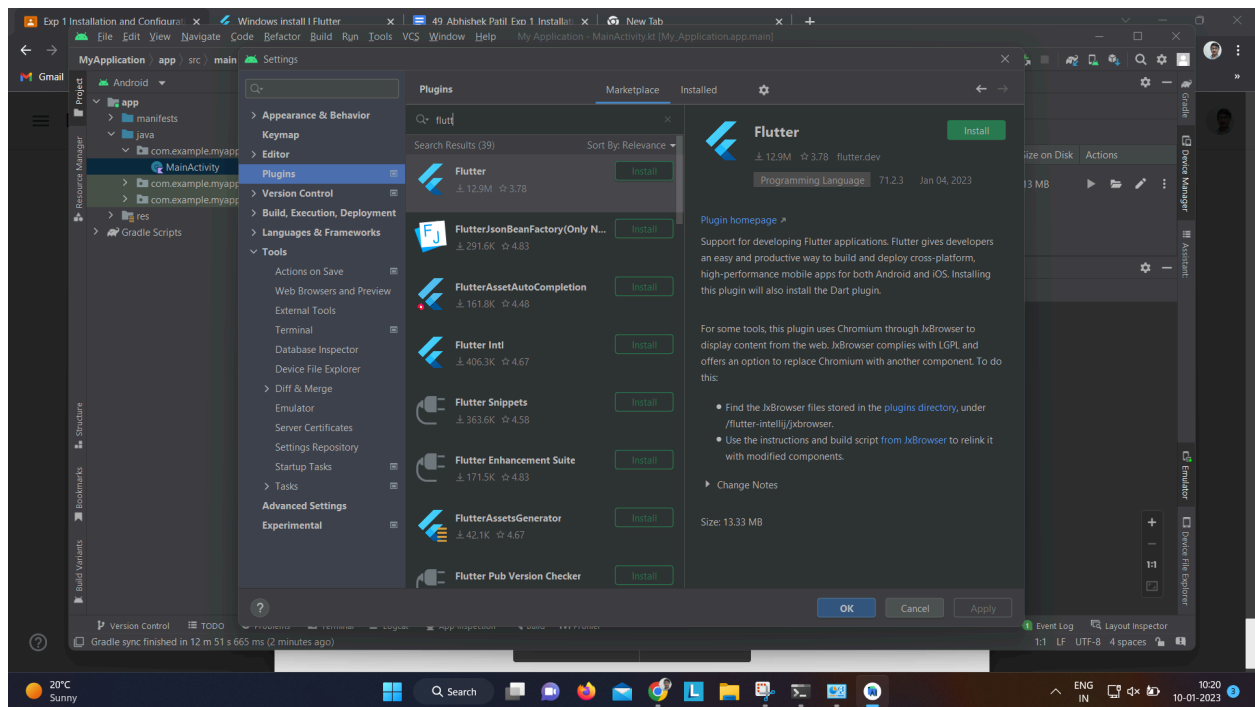
**Step 16:** Now, verify the all AVD configuration. If it is correct, click on Finish. The following screen appears.



**Step 17:** Last, click on the icon pointed into the red color rectangle. The Android emulator displayed as below screen.



**Step 18:** Open the Android Studio and then go to File->Settings->Plugins.





**Step 19:** Now, search the Flutter plugin. If found, select Flutter plugin and click install. When you click on install, it will ask you to install Dart plugin as below screen. Click yes to proceed.

**Step 20:** Restart the Android Studio.

**Conclusion:** Thus we have installed and configured flutter environments in our respective devices.