

EXPERIMENT NO: - 01

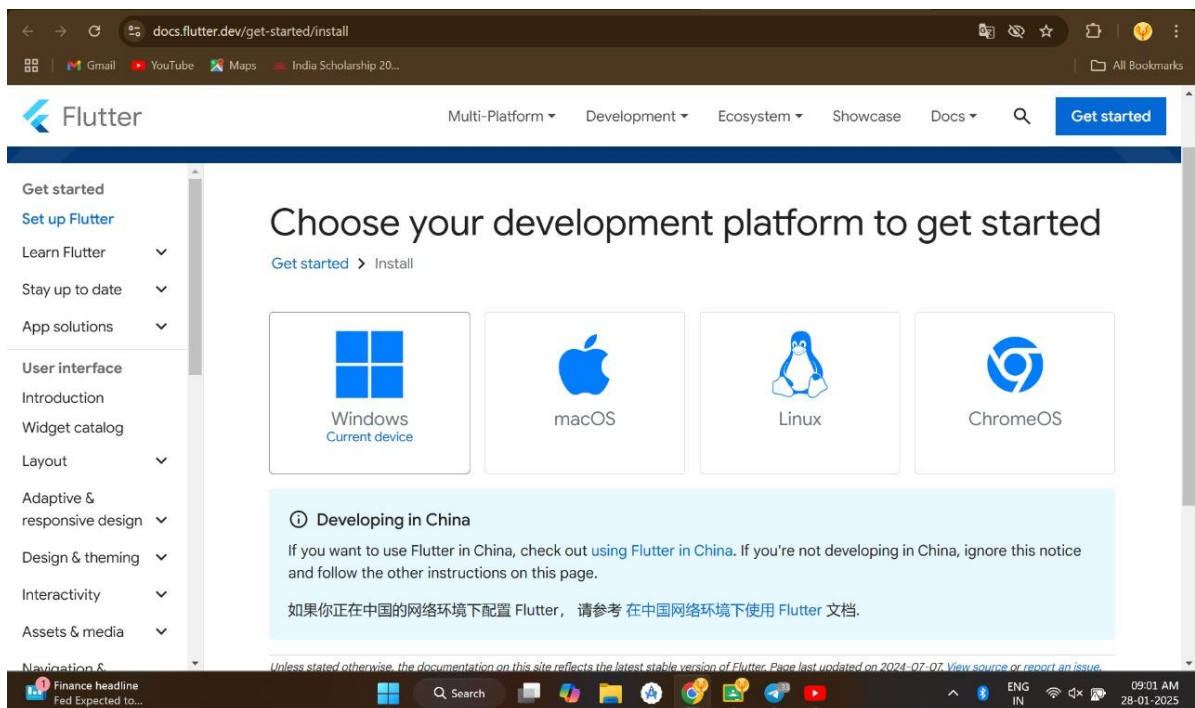
Name:- Prajyot Shinde

Class:- D15A

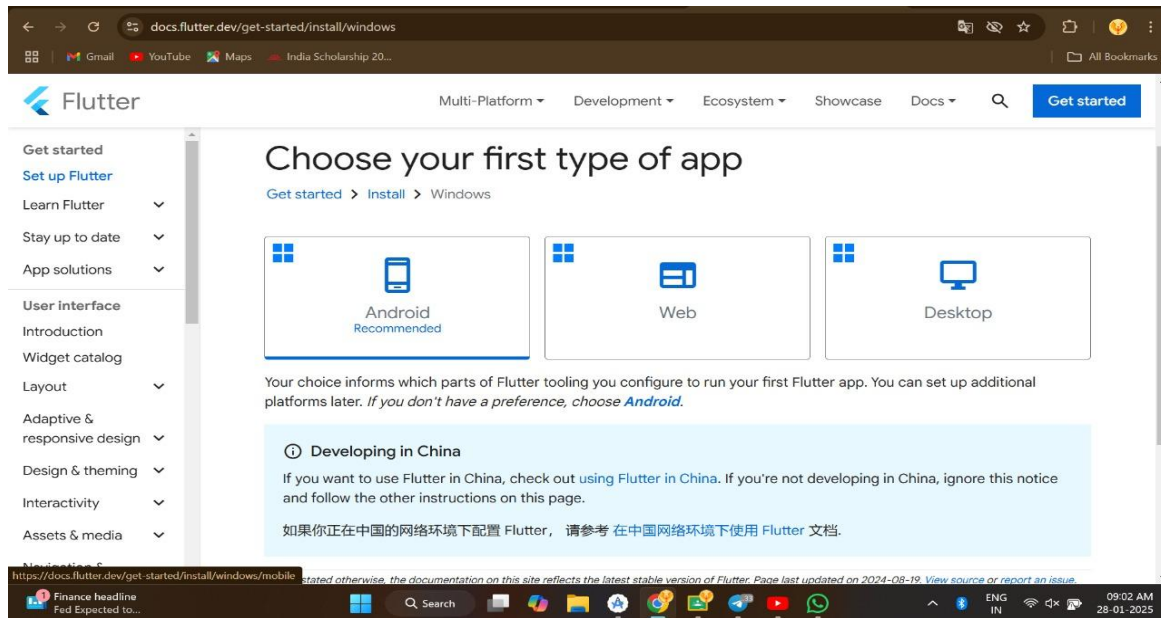
Roll:No:- 55

AIM:- Installation and Configuration of Flutter Environment.

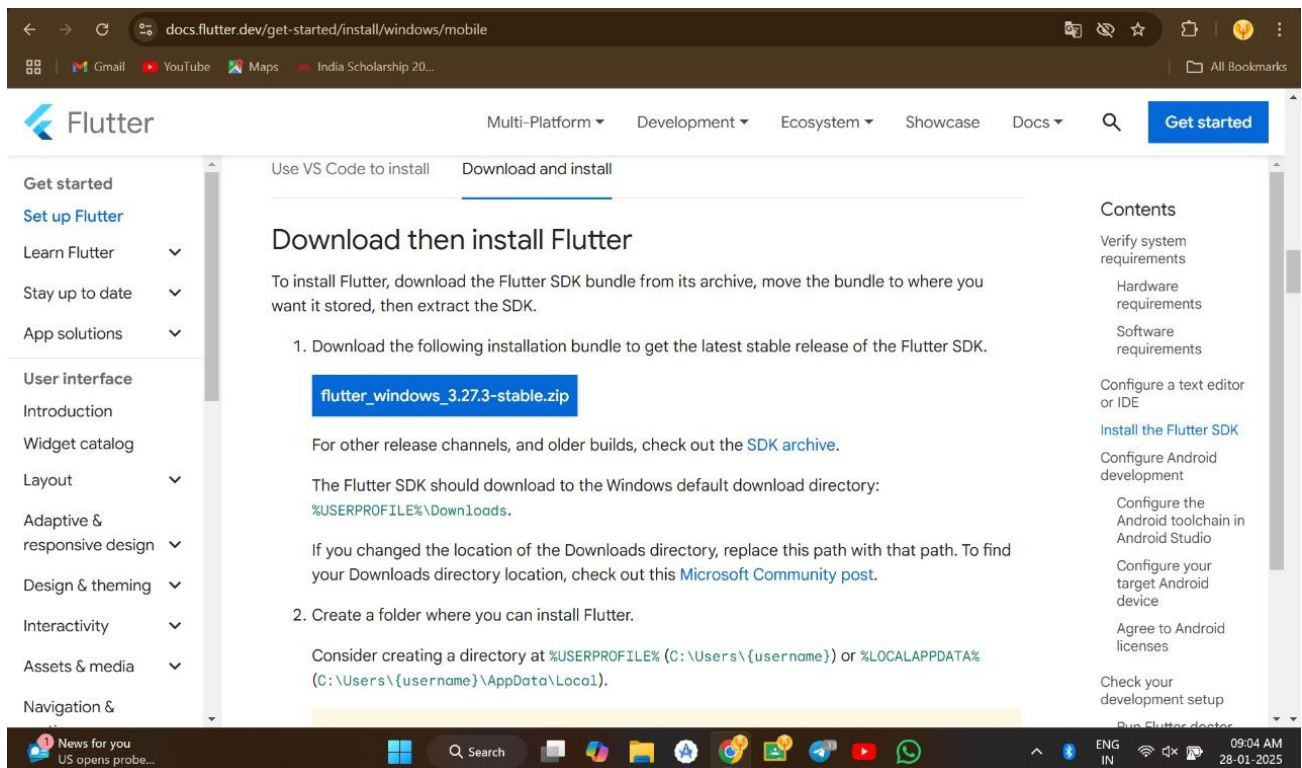
Step 1: Go to the official Flutter website: <https://docs.flutter.dev/get-started/install>



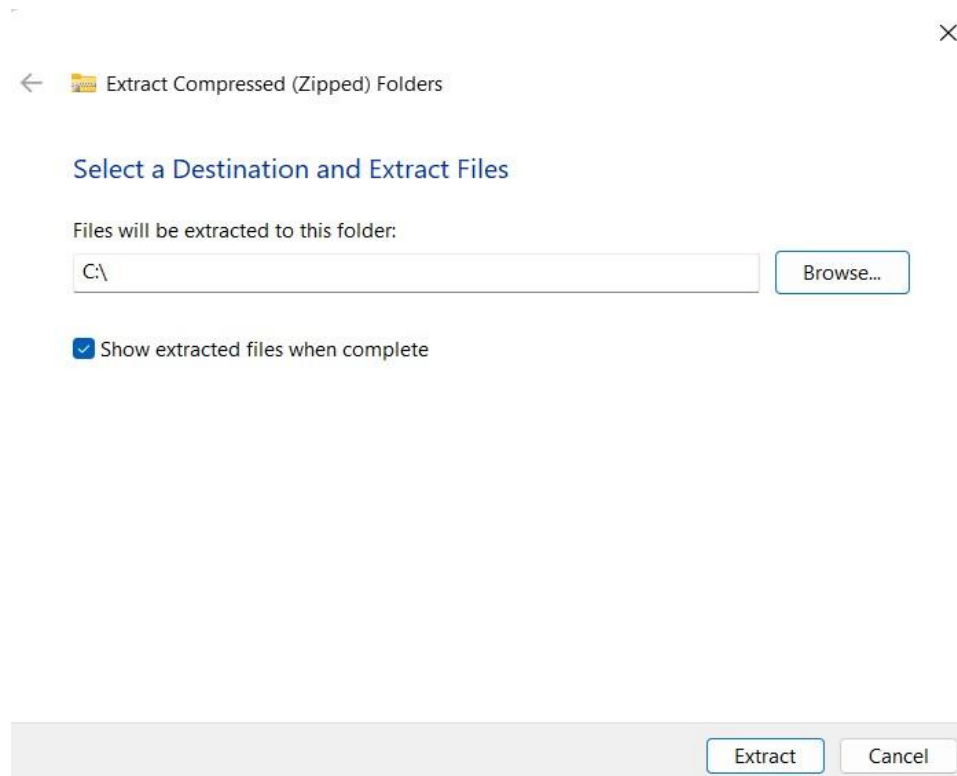
Step 2: To download the latest Flutter SDK, click on the Windows icon > Android



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



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

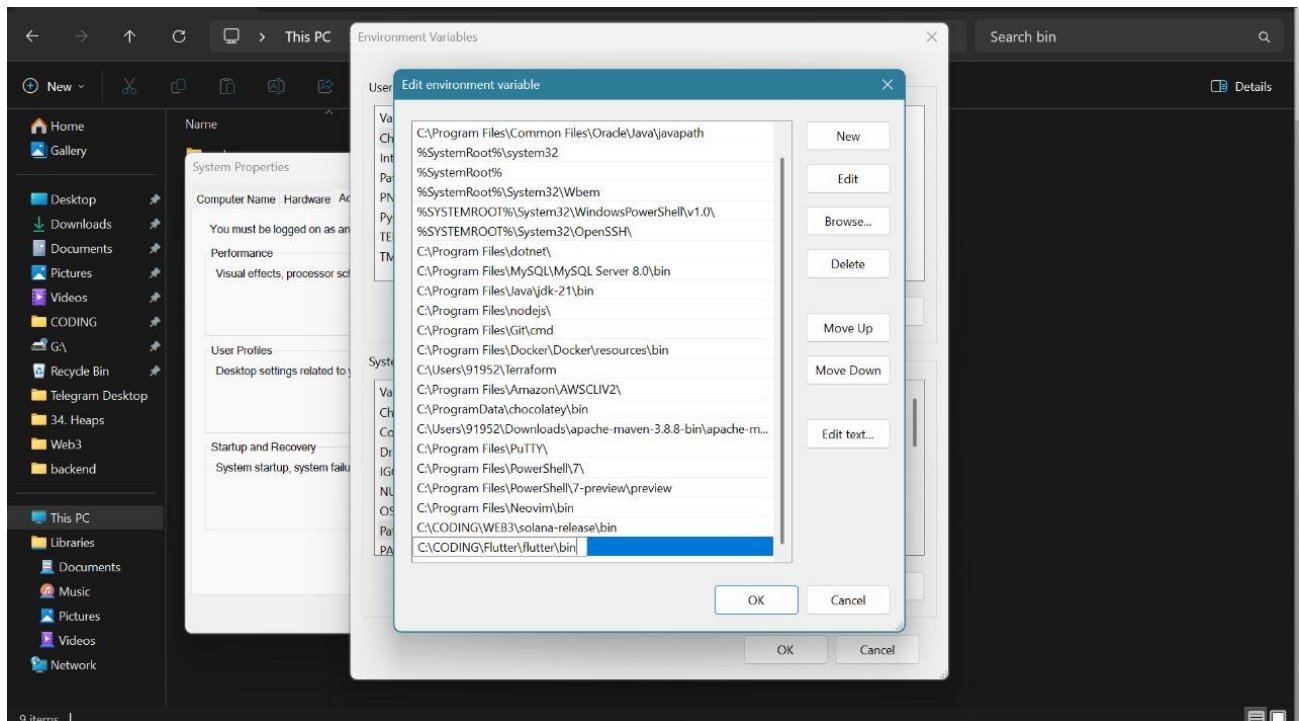


Step 5 :- Add Flutter to System PATH

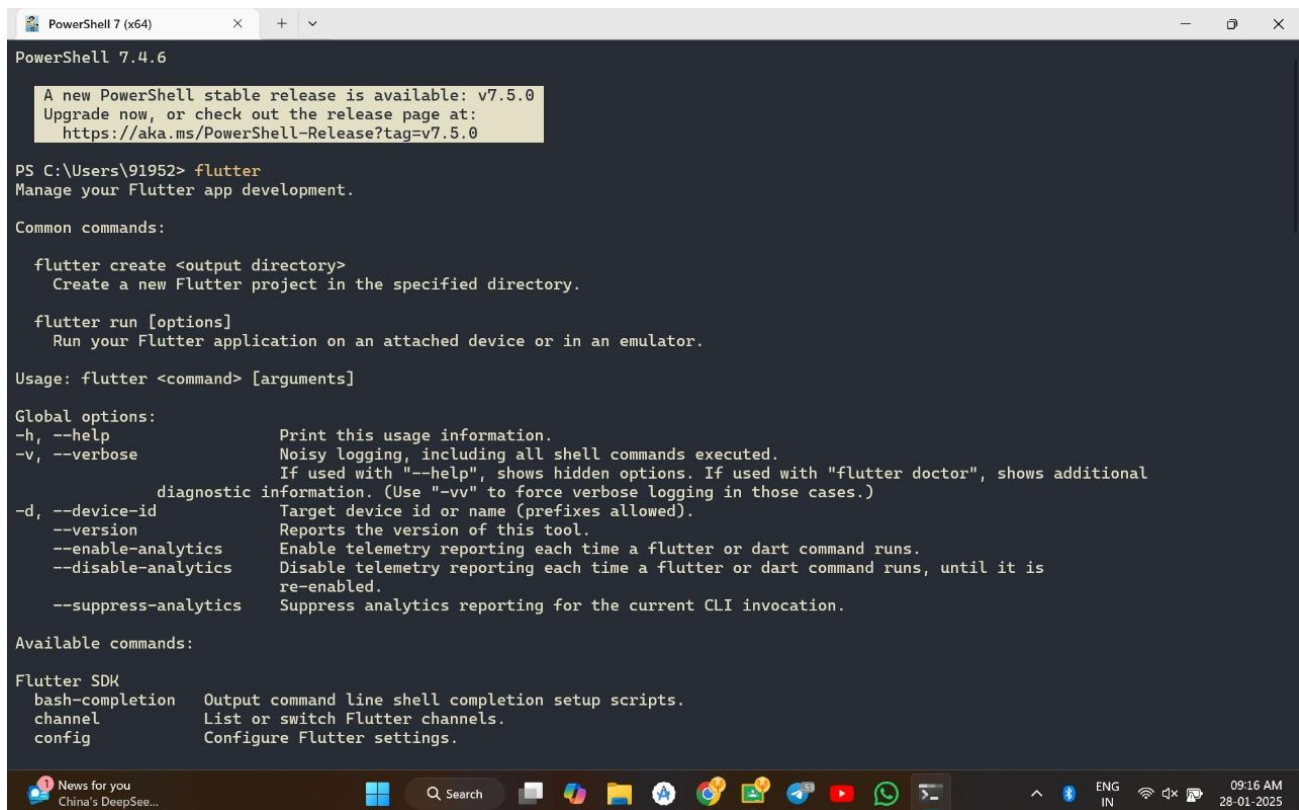
Right-click on the Start Menu > System > Advanced system settings > Environment Variables.

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.



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

```

PS C:\Users\91952> flutter doctor
Doctor summary (to see all details, run flutter doctor -v):
[✓] Flutter (Channel stable, 3.27.3, on Microsoft Windows [Version 10.0.26100.2894], locale en-IN)
[✓] Windows Version (Installed version of Windows is version 10 or higher)
[!] Android toolchain - develop for Android devices (Android SDK version 35.0.1)
    X cmdline-tools component is missing
      Run 'path/to/sdkmanager --install "cmdline-tools;latest"'
      See https://developer.android.com/studio/command-line for more details.
    X Android license status unknown.
      Run 'flutter doctor --android-licenses' to accept the SDK licenses.
      See https://flutter.dev/to/windows-android-setup for more details.
[✓] Chrome - develop for the web
[!] Visual Studio - develop Windows apps (Visual Studio Community 2022 17.11.1)
    X Visual Studio is missing necessary components. Please re-run the Visual Studio installer for the "Desktop 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 2024.2)
[✓] IntelliJ IDEA Community Edition (version 2023.2)
[✓] VS Code (version 1.96.4)
[✓] Connected device (3 available)
[✓] Network resources

! Doctor found issues in 2 categories.
PS C:\Users\91952>

```

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

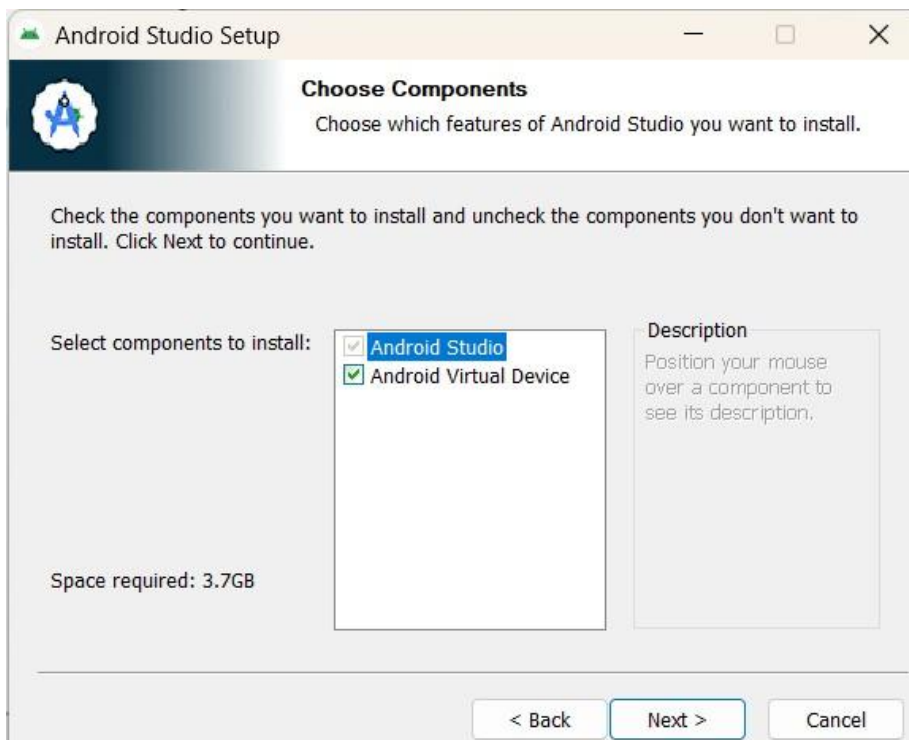
Download the latest version of Android Studio. For more information, see the [Android Studio release notes](#).

Platform	Android Studio package	Size	SHA-256 checksum
Windows (64-bit)	android-studio-2024.2.2.13-windows.exe Recommended	1.2 GB	7d93dd9bf3539f948f609b1968507b1f502bf6965d2d44bd38a17ff26cb5dd3e
Windows (64-bit)	android-studio-2024.2.2.13-windows.zip No .exe installer	1.2 GB	855945962f9b84ea49ce39de0bf4189dbf451ae37a6fab7999da013b046b7f7
Mac (64-bit)	android-studio-2024.2.2.13-mac.dmg	1.3 GB	acfbbe54d6ce8cf21f19b43510c7addcb9dde2824282f205fd1331be77d2e613
Mac (64-bit, ARM)	android-studio-2024.2.2.13-mac_arm.dmg	1.3 GB	688f8d007e612f3f0c18f316179079dc4565f93d8d1e6a7dad80c4cfce356df7
Linux (64-bit)	android-studio-2024.2.2.13-linux.tar.gz	1.3 GB	b7fe1ed4a7959bdaca7a8fd57461dbbf9a205eb23cc218ed828ed88e8b998cb5

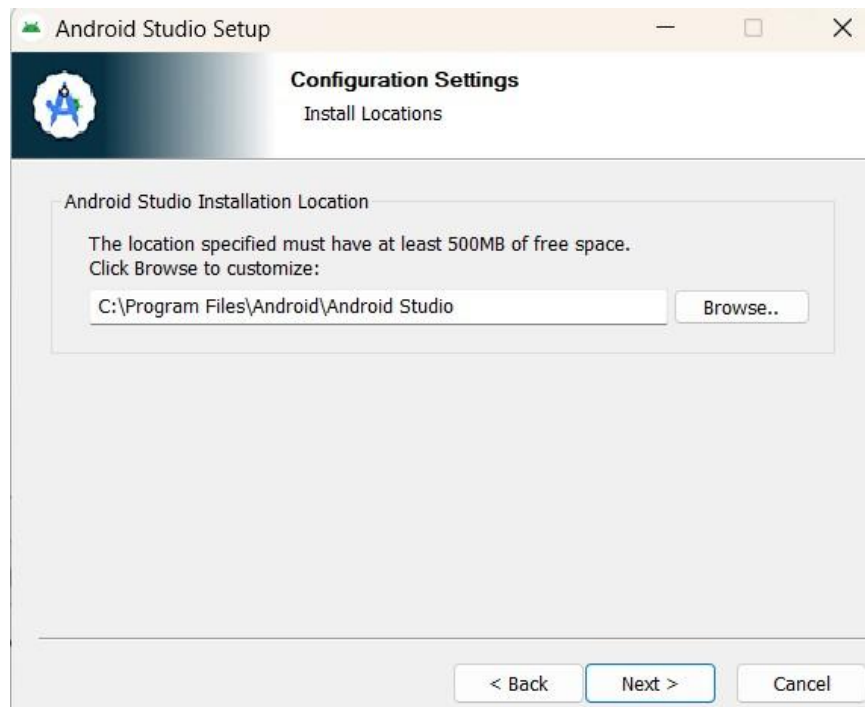
Step 8.1:- When the download is complete, open the .exe file and run it. You will get the following dialog box



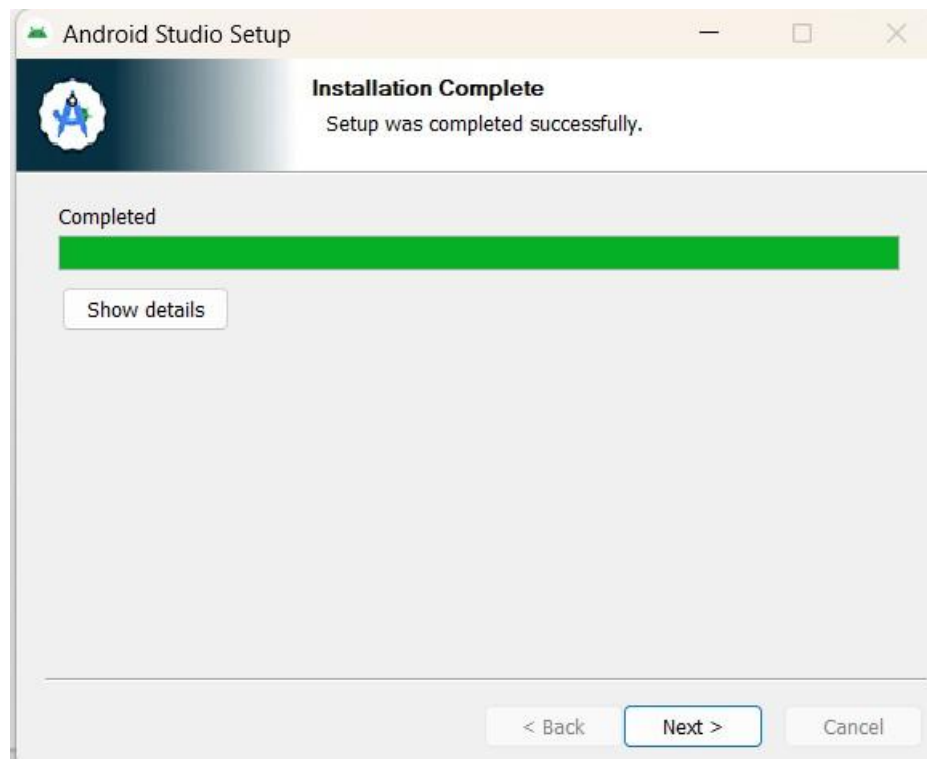
Step 8.2: - Select all the Checkboxes and Click on 'Next' Button.

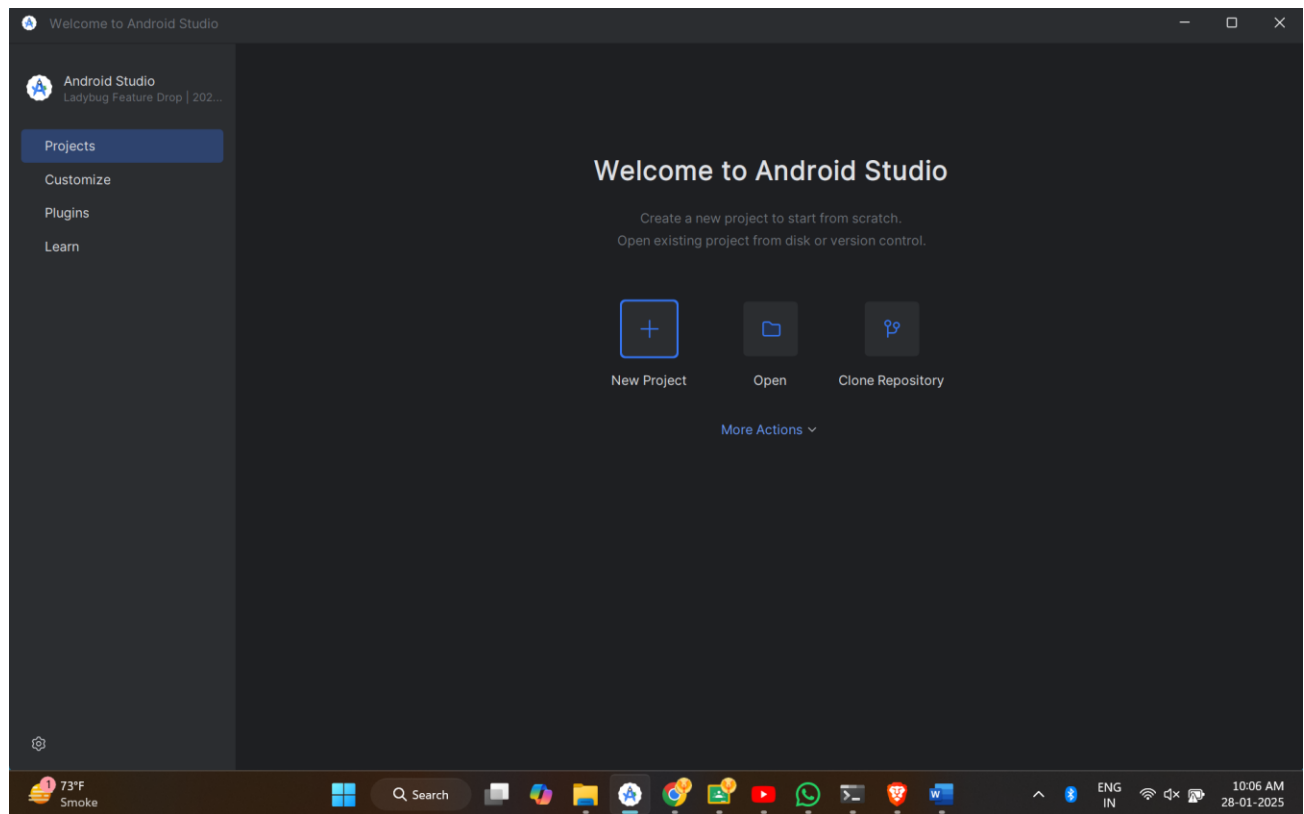


Step 8.3: - Change the destination as per your convenience and click on 'Next' Button.



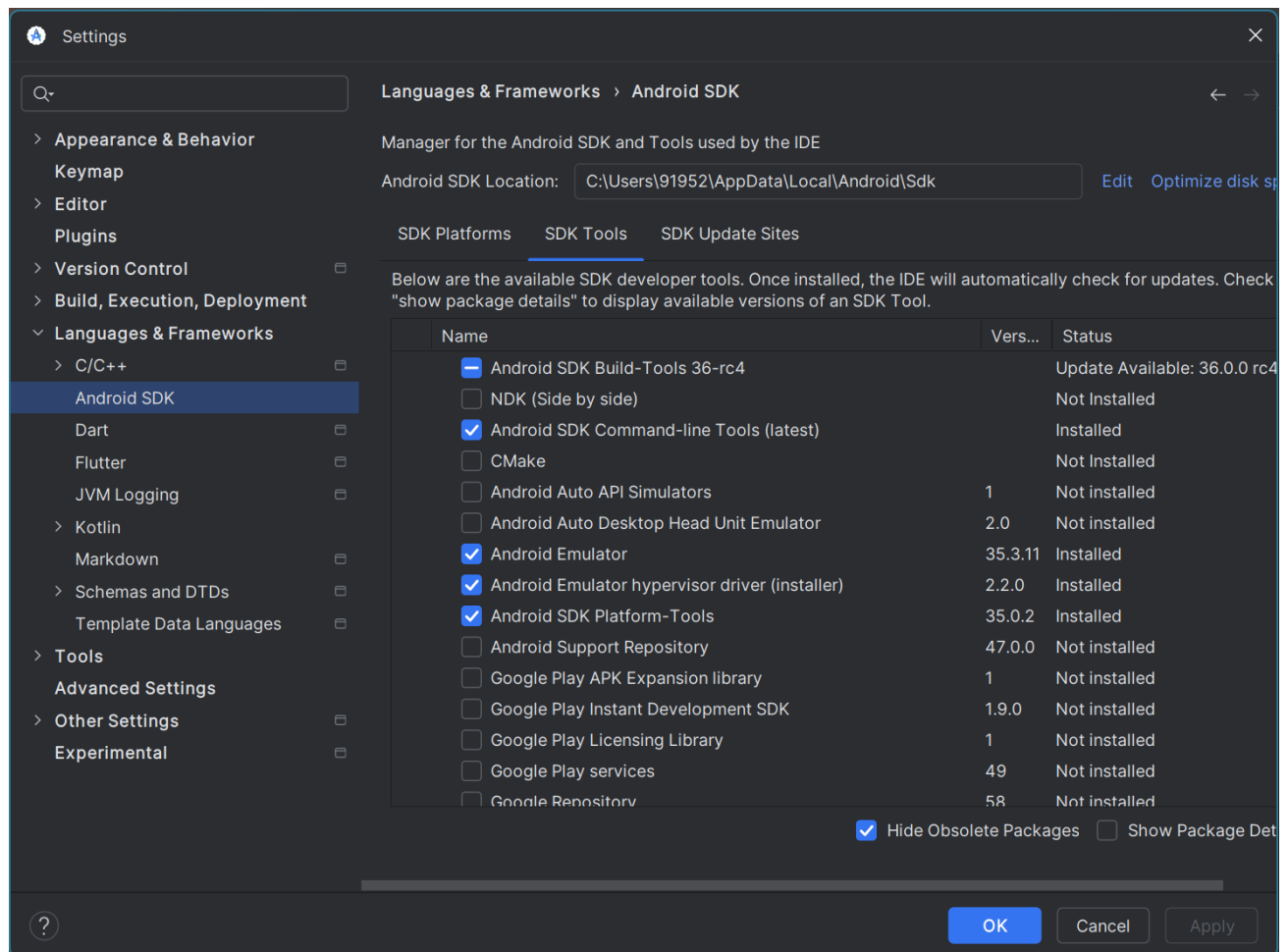
Step 8.4: - Follow the steps of the installation wizard. Once the installation wizard completes, you will get the following screen.





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

```

PowerShell 7 (x64)

! Doctor found issues in 2 categories.
PS C:\Users\91952> flutter doctor --android-licenses
Warning: Errors during XML parse:
Warning: Additionally, the fallback loader failed to parse the XML.ry...
Warning: Errors during XML parse:      ] 62% Fetch remote repository...
Warning: Additionally, the fallback loader failed to
parse the XML.
[=====] 100% Computing updates...
6 of 7 SDK package licenses not accepted.
Review licenses that have not been accepted (y/N)? y

1/6: License android-googletv-license:
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Terms and Conditions

This is the Google TV Add-on for the Android Software Development Kit License Agreement.

1. Introduction

1.1 The Google TV Add-on for the Android Software Development Kit (referred to in this License Agreement as the "Google TV Add-on" and specifically including the Android system files, packaged APIs, and Google APIs add-ons) is licensed to you subject to the terms of this License Agreement. This License Agreement forms a legally binding contract between you and Google in relation to your use of the Google TV Add-on.

1.2 "Google" means Google Inc., a Delaware corporation with principal place of business at 1600 Amphitheatre Parkway, Mountain View, CA 94043, United States.

2. Accepting this License Agreement

2.1 In order to use the Google TV Add-on, you must first agree to this License Agreement. You may not use the Google TV Add-on if you do not accept this License Agreement.

2.2 You can accept this License Agreement by:

(A) clicking to accept or agree to this License Agreement, where this option is made available to you; or

```

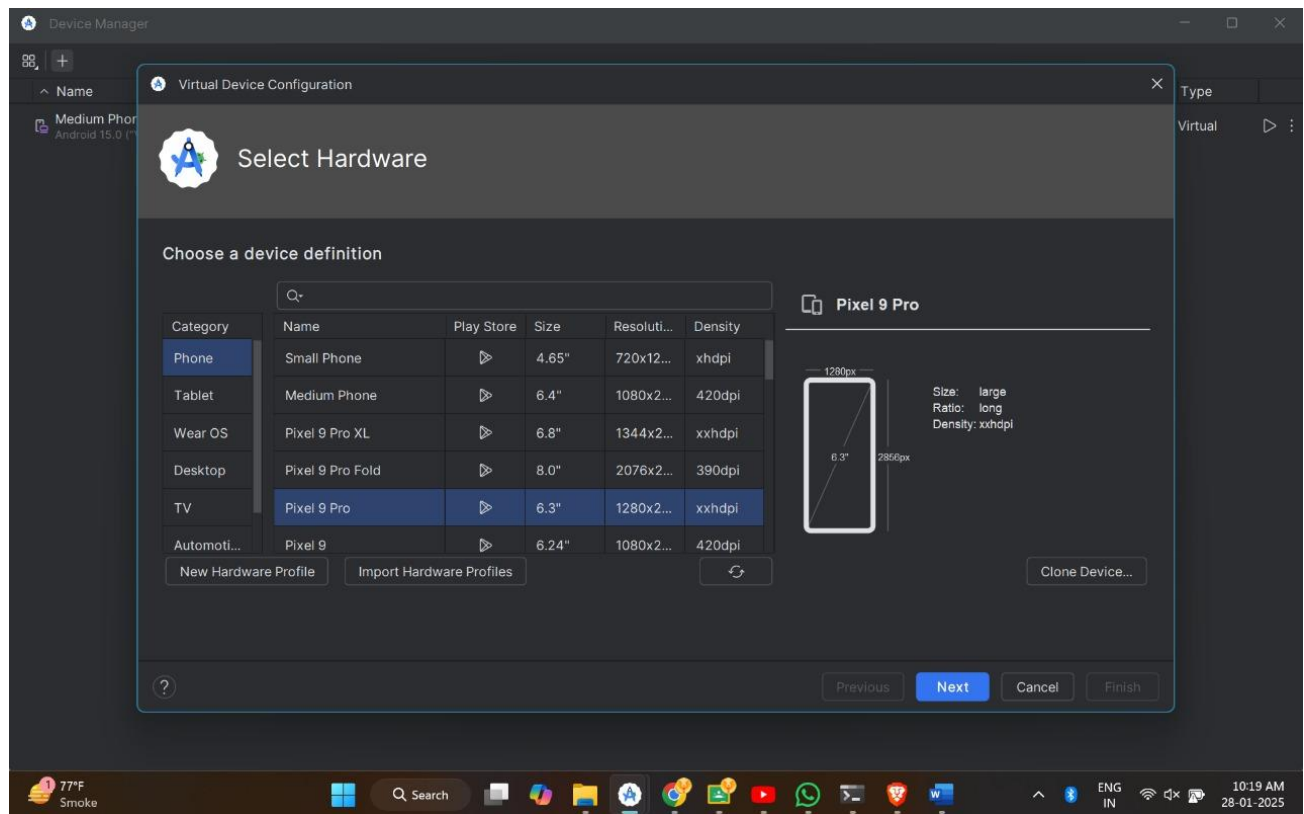
```

PS C:\Users\91952> flutter doctor
Doctor summary (to see all details, run flutter doctor -v):
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[✓] Android toolchain - develop for Android devices (Android SDK version 35.0.1)
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[!] Visual Studio - develop Windows apps (Visual Studio Community 2022 17.11.1)
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      Windows 10 SDK
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[✓] VS Code (version 1.96.4)
[✓] Connected device (3 available)
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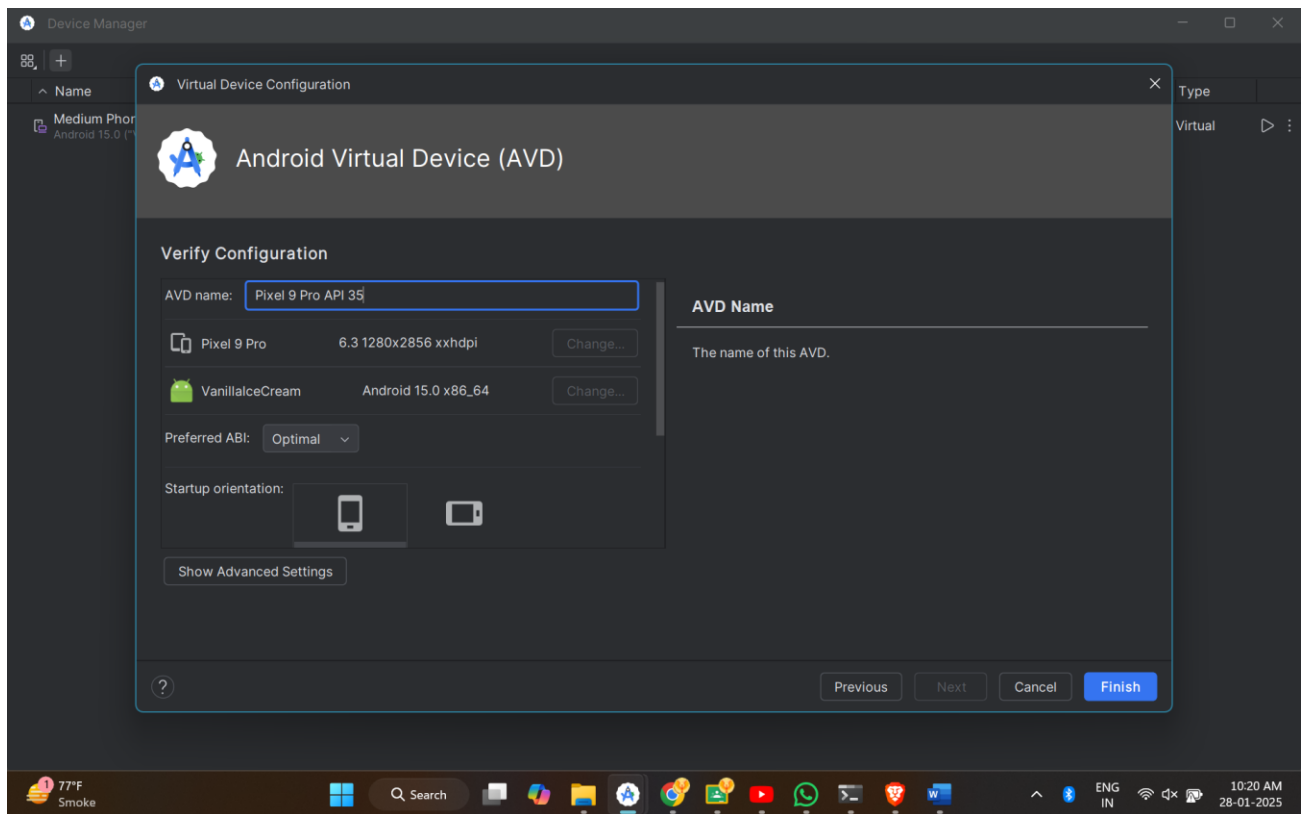
! Doctor found issues in 1 category.
PS C:\Users\91952>

```

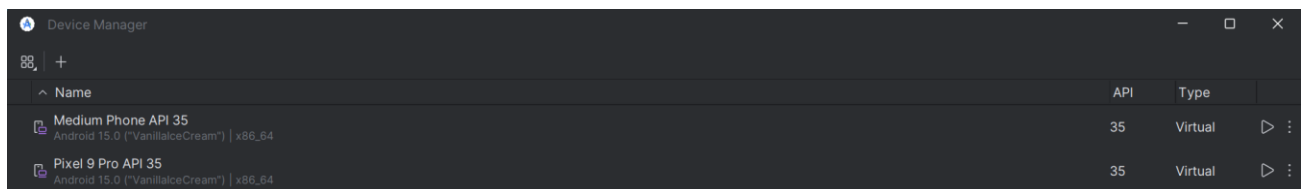
Step 10: - Next, you need to set up an Android emulator. It is responsible for running and testing the Flutter application

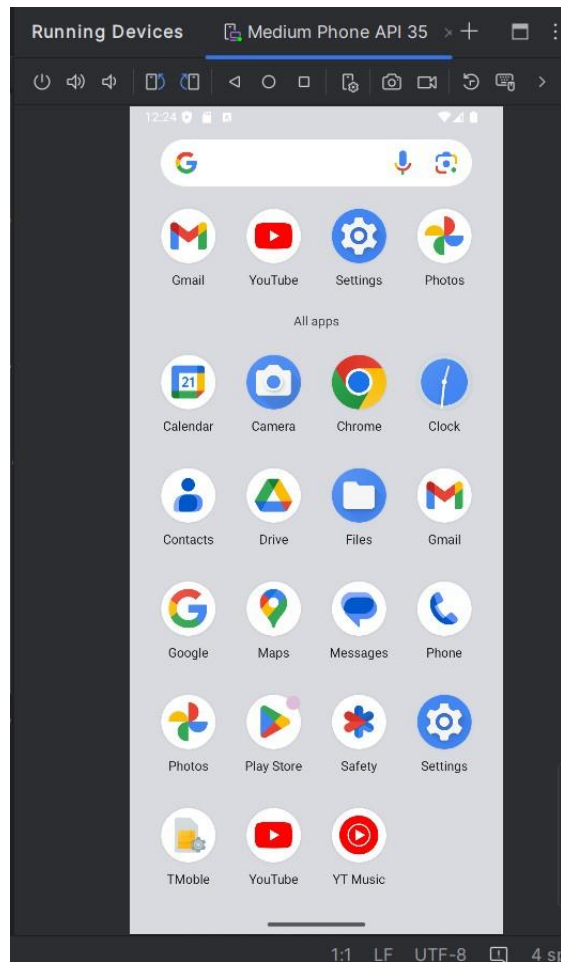


Step 10.1: - Open Android Studio and go to Tools > AVD Manager. Create a new virtual device.



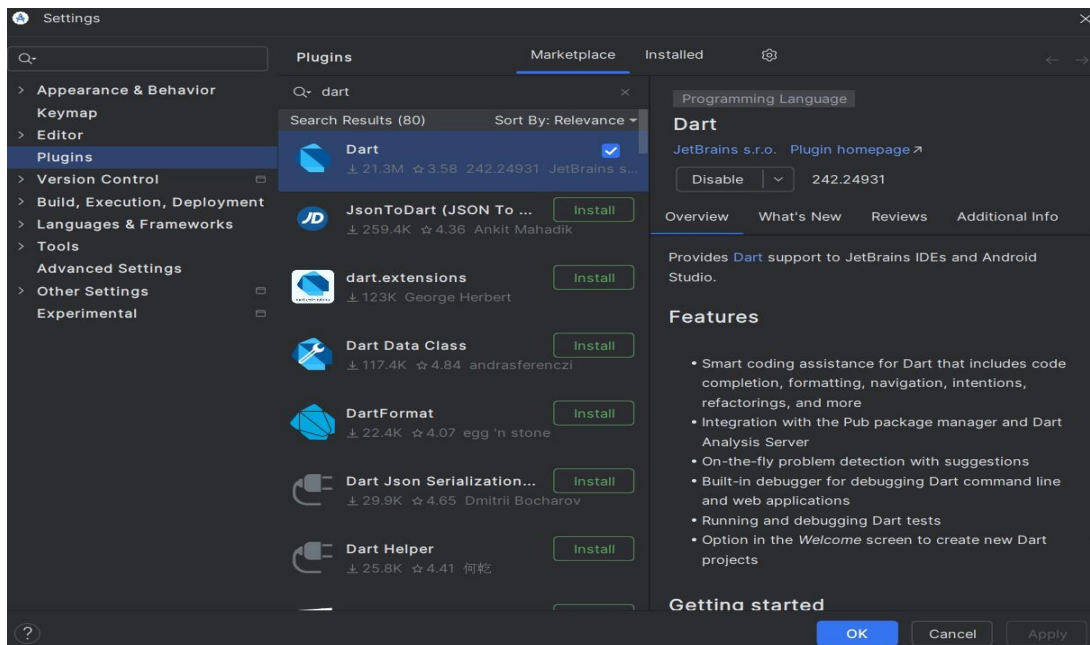
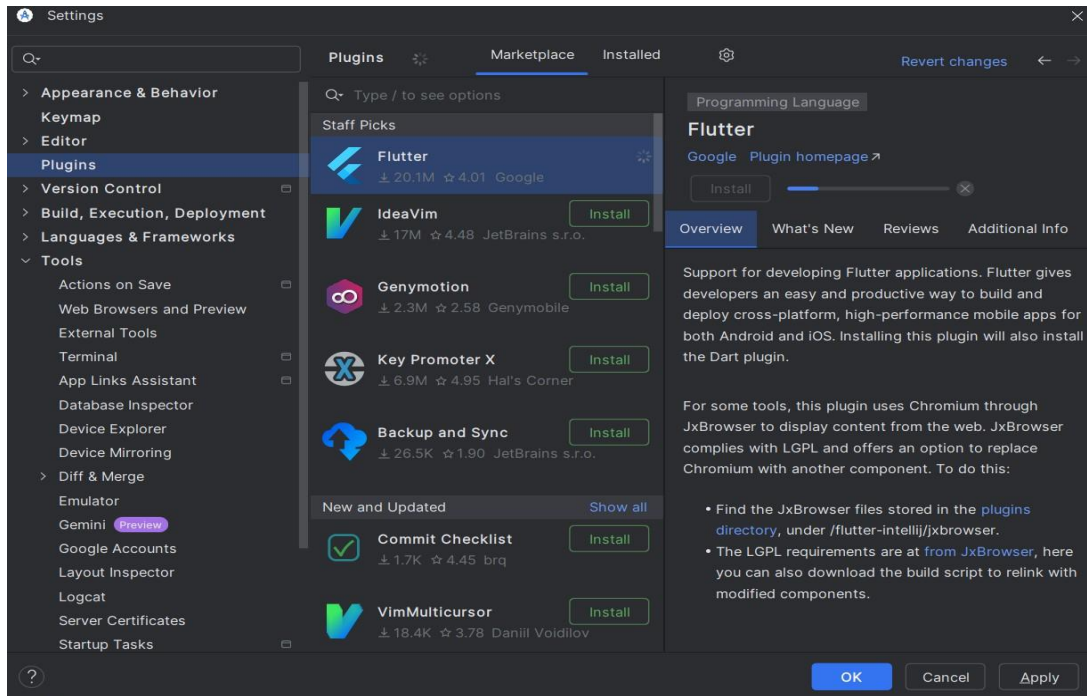
Step 10.2: - Click on the icon pointed into the red color rectangle. The Android emulator displayed as below screen





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.


```

import 'package:flutter/material.dart';

void main() {
  runApp(const MyApp());
}

class MyApp extends StatelessWidget {
  const MyApp({super.key});
  @override
  Widget build(BuildContext context) {
    return MaterialApp(
      title: 'Flutter Professional UI',
      theme: ThemeData(
        colorScheme: ColorScheme.fromSeed(seedColor: Colors.deepPurple),
        textTheme: const TextTheme(
          headlineMedium: TextStyle(fontWeight: FontWeight.bold, color: Colors.deepPurple,
fontSize: 24),
          bodyLarge: TextStyle(color: Colors.black87, fontSize: 18),
        ),
        useMaterial3: true,
      ),
      home: const MyHomePage(title: 'Welcome Prajyot'),
    );
  }
}

class MyHomePage extends StatefulWidget {
  const MyHomePage({super.key, required this.title});

  final String title;

  @override
  State<MyHomePage> createState() => _MyHomePageState();
}

class _MyHomePageState extends State<MyHomePage> {
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        backgroundColor: Colors.deepPurple,
        title: Text(widget.title, style: const TextStyle(color: Colors.white)),
        centerTitle: true,

```

```
),
body: Center(
  child: Container(
    padding: const EdgeInsets.all(16.0),
    decoration: BoxDecoration(
      borderRadius: BorderRadius.circular(12.0),
      color: Colors.deepPurple.shade50,
      boxShadow: [
        BoxShadow(
          color: Colors.deepPurple.withOpacity(0.2),
          blurRadius: 10,
          spreadRadius: 1,
          offset: const Offset(0, 5),
        )
      ],
    ),
  child: const Text(
    'Hello Prajyot',
    style: TextStyle(
      fontSize: 28,
      fontWeight: FontWeight.bold,
      color: Colors.deepPurple
    ),
  ),
),
);
}
```

