

## EXPERIMENT NO: 1

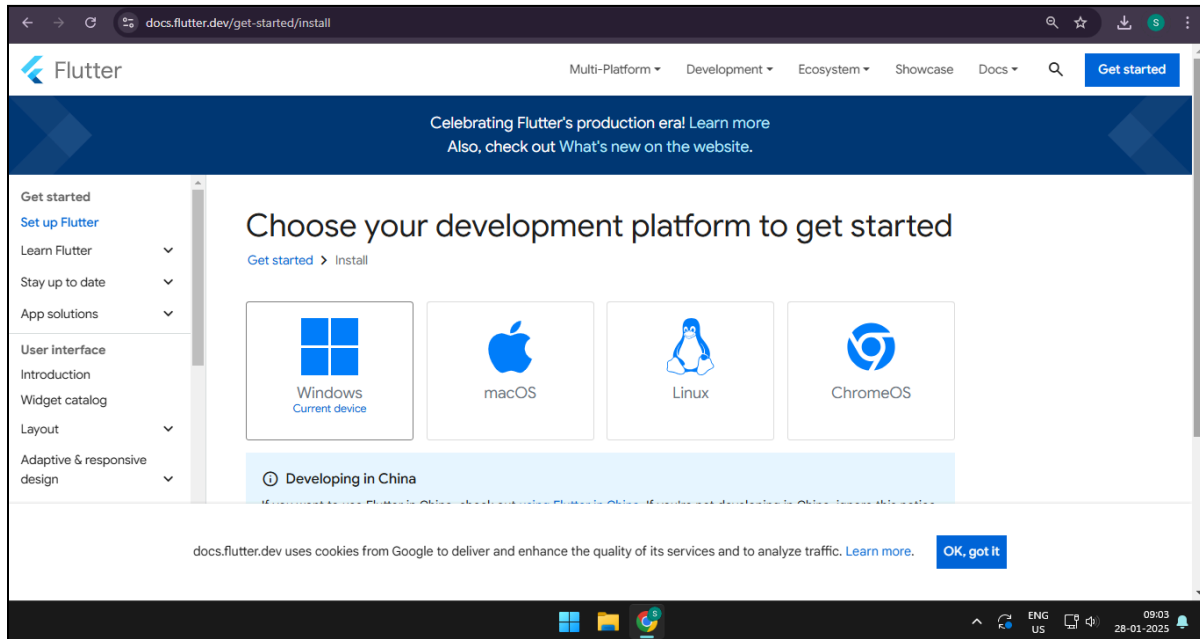
**NAME:** SHRAVANI S RASAM

**CLASS:** D15A

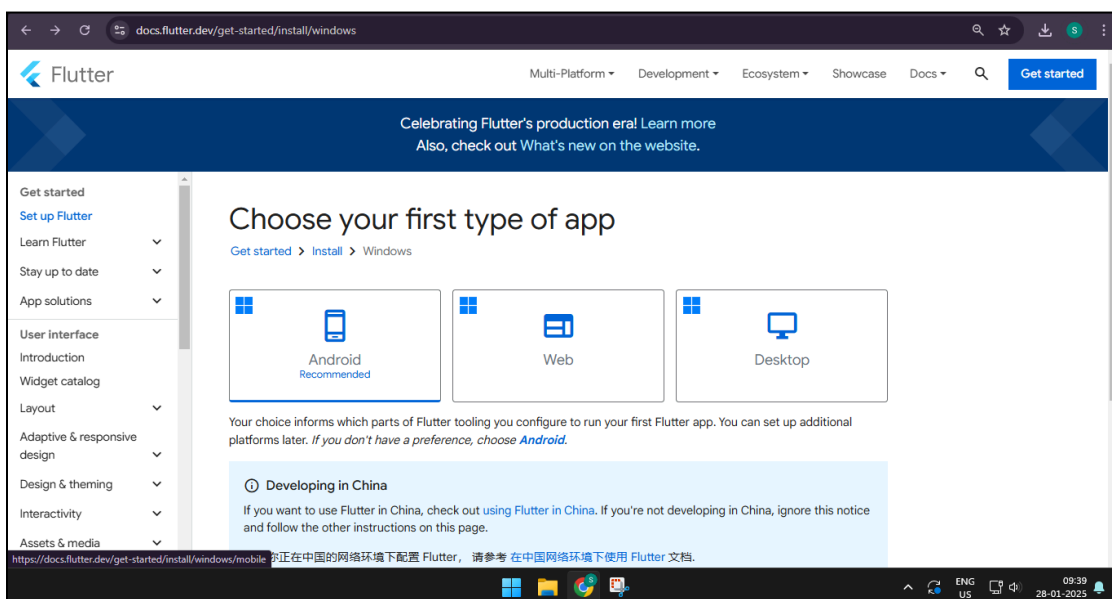
**ROLL NO:** 45

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

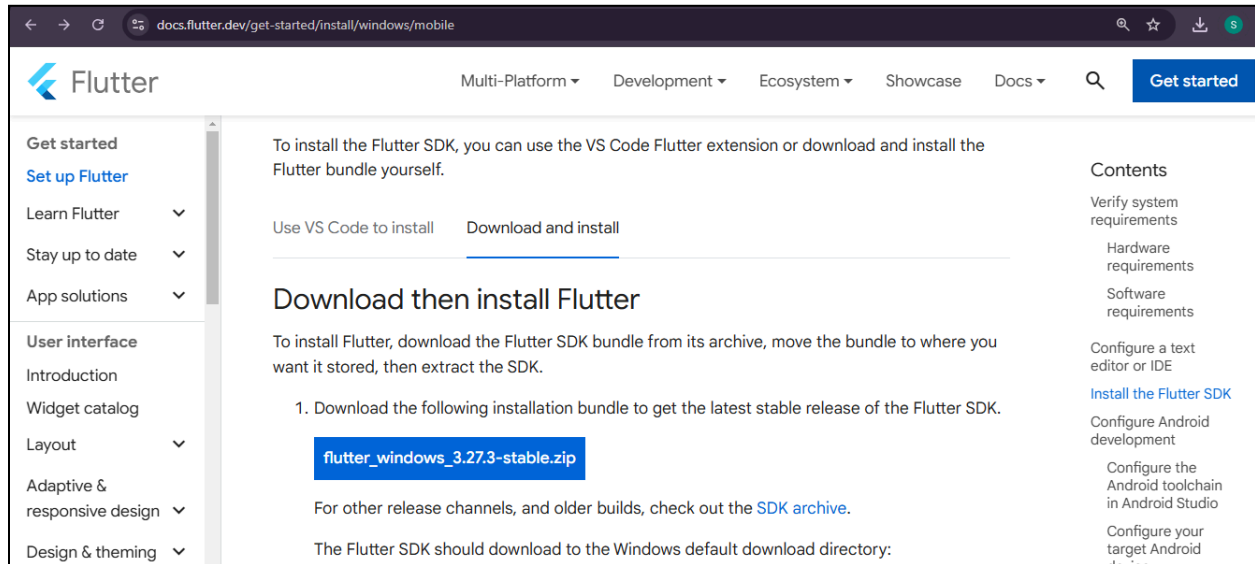
**Step 1:** Go to the official Flutter website: <https://docs.flutter.dev/get-started/install>



**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).

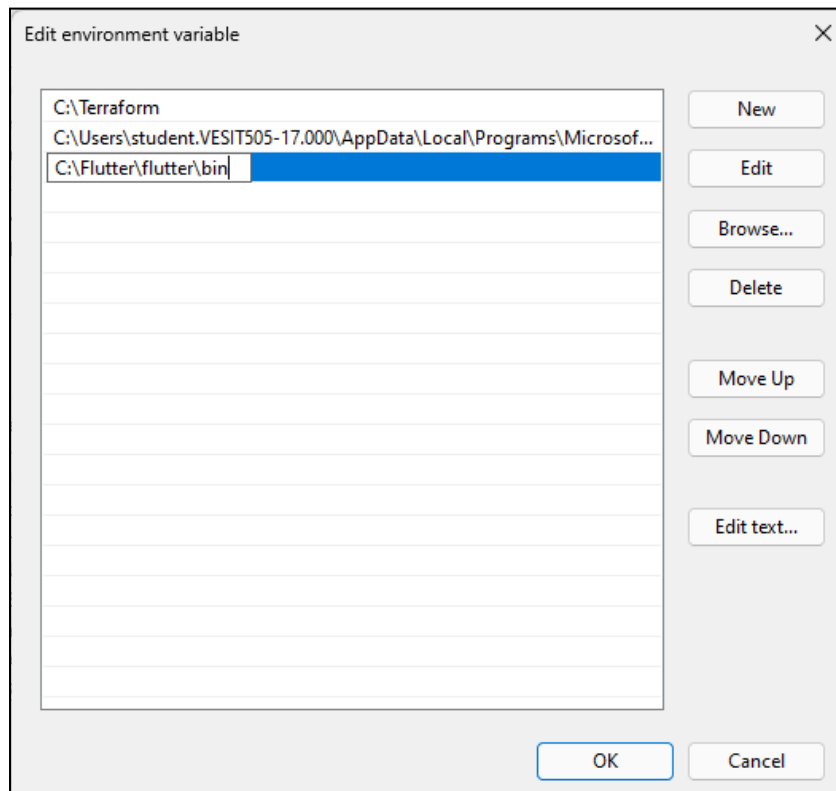


**Step 5 :-** Add Flutter to System PATH

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 x + v
C:\Users\Shravani>flutter
Command exited with code 128: git fetch --tags
Standard error: fatal: unable to access 'https://github.com/flutter/flutter.git/': Could not resolve host: github.com

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]

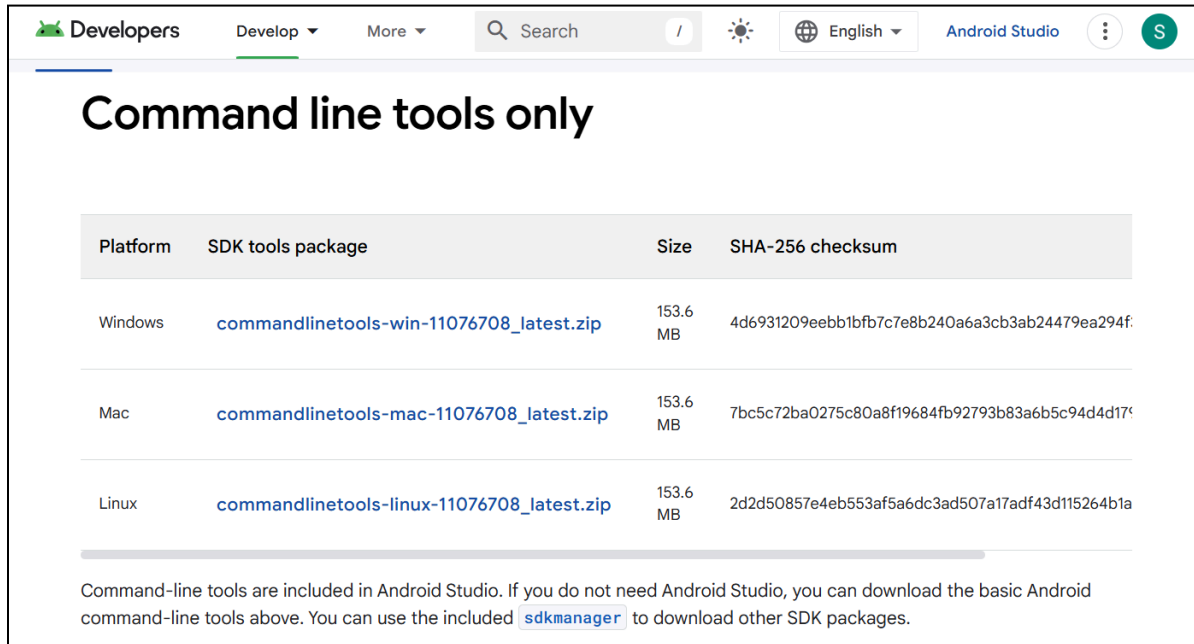
Global options:
-h, --help                Print this usage information.
-v, --verbose              Noisy logging, including all shell commands executed.
                           If used with "--help", shows hidden options. If used with
                           "flutter doctor", shows additional
                           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.
```

**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

```
Command Prompt - flutter x + v
C:\Users\Shravani>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-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/to/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
[X] 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 (not installed)
[✓] VS Code (version 1.96.4)
[✓] Connected device (3 available)
[✓] Network resources

! Doctor found issues in 3 categories.
```

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

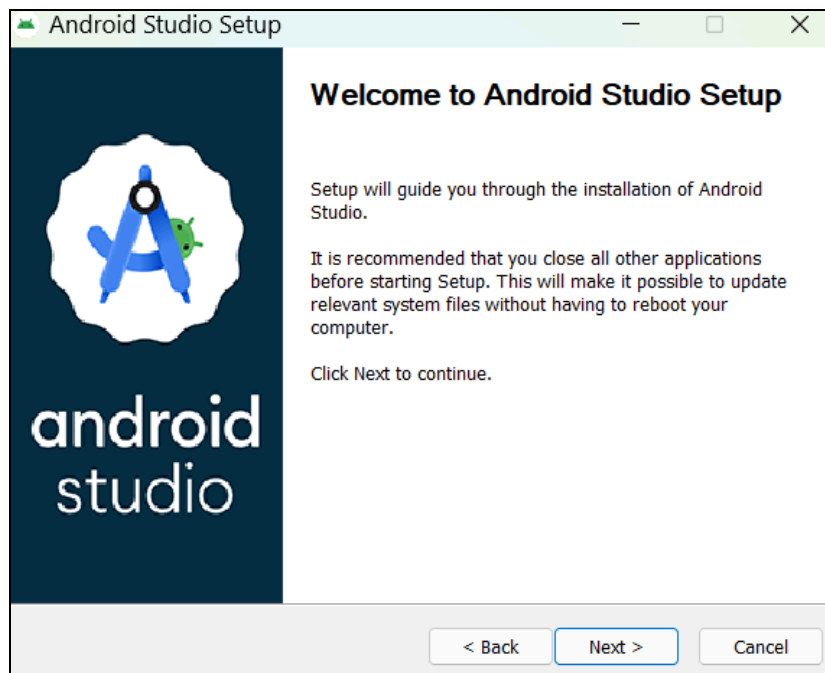


The screenshot shows the 'Developers' tab in the Android Studio interface. The main heading is 'Command line tools only'. Below it is a table with four columns: Platform, SDK tools package, Size, and SHA-256 checksum. The table lists three packages for Windows, Mac, and Linux, each with a size of 153.6 MB. Below the table, a paragraph explains that command-line tools are included in Android Studio and provides instructions on how to use the included `sdkmanager` to download other SDK packages.

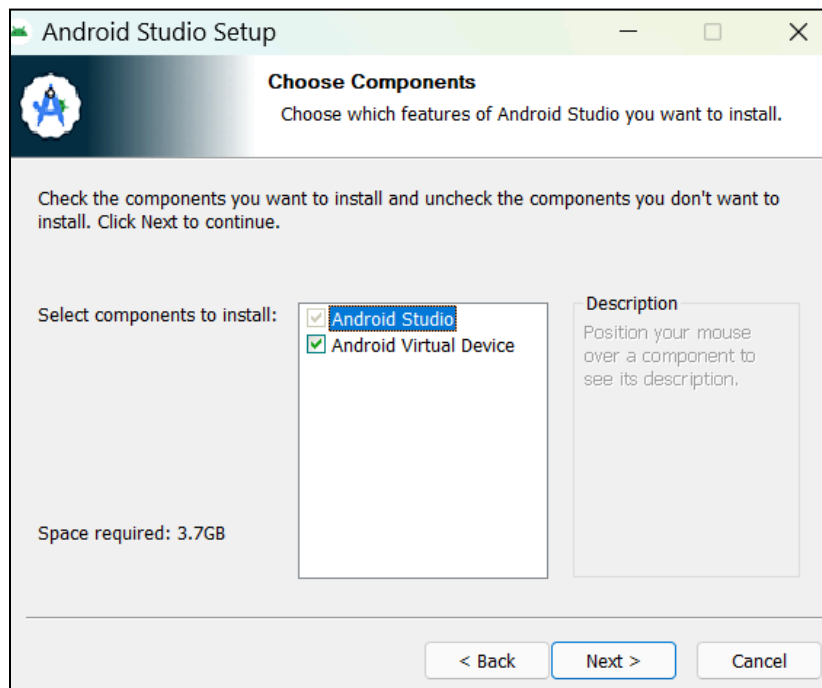
Platform	SDK tools package	Size	SHA-256 checksum
Windows	<a href="#">commandlinetools-win-11076708_latest.zip</a>	153.6 MB	4d6931209eebb1bfb7c7e8b240a6a3cb3ab24479ea294f...
Mac	<a href="#">commandlinetools-mac-11076708_latest.zip</a>	153.6 MB	7bc5c72ba0275c80a8f19684fb92793b83a6b5c94d4d17c...
Linux	<a href="#">commandlinetools-linux-11076708_latest.zip</a>	153.6 MB	2d2d50857e4eb553af5a6dc3ad507a17adf43d115264b1a...

Command-line tools are included in Android Studio. If you do not need Android Studio, you can download the basic Android command-line tools above. You can use the included `sdkmanager` to download other SDK packages.

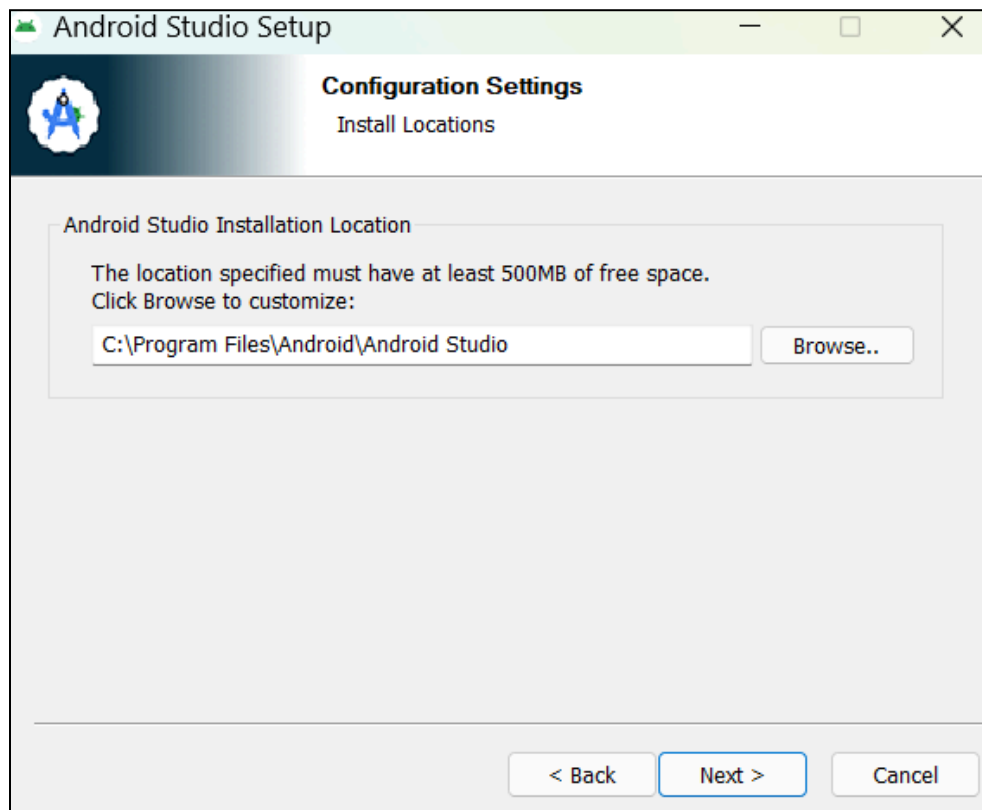
**Step 8.1:** - When the download is complete, open the .exe file and run it. You will get the following dialog box



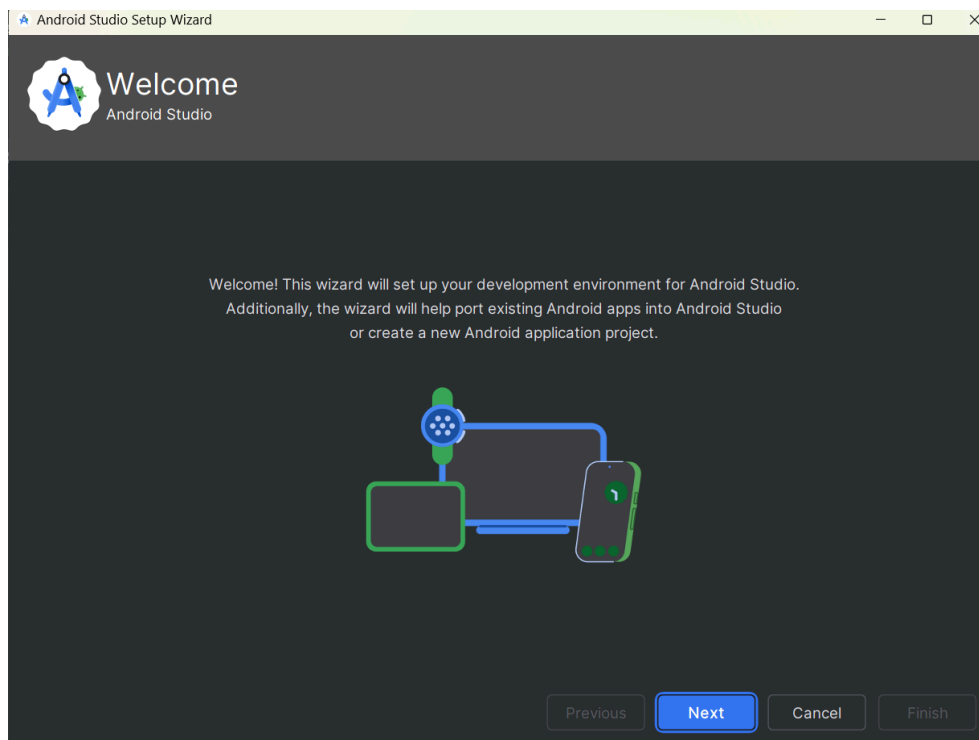
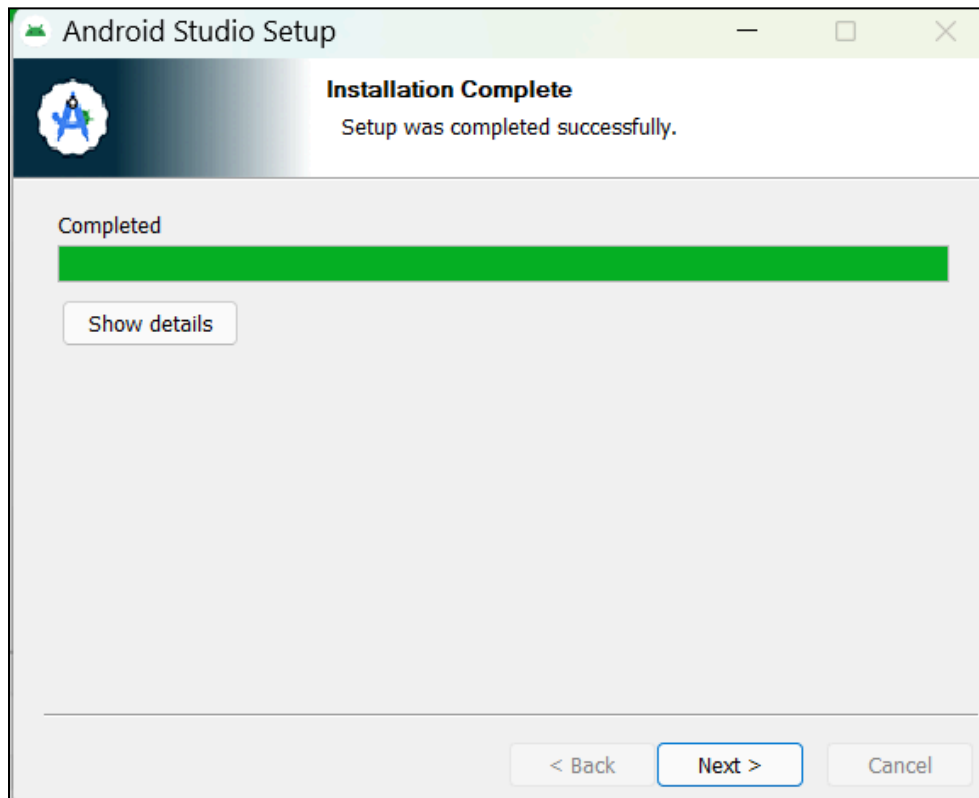
**Step 8.2:** - Select all the Checkboxes and Click on 'Next' Button.

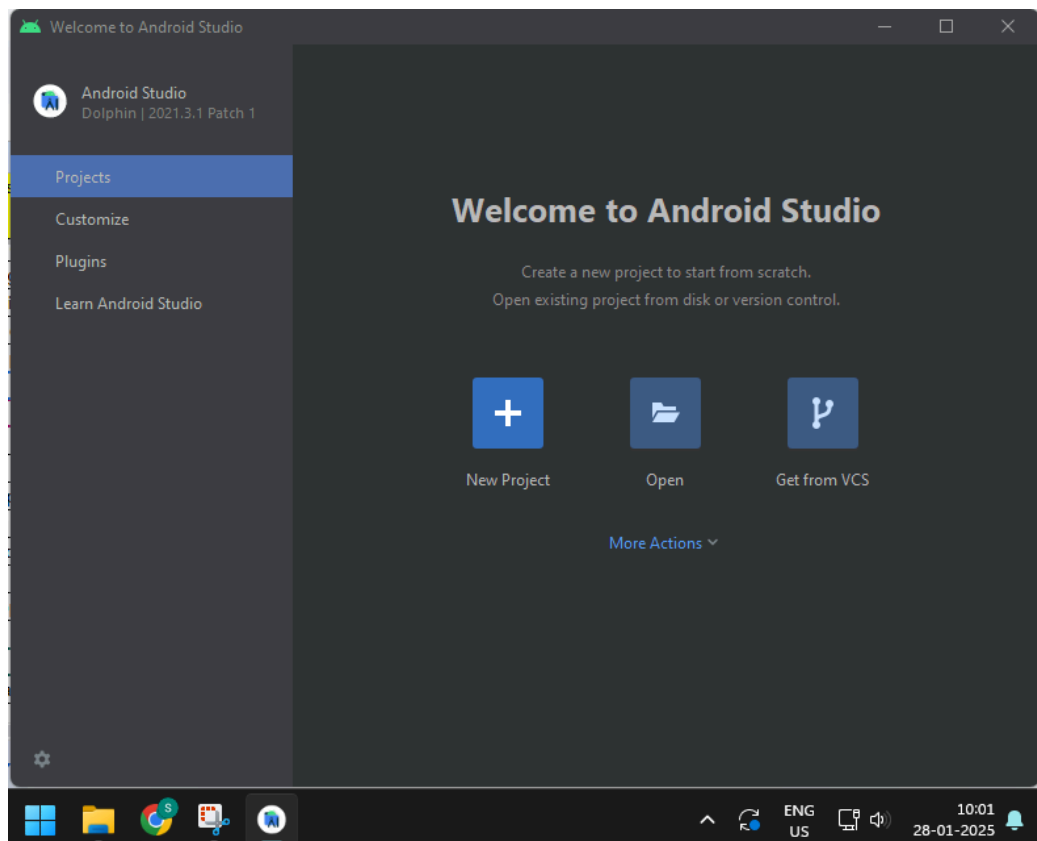
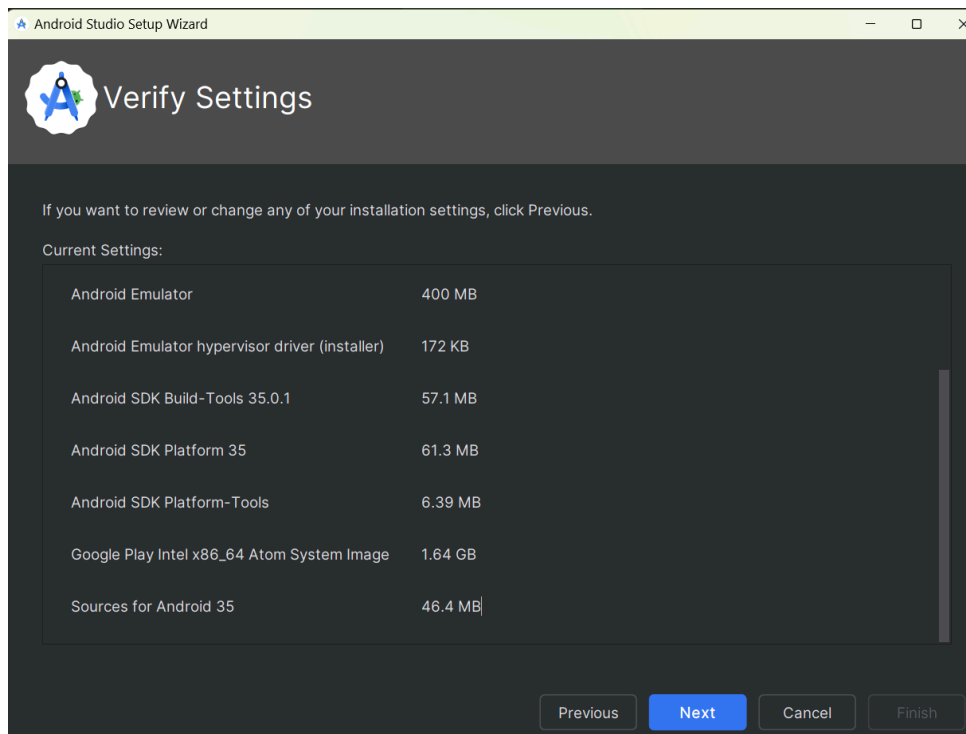


**Step 8.3:** - Change the destination as per your convenience and click on 'Next' Button.

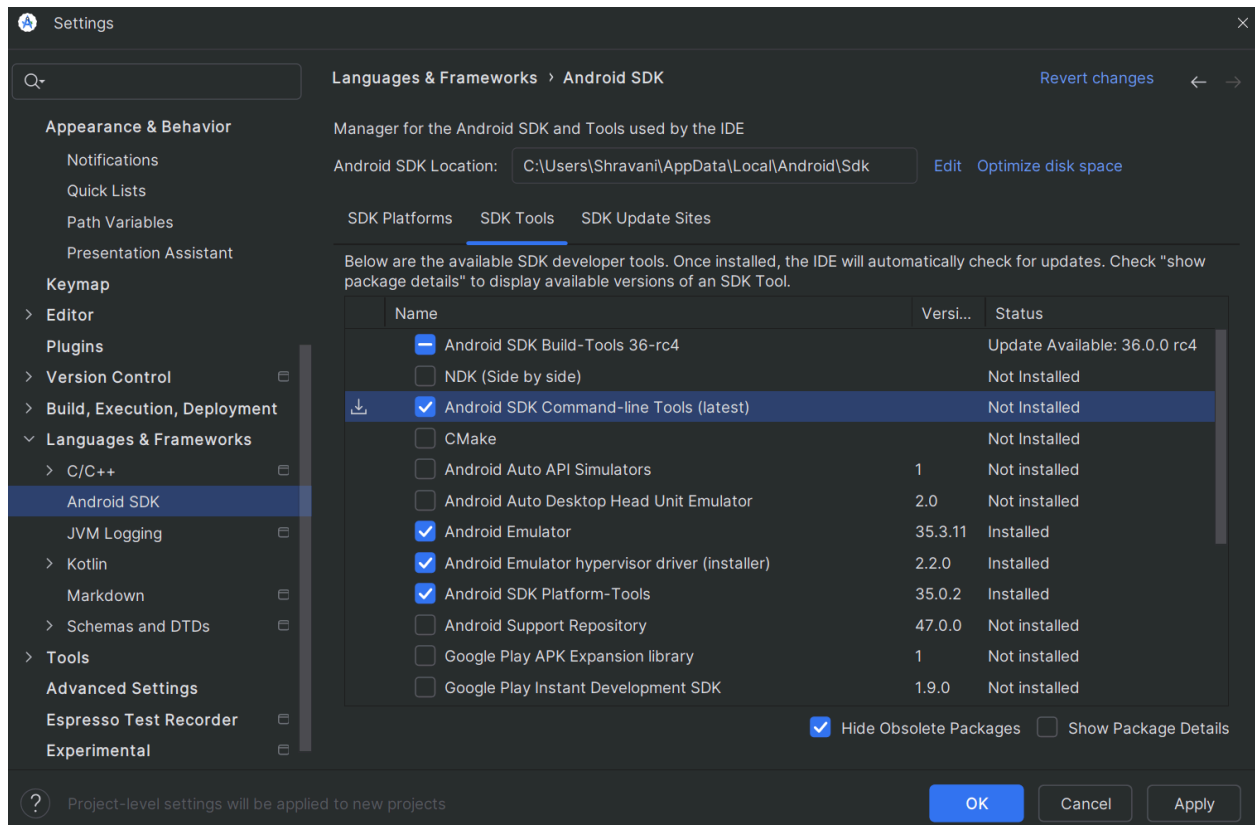


**Step 8.4:** - Follow the steps of the installation wizard. Once the installation wizard completes, you will get the following screen.





**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\Shravani>flutter doctor --android-licenses

Warning:
Warning: Additionally, the fallback loader failed to parse the XML.
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:
-----
Terms and Conditions

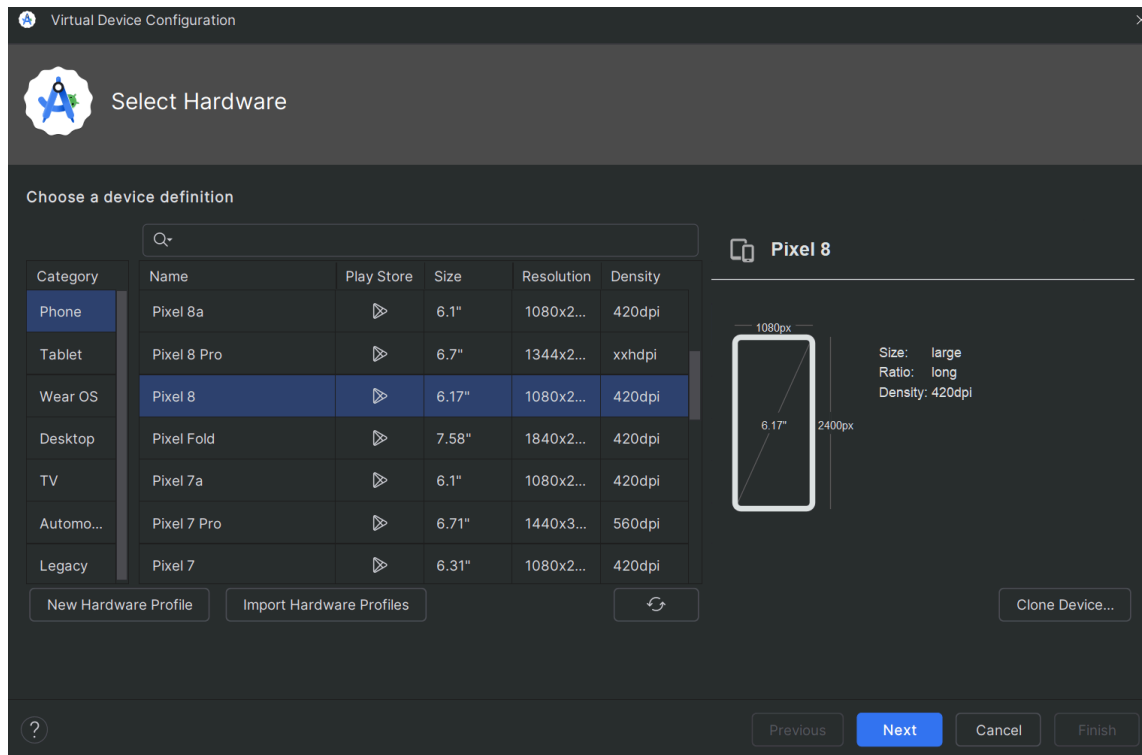
This is the Google TV Add-on for the Android Software Development Kit License Agreement.

1. Introduction

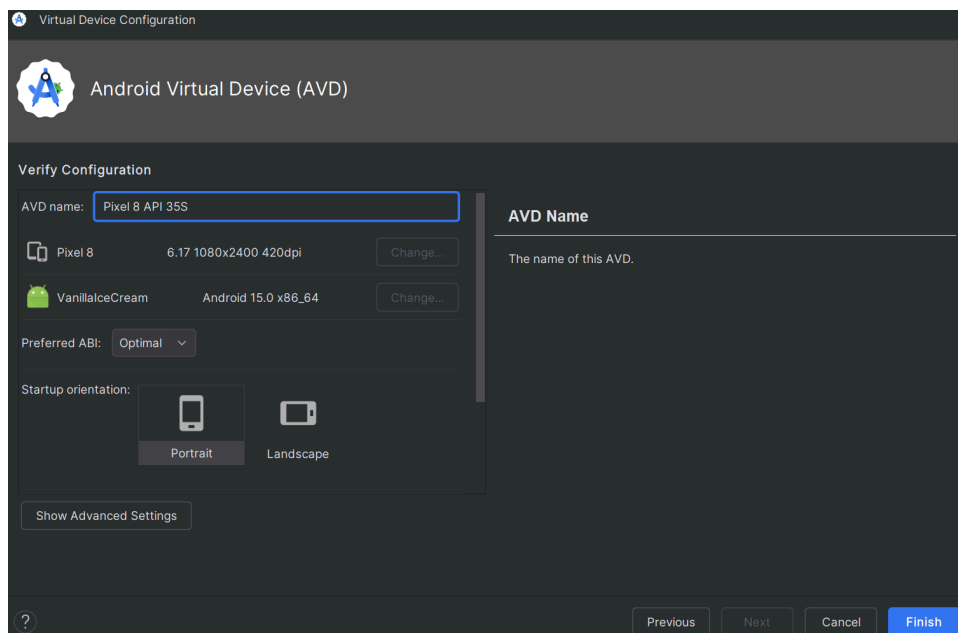
1.1 The Google TV Add-on for the Android Software Development Kit (referred to in this Li
g the Android system files, packaged APIs, and Google APIs add-ons) is licensed to you su
t forms a legally binding contract between you and Google in relation to your use of the
```



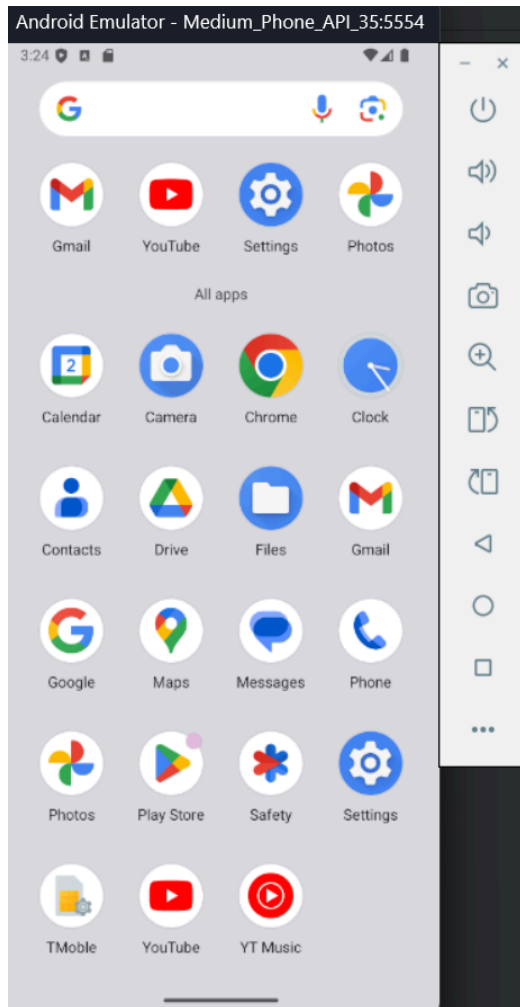
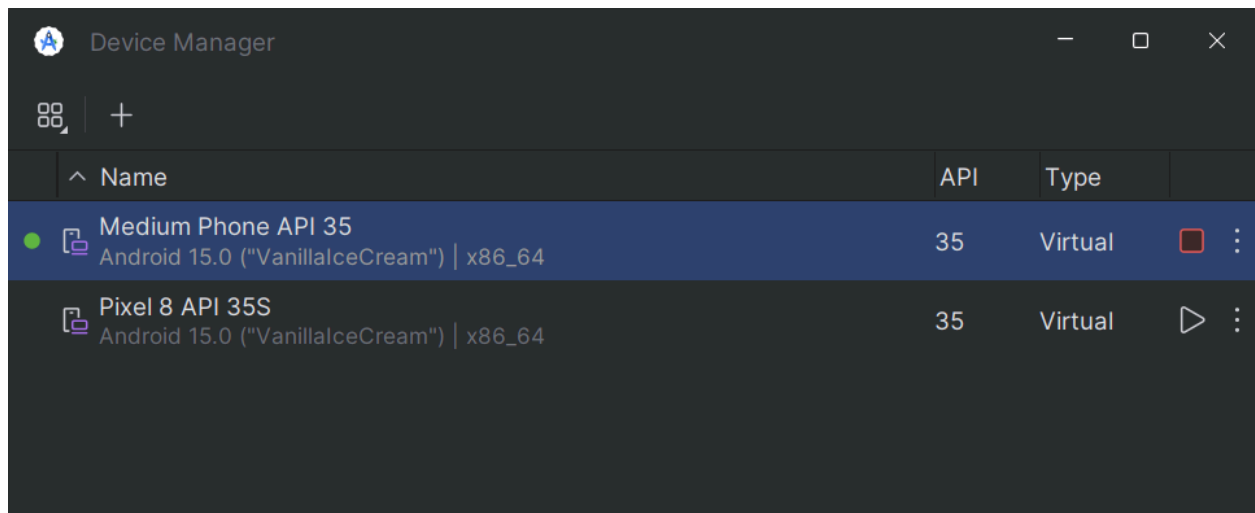
**Step 10:** - Next, you need to set up an Android emulator. It is responsible for running and testing the Flutter application



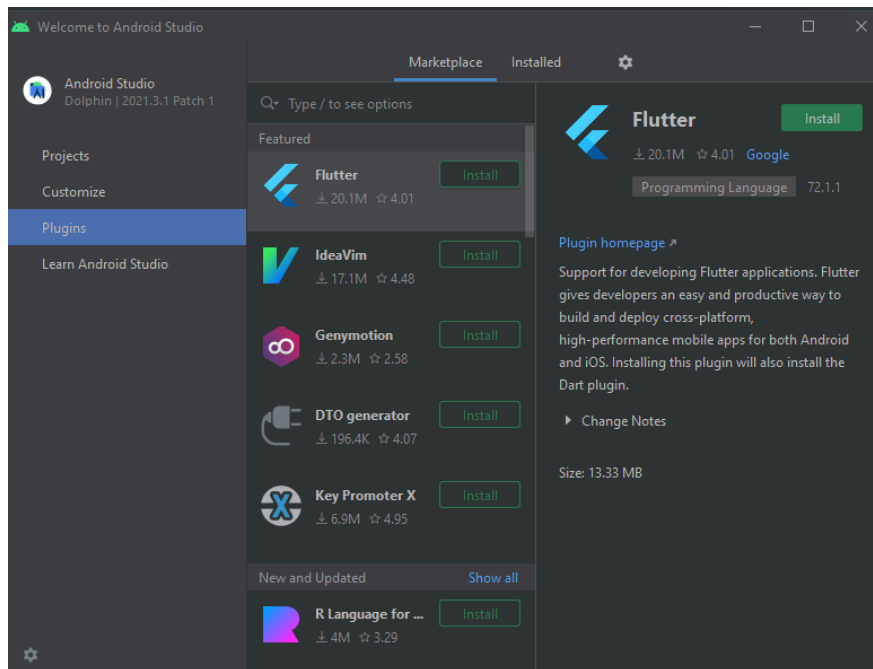
**Step 10.1:** - Open Android Studio and go to Tools > AVD Manager. Create a new virtual device



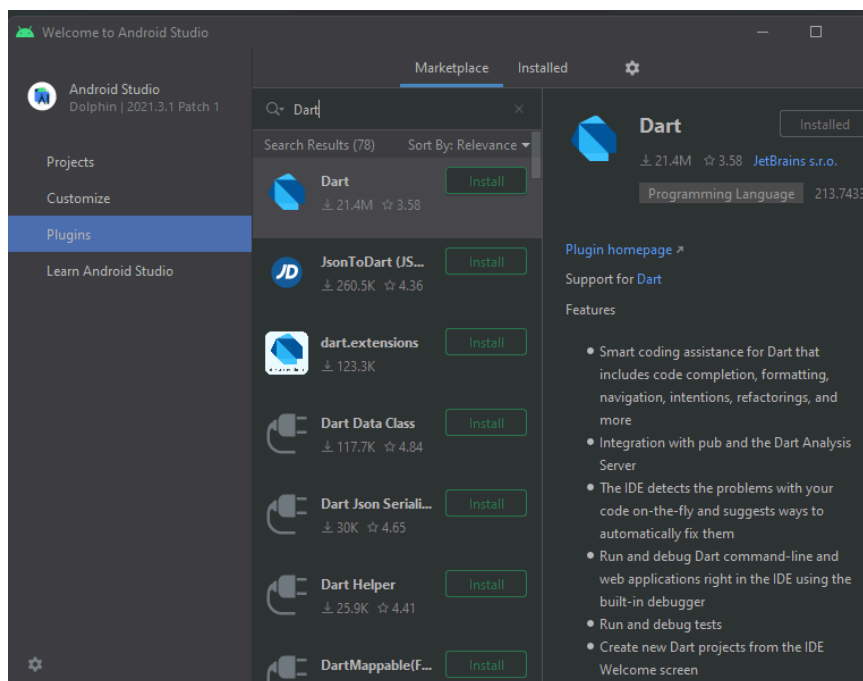
**Step 10.2:** - Click on the icon pointed into the red color rectangle. The Android emulator displayed as below screen



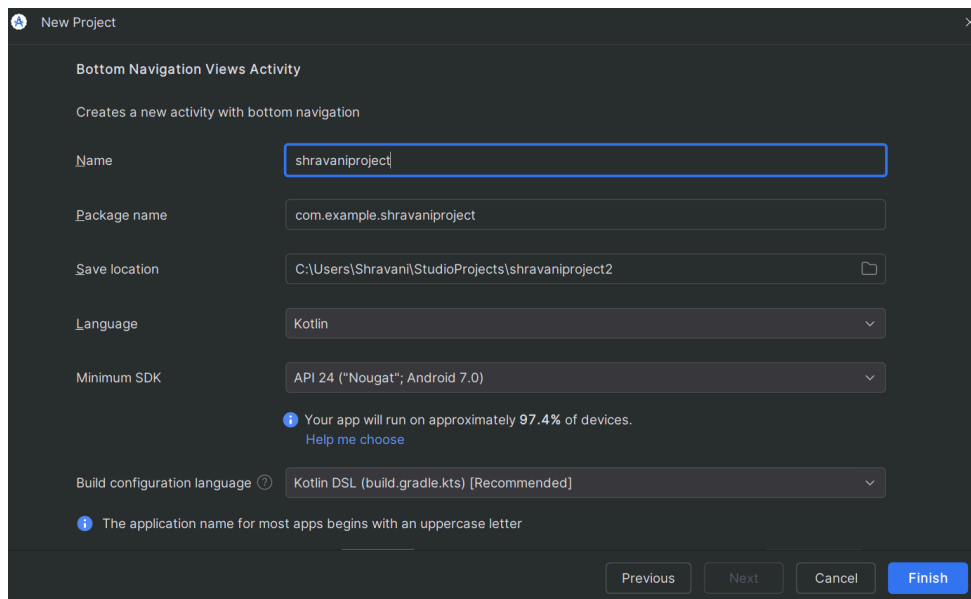
**Step 11:** - Now, install Flutter and Dart plugin for building Flutter application in Android Studio. These plugins provide a template to create a Flutter application, give an option to run and debug Flutter application in the Android Studio itself



**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 12:** Go to File > New Project select project name , location and click next



The screenshot shows the 'New Project' dialog in Android Studio. The title bar says 'New Project'. The main heading is 'Bottom Navigation Views Activity' with a subtitle 'Creates a new activity with bottom navigation'. The form contains the following fields and options:

- Name:** A text input field containing 'shravanproject'.
- Package name:** A text input field containing 'com.example.shravanproject'.
- Save location:** A text input field containing 'C:\Users\Shravan\StudioProjects\shravanproject2' with a folder icon to its right.
- Language:** A dropdown menu set to 'Kotlin'.
- Minimum SDK:** A dropdown menu set to 'API 24 ("Nougat"; Android 7.0)'.
- Build configuration language:** A dropdown menu set to 'Kotlin DSL (build.gradle.kts) [Recommended]'.

Below the fields, there is a blue information icon and the text: 'Your app will run on approximately 97.4% of devices. [Help me choose](#)'. At the bottom, there is another blue information icon and the text: 'The application name for most apps begins with an uppercase letter'. At the very bottom are four buttons: 'Previous', 'Next', 'Cancel', and 'Finish' (which is highlighted in blue).

