

Hello World Flutter Project

This README provides a step-by-step guide to set up Flutter IDE, create a basic "Hello World" project using dart language, and run it on an emulator or device.

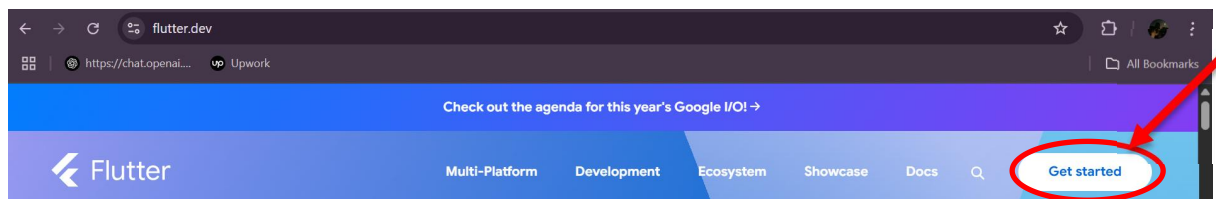
System Requirements

- A computer running Windows, macOS, or Linux.
- Internet connection for downloading Android Studio and dependencies.
- Minimum 8GB RAM (16GB recommended) and 10GB free disk space.

Step 1: Install Required Software

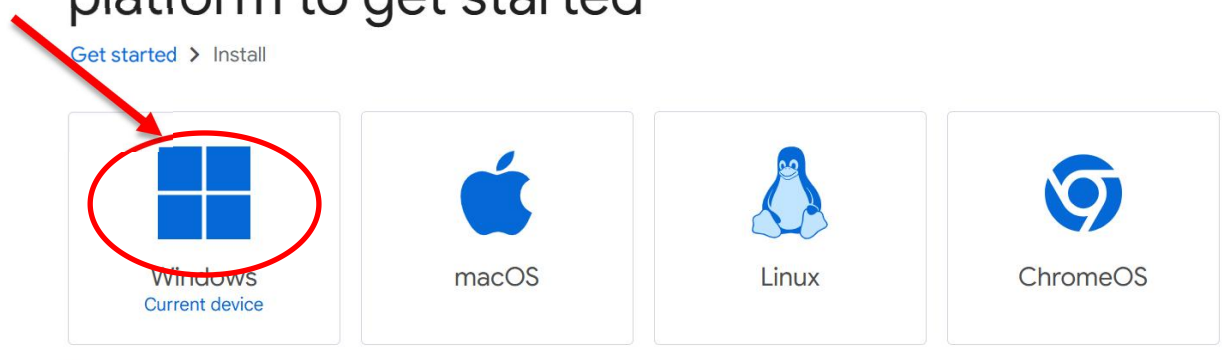
1. ✓ Install Flutter SDK

- Go to flutter.dev
- Click on Get Started.



- Download the SDK for your OS (Windows/Mac/Linux). Let's go with windows.

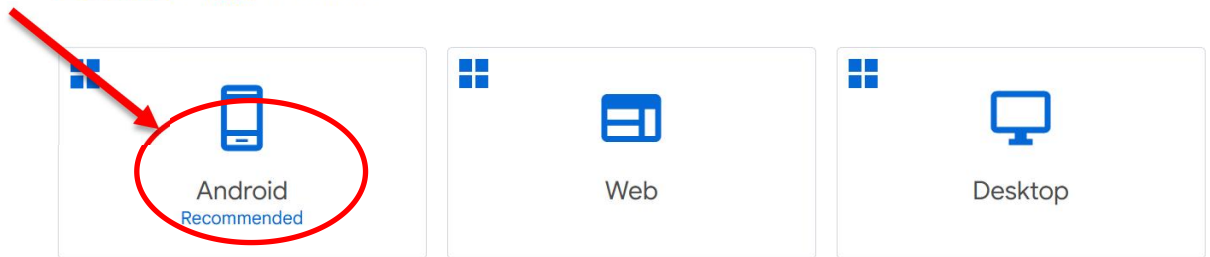
Choose your development platform to get started



- Click on Android.

Choose your first type of app

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



Your choice informs which parts of Flutter tooling you configure to run your first Flutter app. You can set up additional platforms later. *If you don't have a preference, choose **Android**.*

- Click on Download and Install.

Install the Flutter SDK

To install the Flutter SDK, you can use the VS Code Flutter extension or download and install the Flutter bundle yourself.

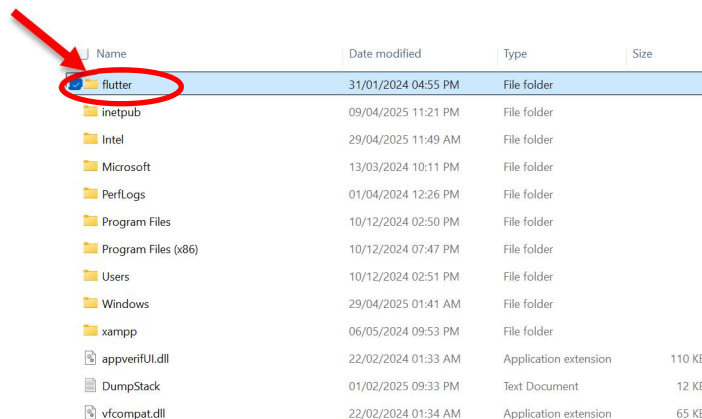


- Click on Download.

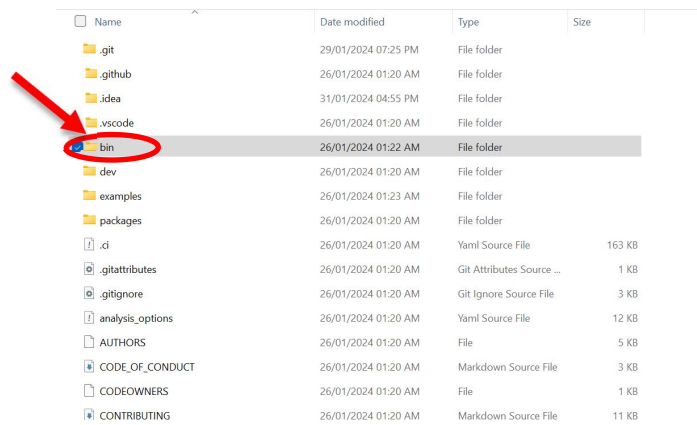
- Download the following installation bundle to get the latest stable release of the Flutter SDK.



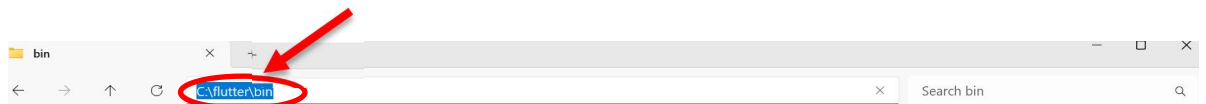
- Unzip it to a suitable location (e.g., C:\src\flutter)
- Go to Extracted flutter folder.



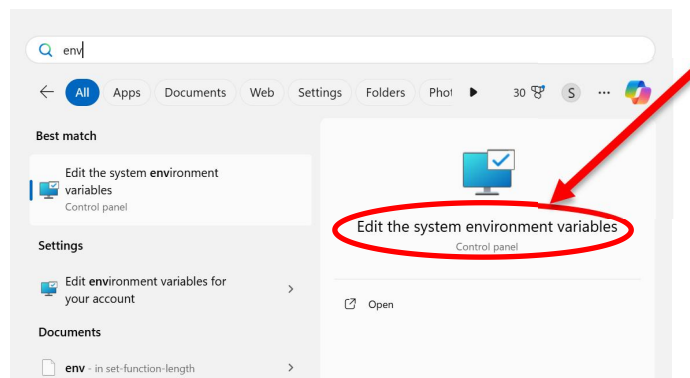
- Click on bin file.



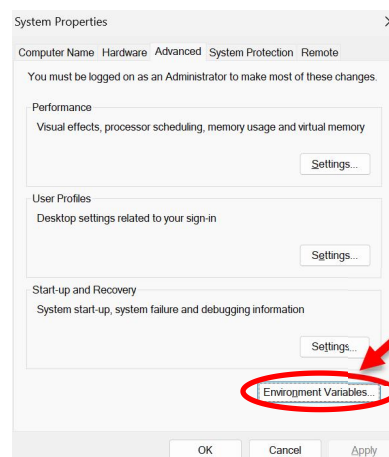
- Copy the bin path.



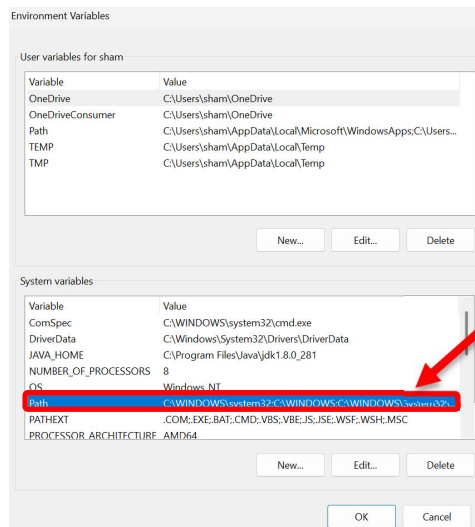
- Click on windows button and search for **Environment Variables** and click on it.



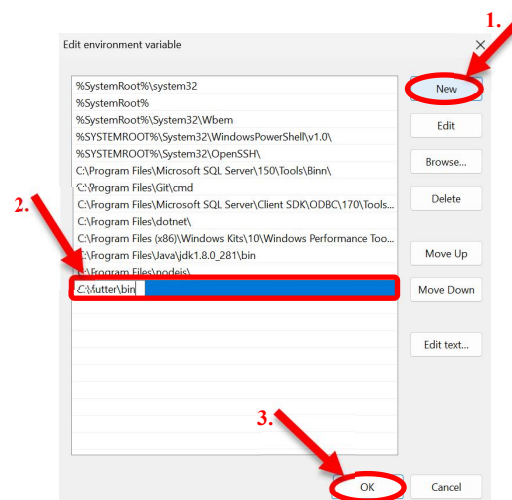
- Click on Environment Variables.



- Click on **Path** in system variable.



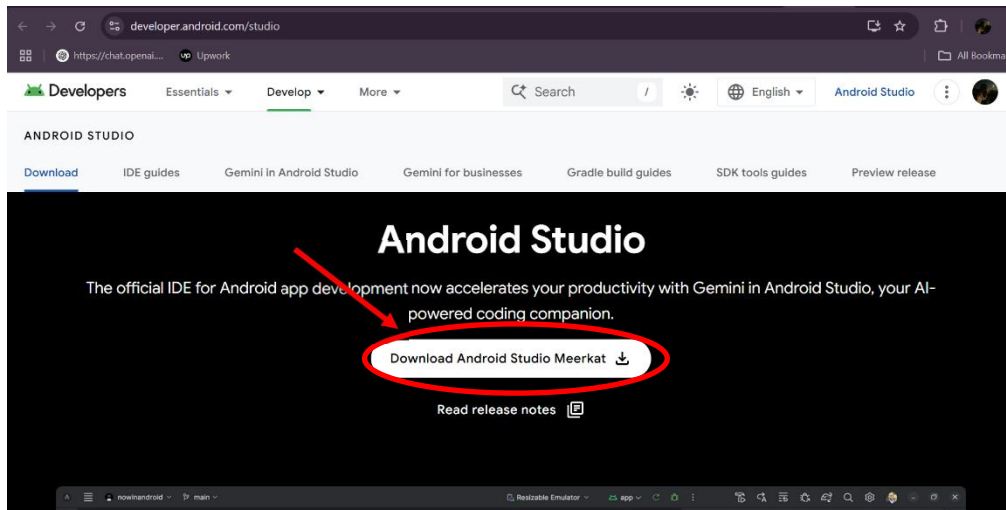
- Click on **New** and placed the copied Flutter bin path here and click on **Ok** button.



1. Install Android Studio

1. Download Android Studio:

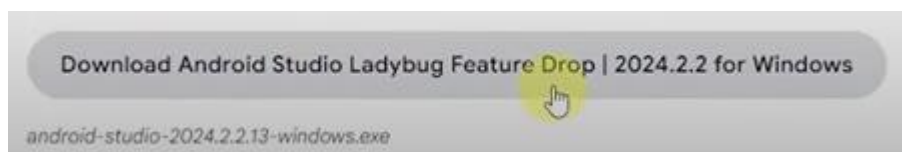
- Visit developer.android.com/studio.
- Download the latest version for your operating system.



- After clicking on download button, read and agree the terms and condition for successful download.

☒ I have read and agree with the above terms and conditions

- Click on download button.

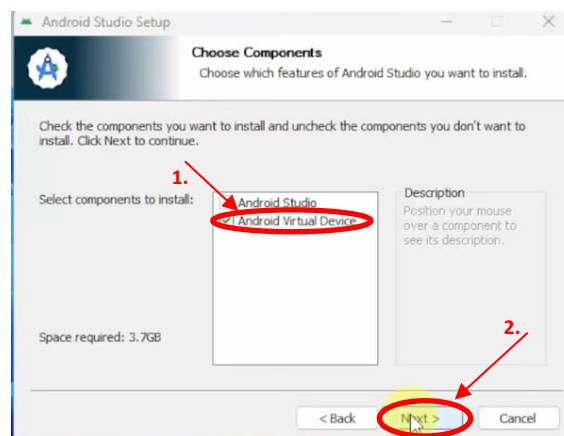


2. Install Android Studio:

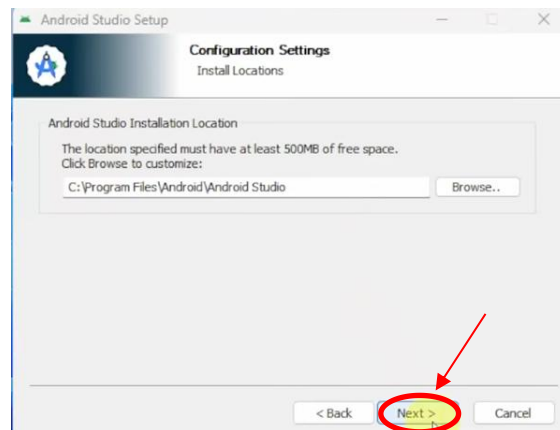
- Now open the directory where u download the setup and click on it.
- After this, click on next button.



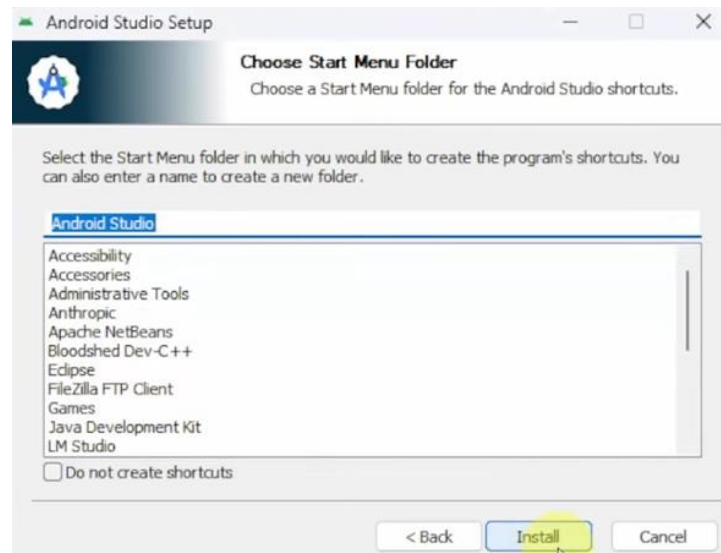
- Now choose the component of android virtual device and click on next button.



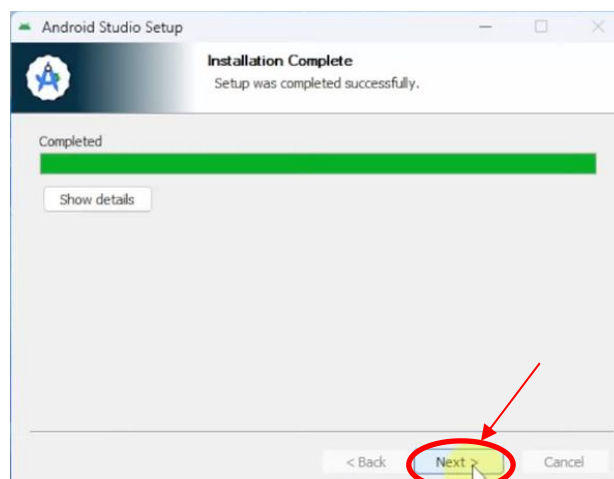
- Choose the location to install setup and click on next button.



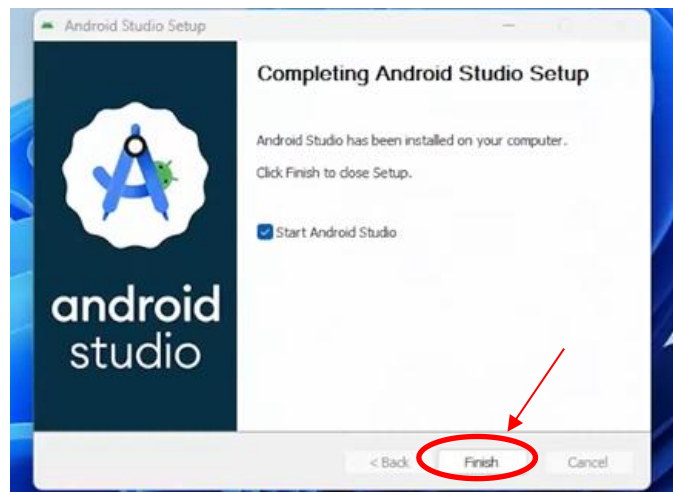
- Click on install button.



- After completing setup installation, click on next button.

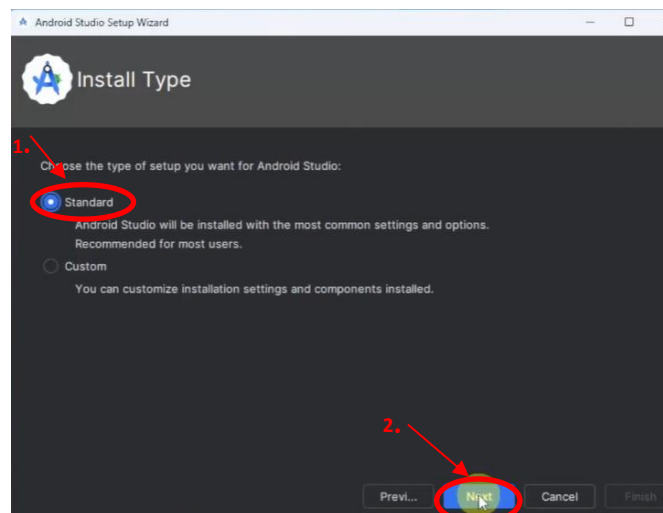


- Click on Finish button.

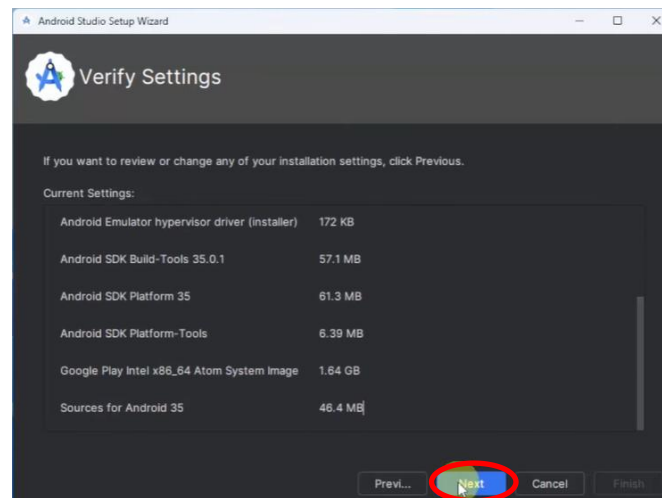


3. Set up Android SDK:

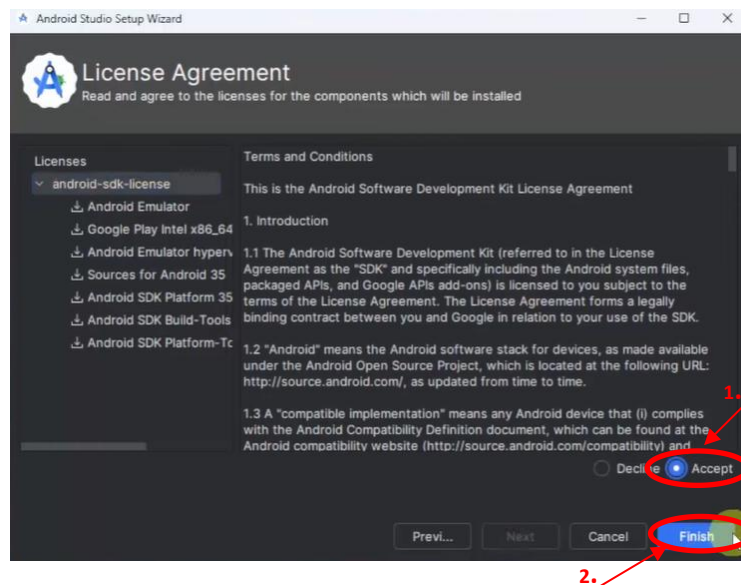
- Run the installer and follow the setup wizard.
- Choose the type of setup, I preferred standard here to choose it and click on next button.



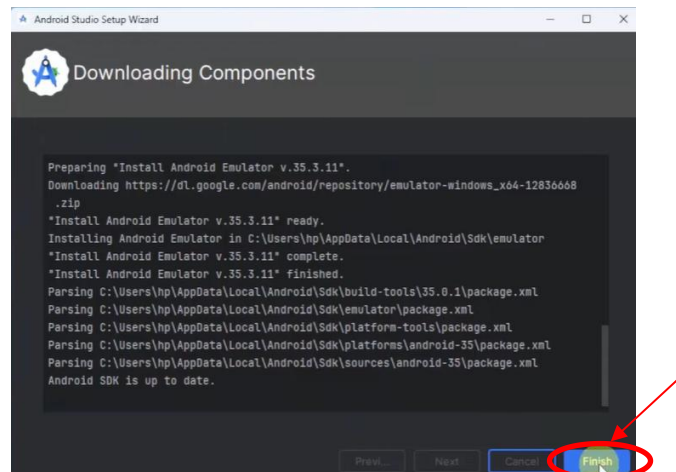
- Click on next button.



- Read and accept the license agreement and click on finish button.

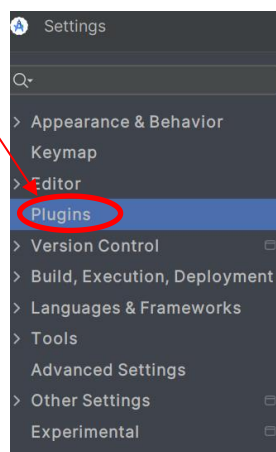


- After downloading components, click on finish button.

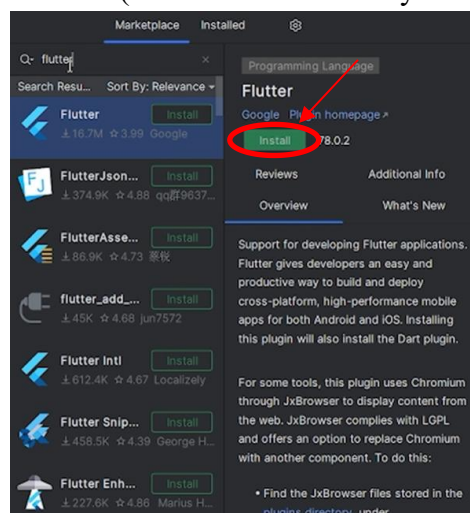


3. ✓ Install Flutter & Dart Plugins in Android Studio

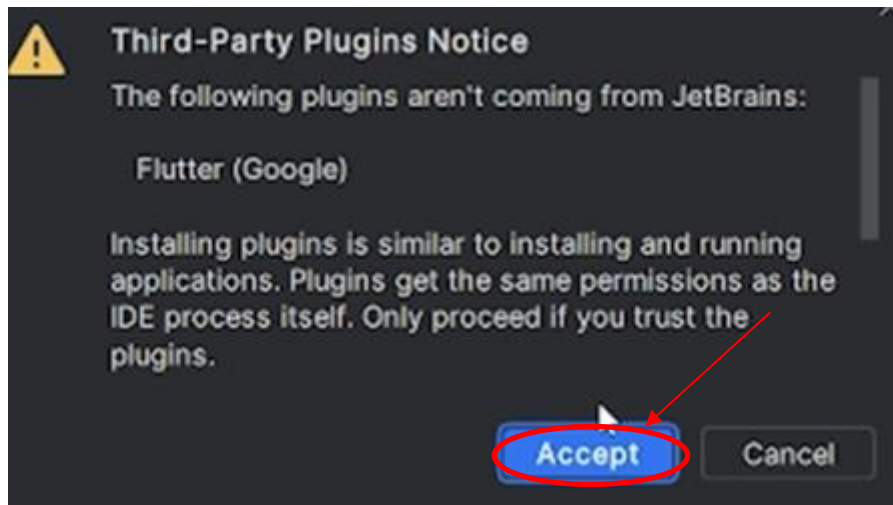
- Open Android Studio.
- Go to File > Settings > Plugins



- Search for "Flutter" and install it (this will automatically install the Dart plugin)



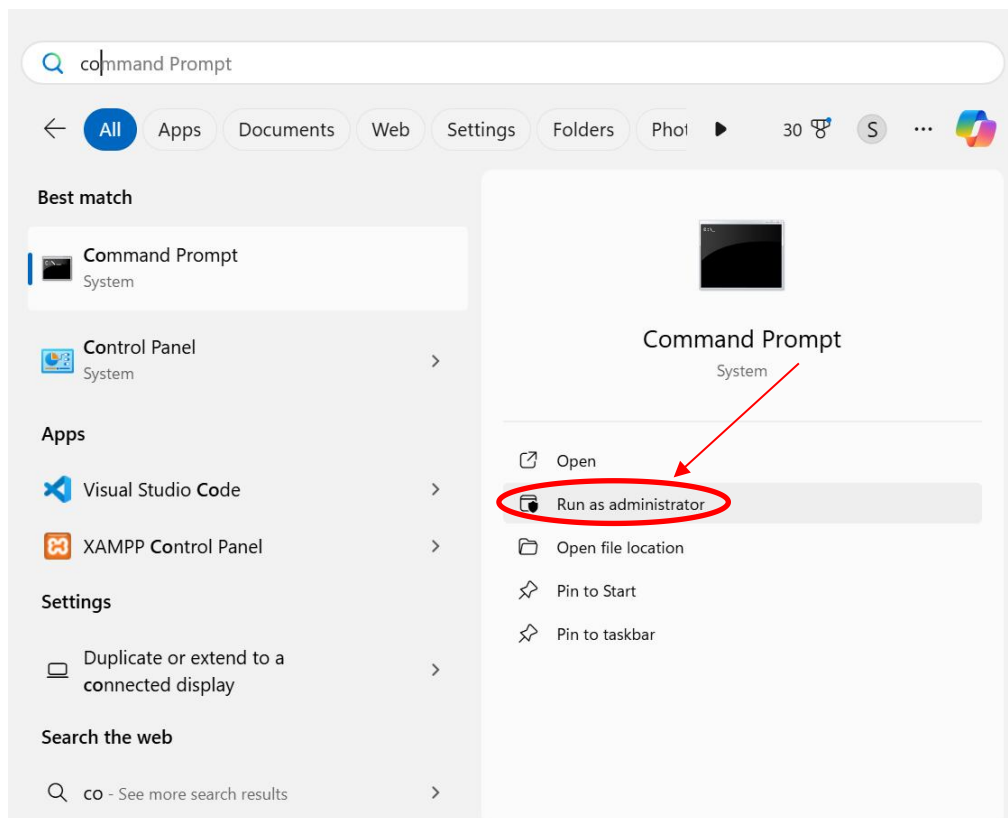
- Accept the third party plugin notice.



- Restart Android Studio.

Step 2: Check Flutter Installation

- Click on windows button and search for **Command Prompt**, open it as an administrator.



- To verify your installation of all the components, run the following command.

```
C:\Windows\System32 flutter doctor
Doctor summary (to see all details, run flutter doctor -v):
[✓] Flutter (Channel stable, 3.19.2, on Microsoft Windows [Version 10.0.22631.3235], 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)
    ! Some Android licenses not accepted. To resolve this, run: flutter doctor --android-licenses
[✓] Chrome - develop for the web
[✓] Visual Studio - develop Windows apps (Visual Studio Build Tools 2019 16.11.29)
[✓] Android Studio (version 2023.2)
[✓] VS Code (version 1.87.0)
[✓] Connected device (3 available)
[✓] Network resources

! Doctor found issues in 1 category.
```

- Run the following command to enable signing licenses.

```
C:\Windows\System32 flutter doctor --android-licenses
[=====] 100% Computing updates...
4 of 7 SDK package licenses not accepted.
Review licenses that have not been accepted (y/N)?
```

- Type y on each licenses to accept all the SDK Packages.

```
Review licenses that have not been accepted (y/N)? y
```

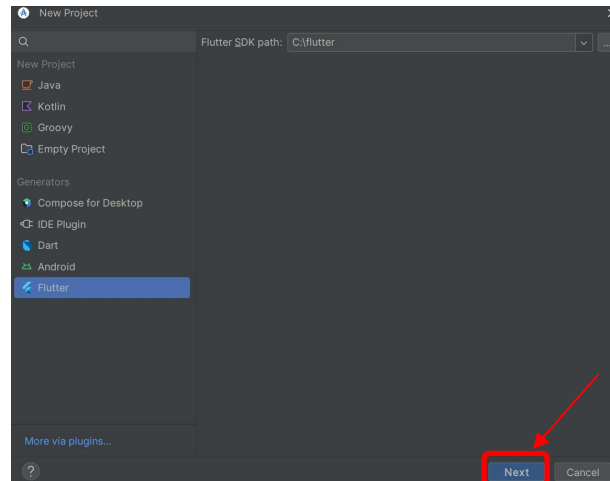
- Again run the following Doctor command to verify the installation command.

```
C:\Windows\System32 flutter doctor
Doctor summary (to see all details, run flutter doctor -v):
[✓] Flutter (Channel stable, 3.19.2, on Microsoft Windows [Version 10.0.22631.3235], 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 Build Tools 2019 16.11.29)
[✓] Android Studio (version 2023.2)
[✓] VS Code (version 1.87.0)
[✓] Connected device (3 available)
[✓] Network resources

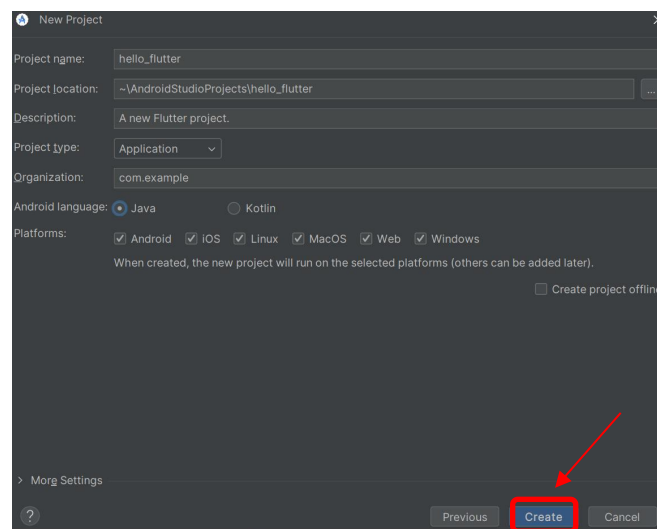
• No issues found!
C:\Windows\System32>
```

Step 3: Create a New Flutter Project

- Open Android Studio.
- Click "New Flutter Project".
- Set the Flutter SDK Path and click on Next.

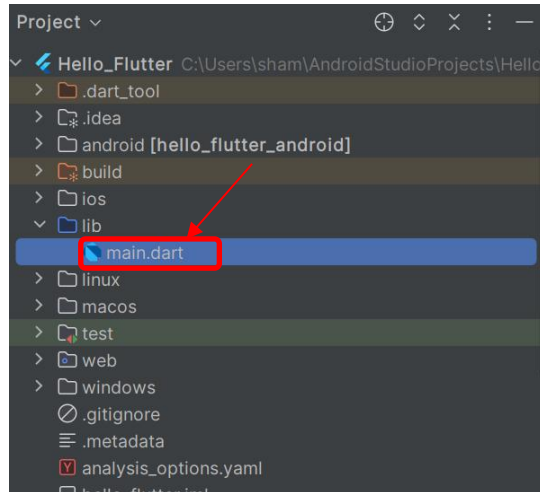


- Configure your project name as hello_flutter.



Step 4: Write a Hello World Code

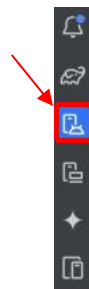
- **Open the Main Dart Activity:**
 - Navigate to project > lib > main.dart.



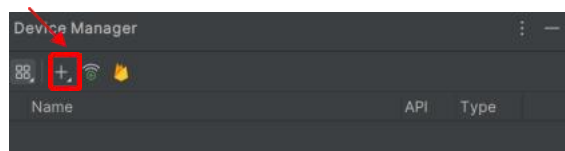
- Edit **main.dart** with the provided source code file.

Step 4: Set Up an Emulator or Device

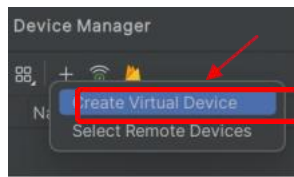
1. Emulator Setup:
 - Go to Device Manager on the right side of ide.



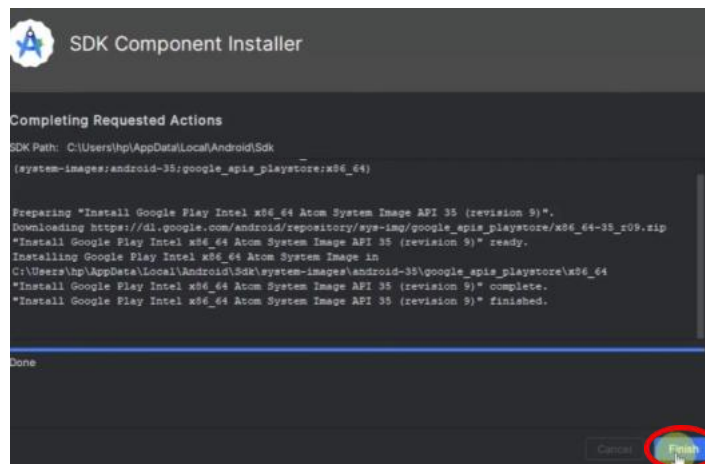
- Click on + sign to add a new device.



- Click Create Virtual Device.



- Select a device (e.g., Pixel 6), choose a system image (e.g., Android 14), and download it if needed.
- Click Finish to create the AVD.

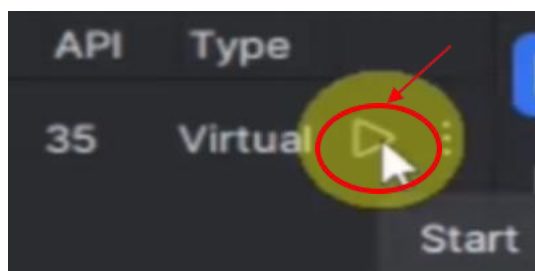


2. Physical Device (Optional):

- Enable Developer Options on your Android device (Settings > About Phone > Tap Build Number 7 times).
- Enable USB Debugging in Developer Options.
- Connect the device via USB and allow debugging when prompted.

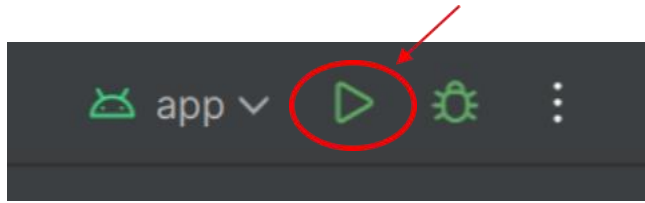
Step 5: Run the Project

1. Select Device:
 - In Android Studio, select your emulator or connected device from the device dropdown menu.



2. Run the App:

- Click the Run button (green play icon) or press Shift + F10.



- Wait for the emulator to boot or the app to install on the device.

3. Verify Output:

- The app should display "Hello, World!" in the center of the screen.

