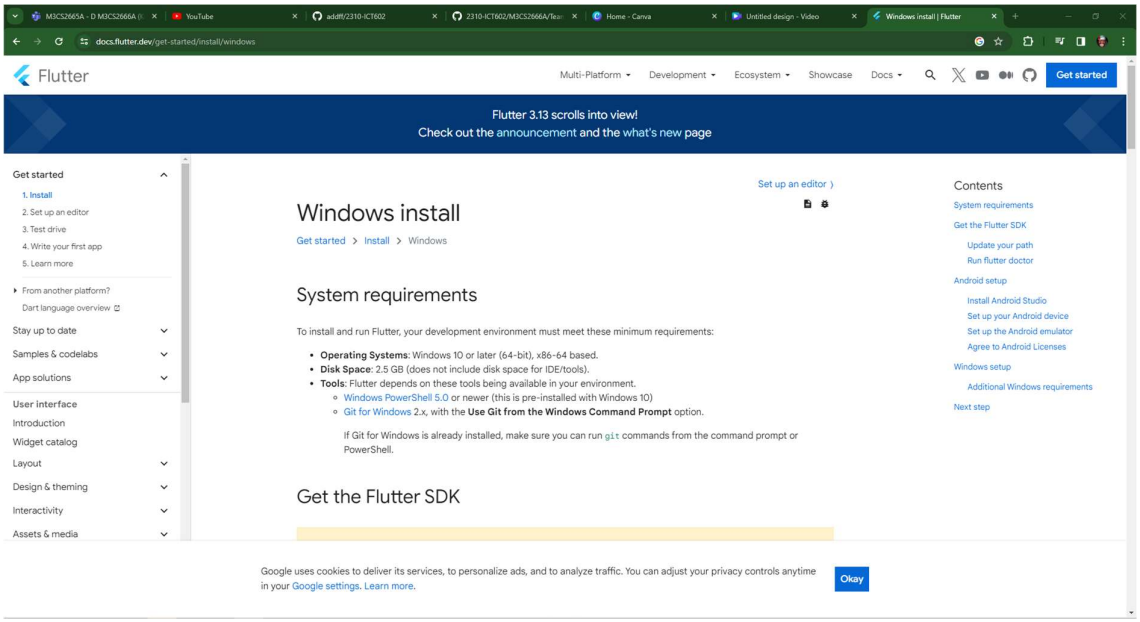
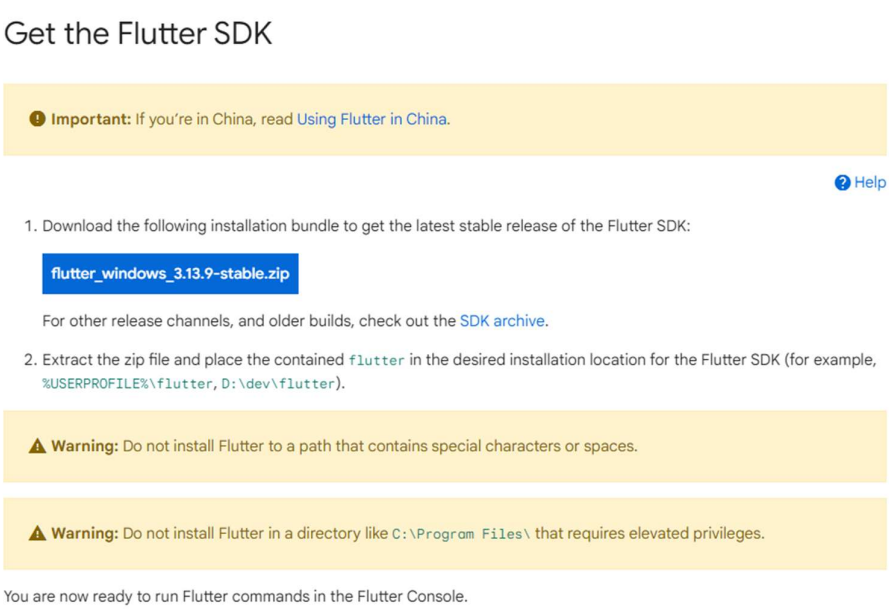
Lab 1: How to install Flutter

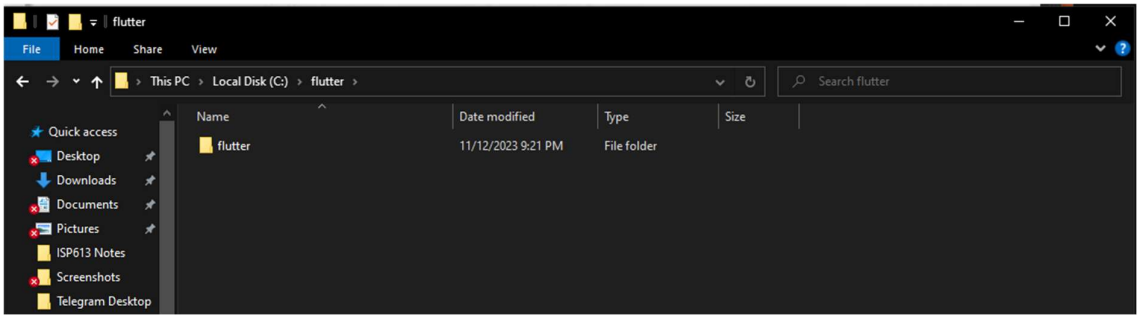
1. Go to https://docs.flutter.dev/get-started/install/windows



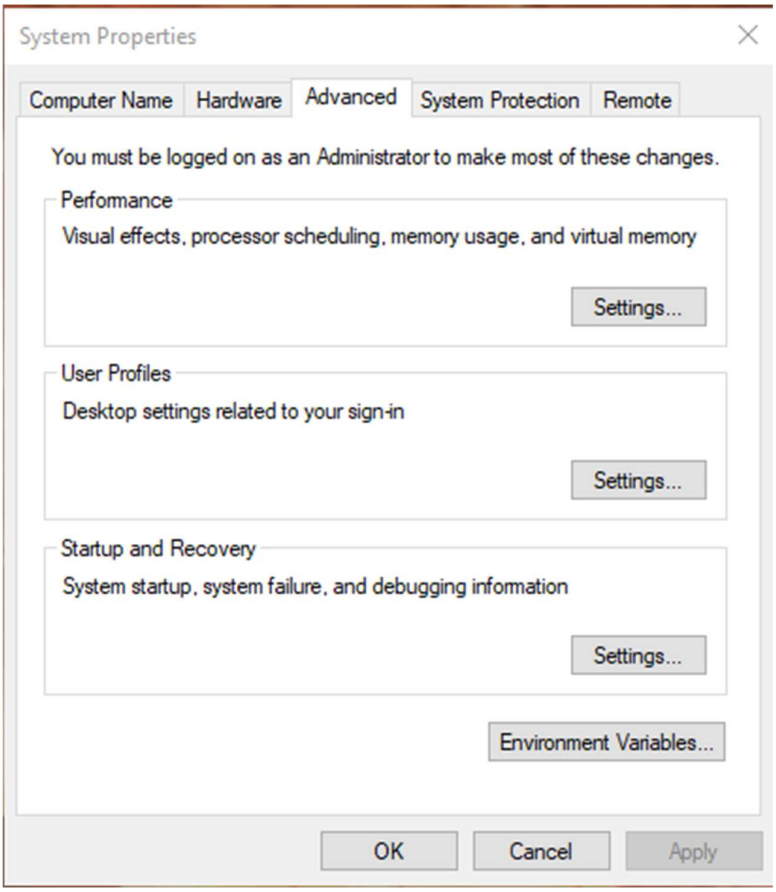
2. Install flutter SDK. Click the blue button.



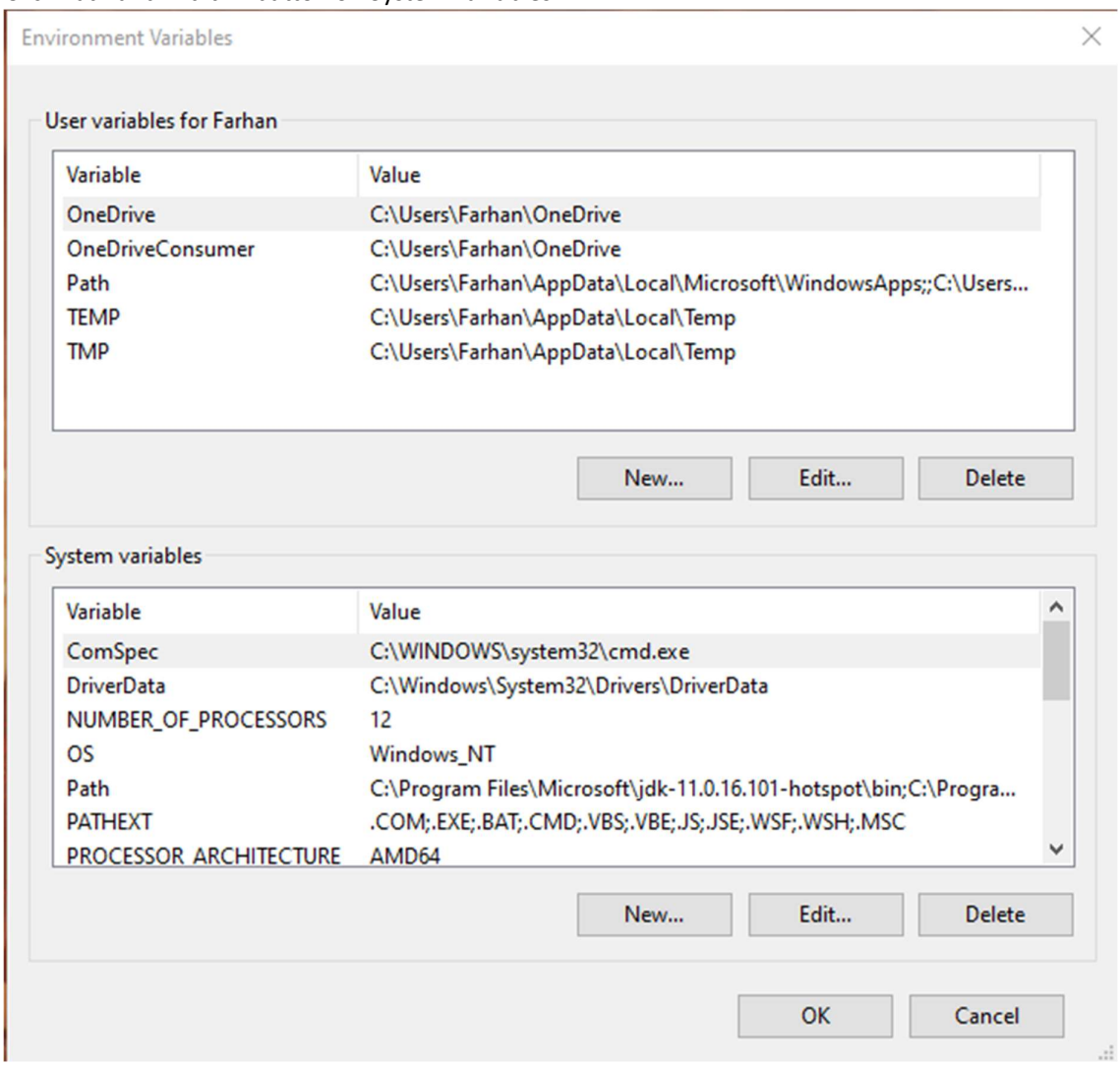
3. Place the Flutter SDK folder at C: drive.



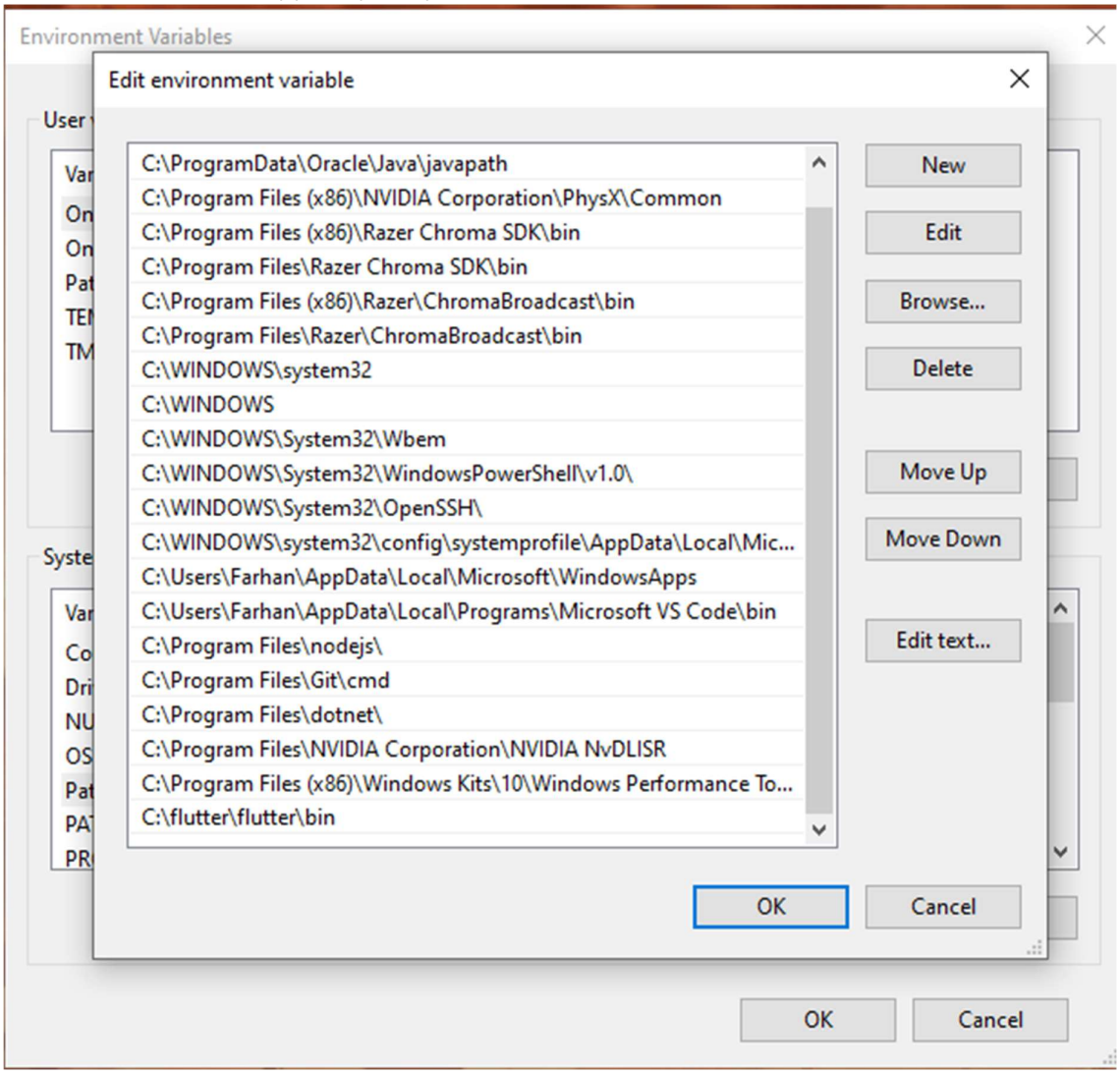
4. Go to System Properties and click Environment Variables.



Click Path and “Edit…” button on System variables.



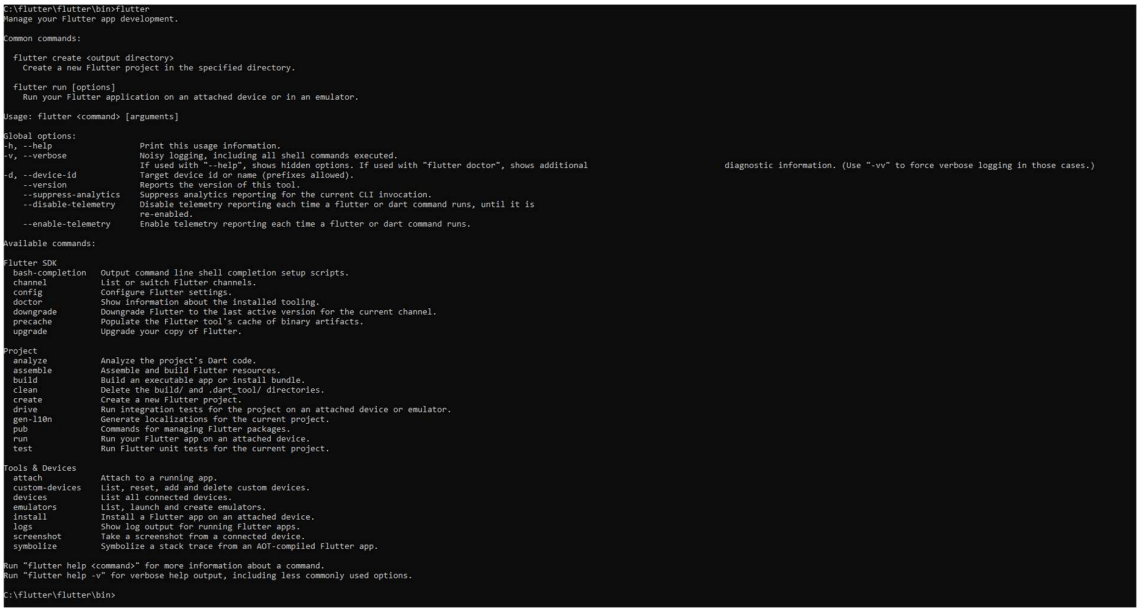
Press New button and copy and paste path to flutter\bin



5. Check your cmd if flutter sdk is installed according to your path

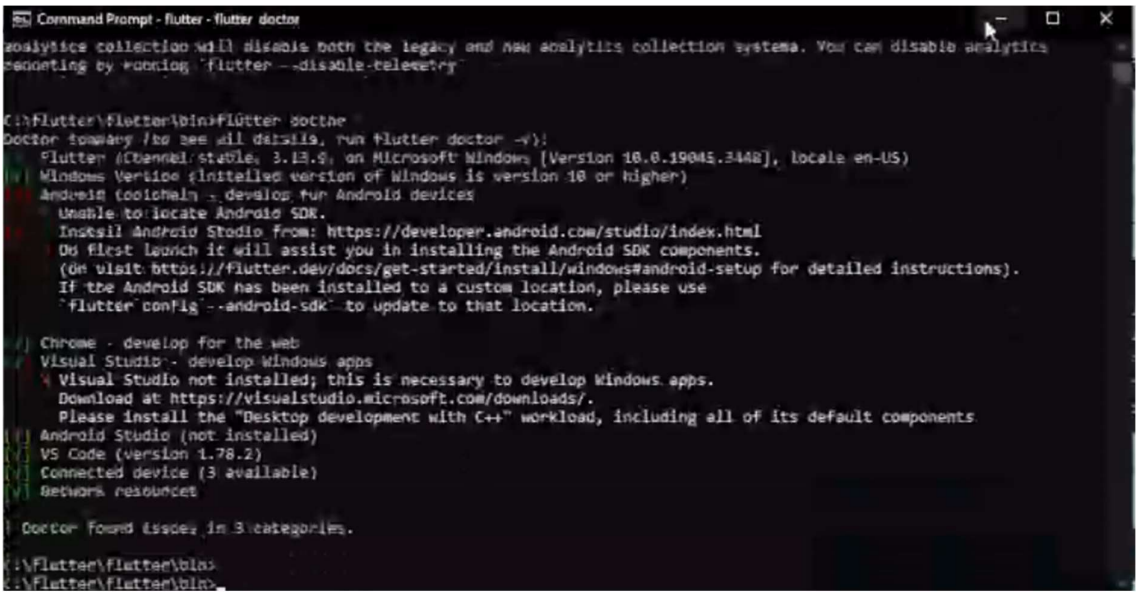
```
C:\flutter\flutter\bin>where flutter dart
C:\flutter\flutter\bin\flutter
C:\flutter\flutter\bin\flutter.bat
C:\flutter\flutter\bin\dart
C:\flutter\flutter\bin\dart.bat
```

6. Write a command “flutter” in your cmd.



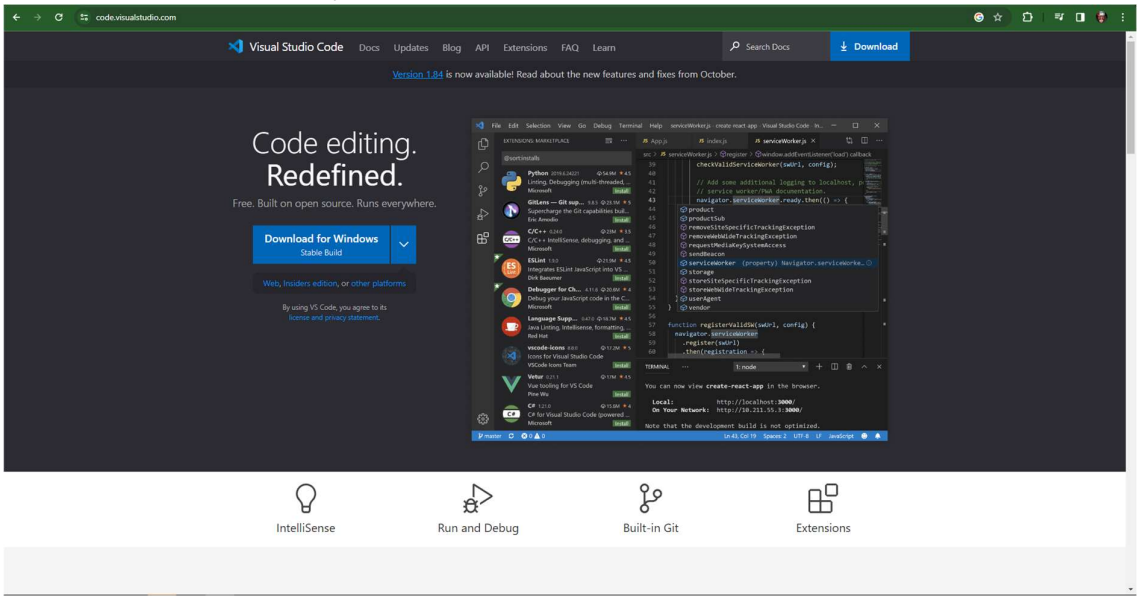
```
C:\flutter\flutter\bin>flutter
Manage your Flutter app development.

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 "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.
    --suppress-analytics    Suppress analytics reporting for the current CLI invocation.
    --disable-telemetry     Disable telemetry reporting each time a flutter or dart command runs, until it is
                            re-enabled.
    --enable-telemetry      Enable telemetry reporting each time a flutter or dart command runs.

Available commands:

Flutter SDK
  bash-completion   Output command line shell completion setup scripts.
  channel           List or switch Flutter channels.
  config            Configure Flutter settings.
  doctor            Show information about the installed tooling.
  downgrade         Downgrade Flutter to the last active version for the current channel.
  precache          Populate the Flutter tool's cache of binary artifacts.
  upgrade           Upgrade your copy of Flutter.

Project
  analyze           Analyze the project's Dart code.
  assemble          Assemble and build Flutter resources.
  build             Build an executable app or install bundle.
  clean             Delete the build/ and .dart_tool/ directories.
  create            Create a new Flutter project.
  drive             Run integration tests for the project on an attached device or emulator.
  gen-l10n          Generate localizations for the current project.
  pub               Commands for managing Flutter packages.
  run               Run your Flutter app on an attached device.
  test              Run Flutter unit tests for the current project.

Tools & Devices
  attach            Attach to a running app.
  custom-devices    List, reset, add and delete custom devices.
  devices           List all connected devices.
  emulators         List, launch and create emulators.
  install           Install a Flutter app on an attached device.
  logs              Show log output for running Flutter apps.
  screenshot        Take a screenshot from a connected device.
  symbolize         Symbolize a stack trace from an AOT-compiled Flutter app.

Run "flutter help <command>" for more information about a command.
Run "flutter help -v" for verbose help output, including less commonly used options.

C:\flutter\flutter\bin>
```

7. Write a command “flutter doctor”

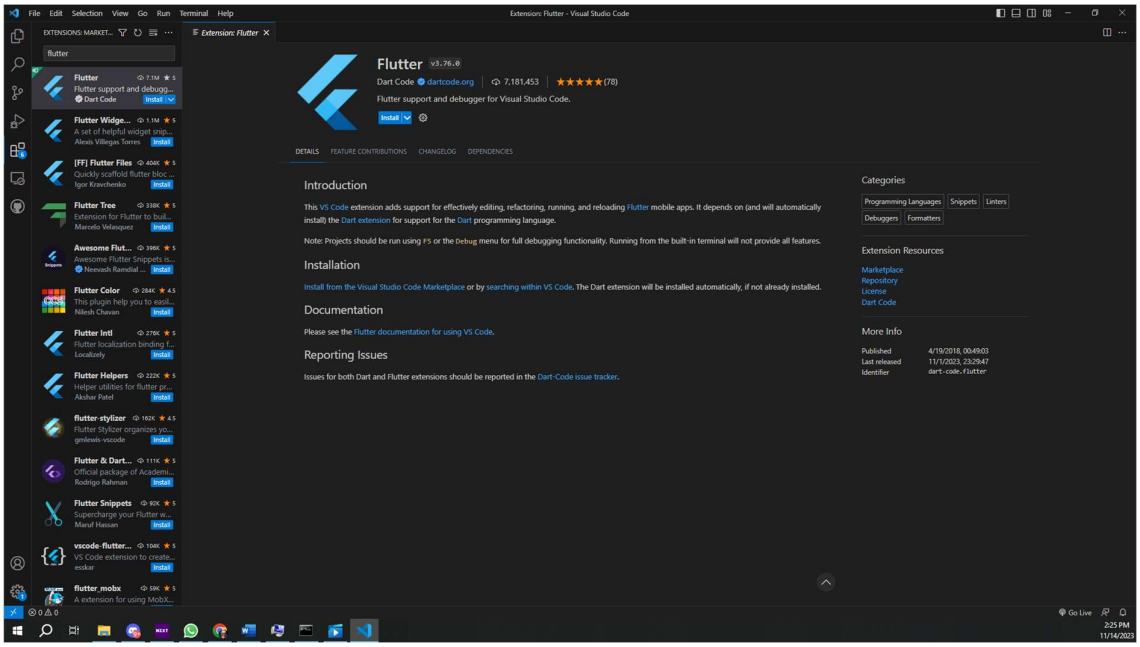


```
Command Prompt - flutter - flutter doctor
Analytics collection will disable both the legacy and new analytics collection systems. You can disable analytics
reporting by running `flutter --disable-telemetry`


C:\flutter\flutter\bin>flutter doctor
Doctor summary (to see all details, run flutter doctor -v):
[√] Flutter (Channel stable, 3.13.9, on Microsoft Windows [Version 10.0.19045.3448], locale en-US)
[√] Windows Version (Installed version of Windows is version 10 or higher)
[!] Android toolchain - develop for Android devices
    ✗ 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/docs/get-started/install/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
[!] Visual Studio - develop Windows apps
    ✗ 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 1.78.2)
[√] Connected device (3 available)
[√] Network resources

! Doctor found issues in 3 categories.

C:\flutter\flutter\bin>
C:\flutter\flutter\bin>
```

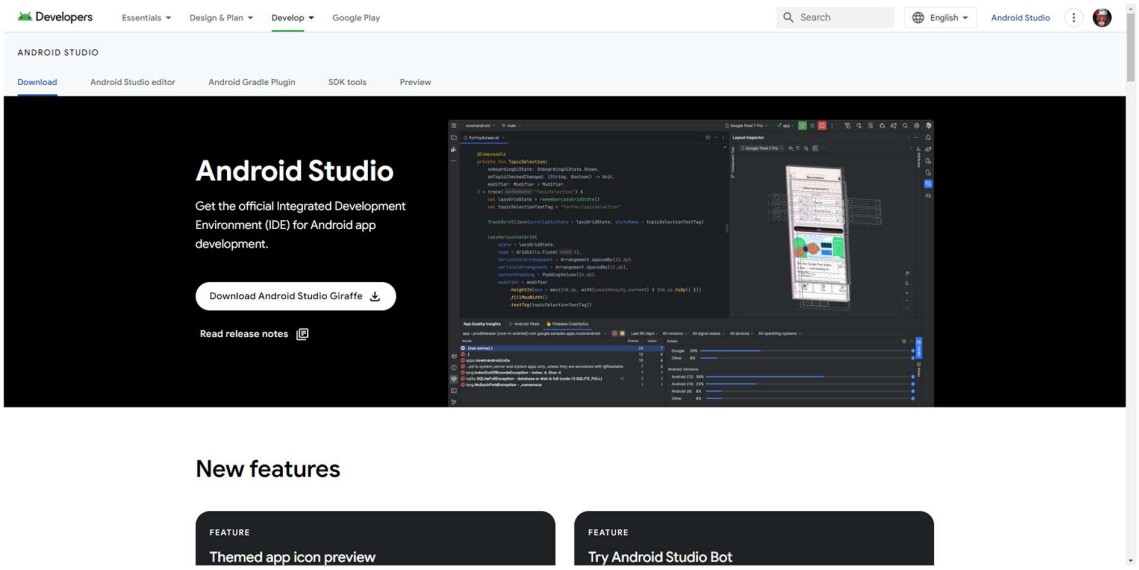
8. Install Visual Studio Code: https://code.visualstudio.com/



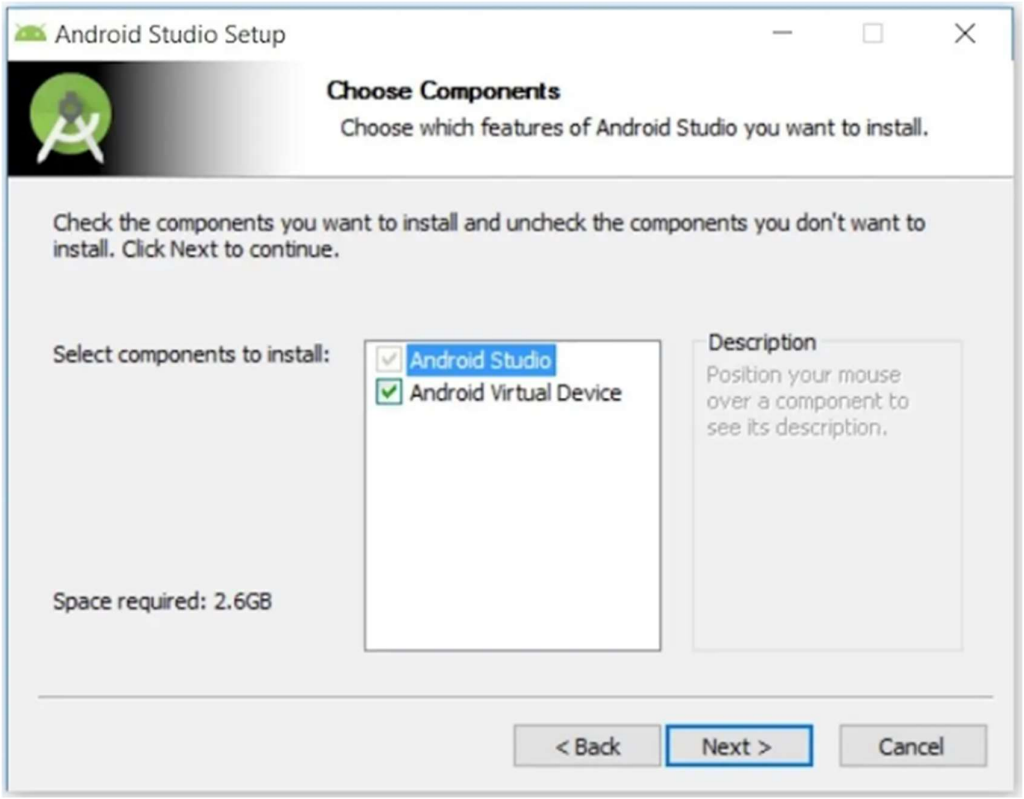
Install Flutter extension in Visual Studio Code

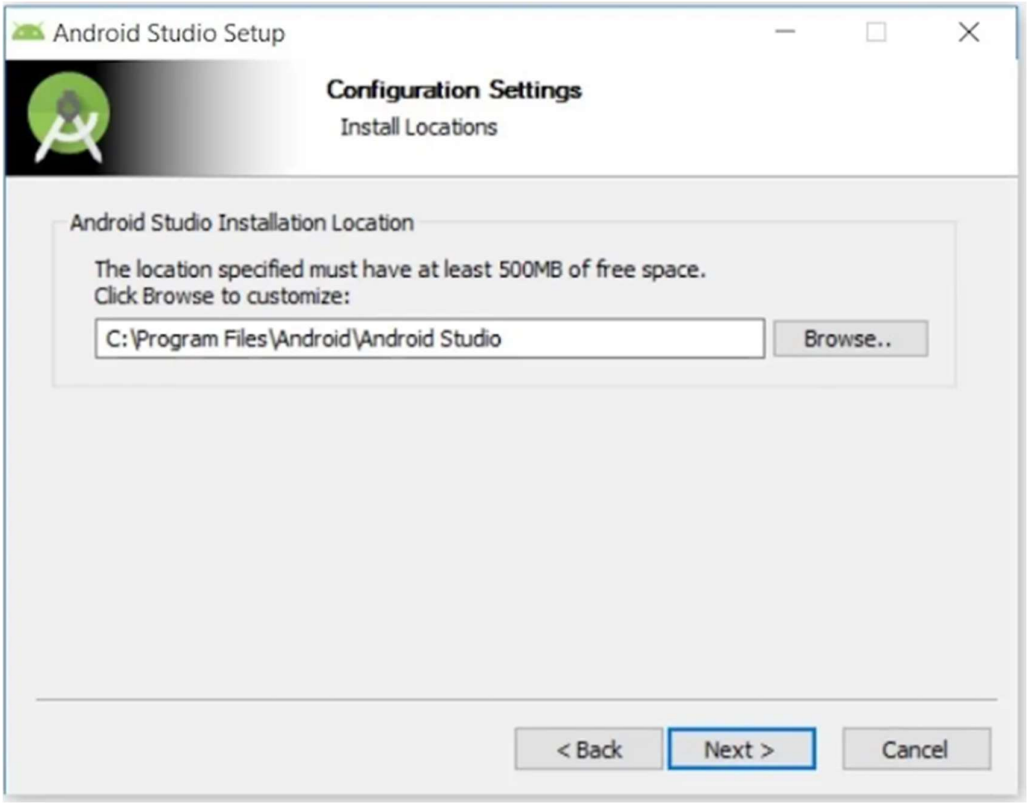


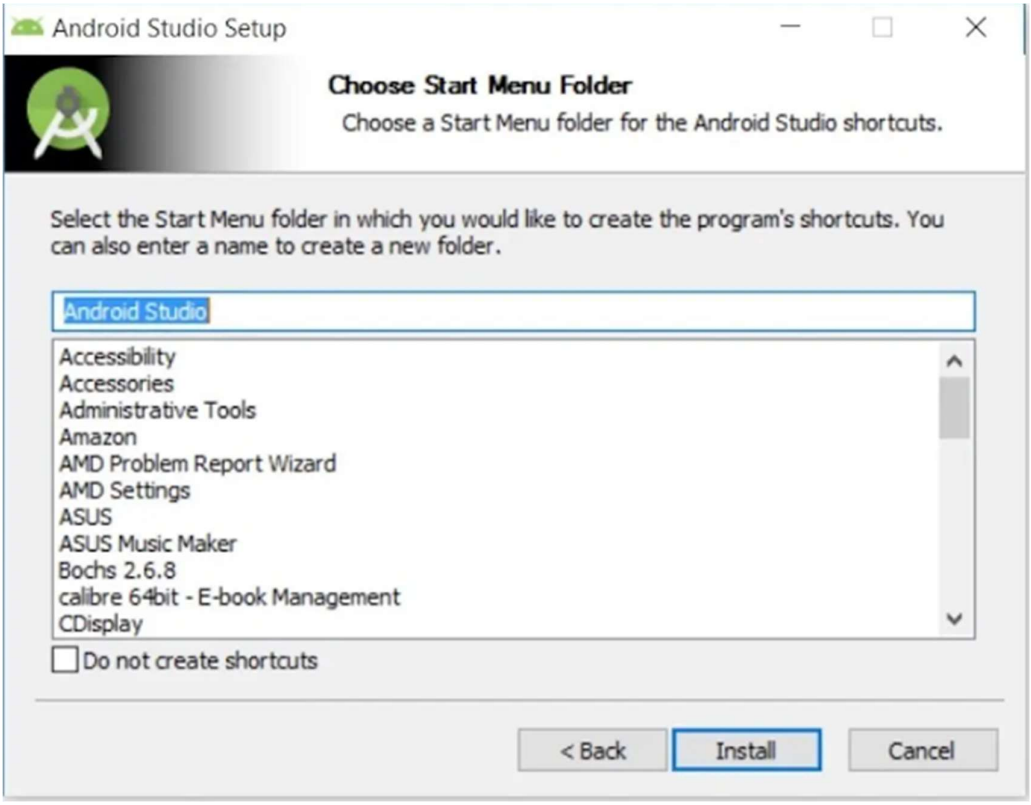
9. Install Android Studio: https://developer.android.com

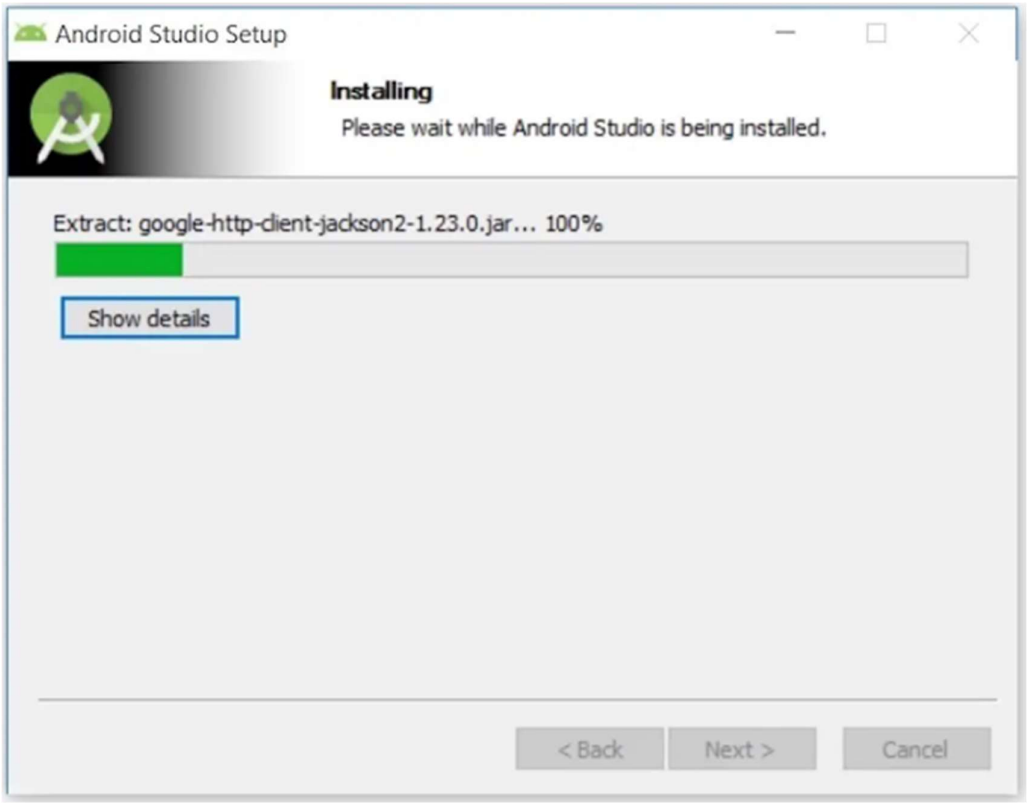


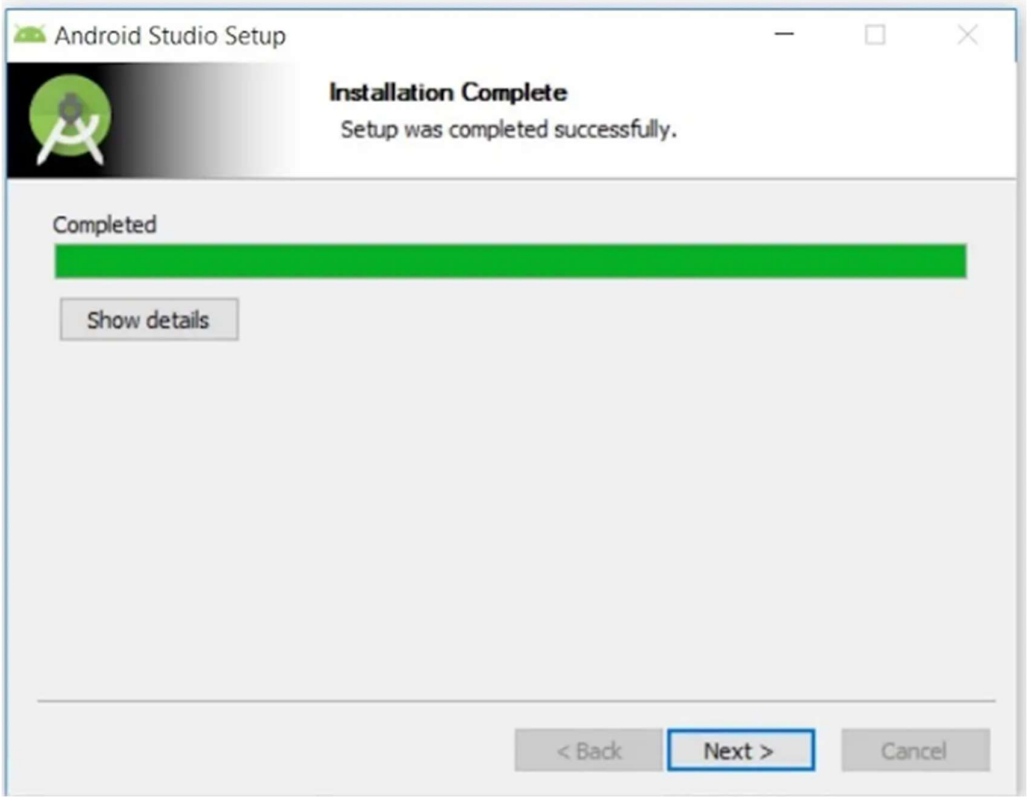
10. Android Studio Install Tutorial

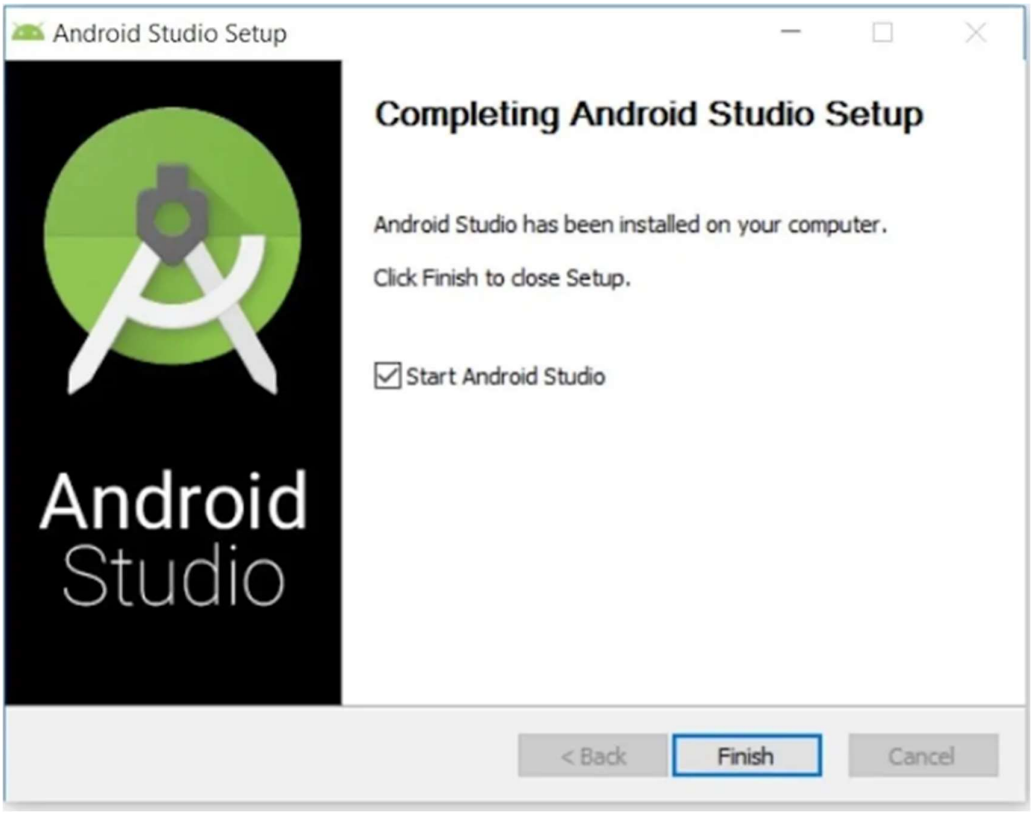

Android Studio Setup
Choose Components
Choose which features of Android Studio you want to install.
Check the components you want to install and uncheck the components you don't want to install. Click Next to continue.
Select components to install:
Android Studio
Android Virtual Device
Description
Position your mouse over a component to see its description.
Space required: 2.6GB
< Back
Next >
Cancel

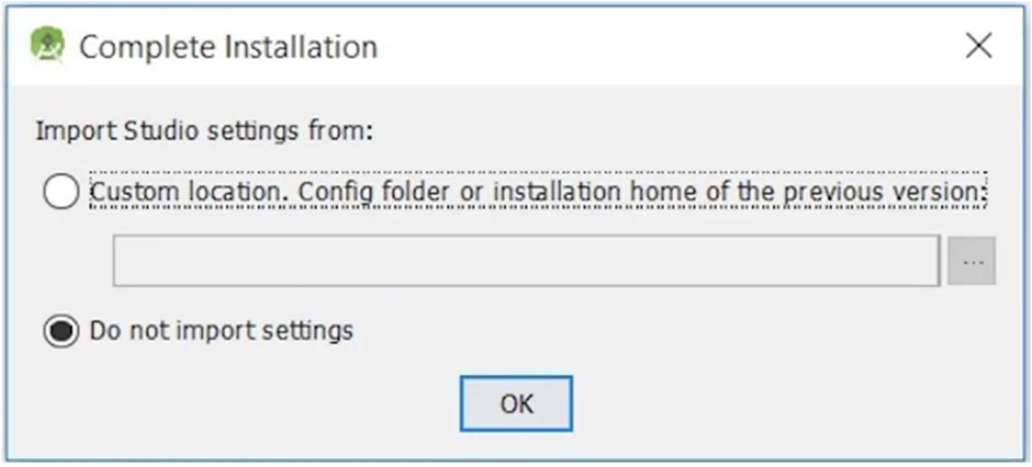

Android Studio Setup
Configuration Settings
Install Locations
Android Studio Installation Location
The location specified must have at least 500MB of free space.
Click Browse to customize:
C:\Program Files\Android\Android Studio
Browse..
< Back
Next >
Cancel

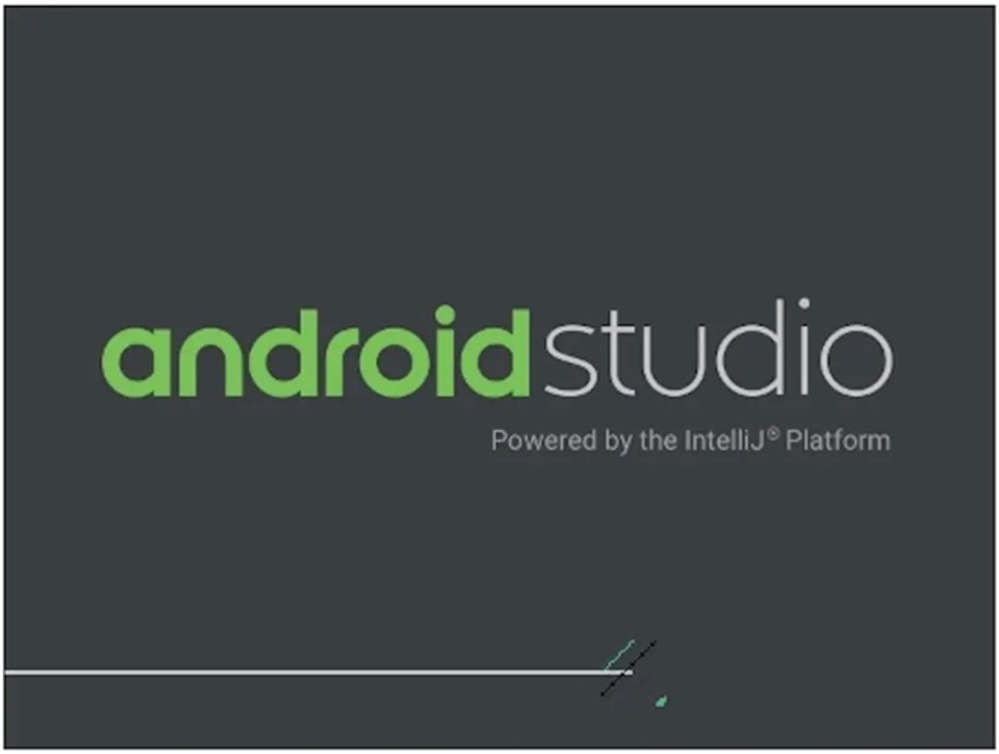

Android Studio Setup
Choose Start Menu Folder
Choose a Start Menu folder for the Android Studio shortcuts.
Select the Start Menu folder in which you would like to create the program's shortcuts. You can also enter a name to create a new folder.
Android Studio
Accessibility
Accessories
Administrative Tools
Amazon
AMD Problem Report Wizard
AMD Settings
ASUS
ASUS Music Maker
Bochs 2.6.8
calibre 64bit - E-book Management
CDisplay
Do not create shortcuts
< Back
Install
Cancel

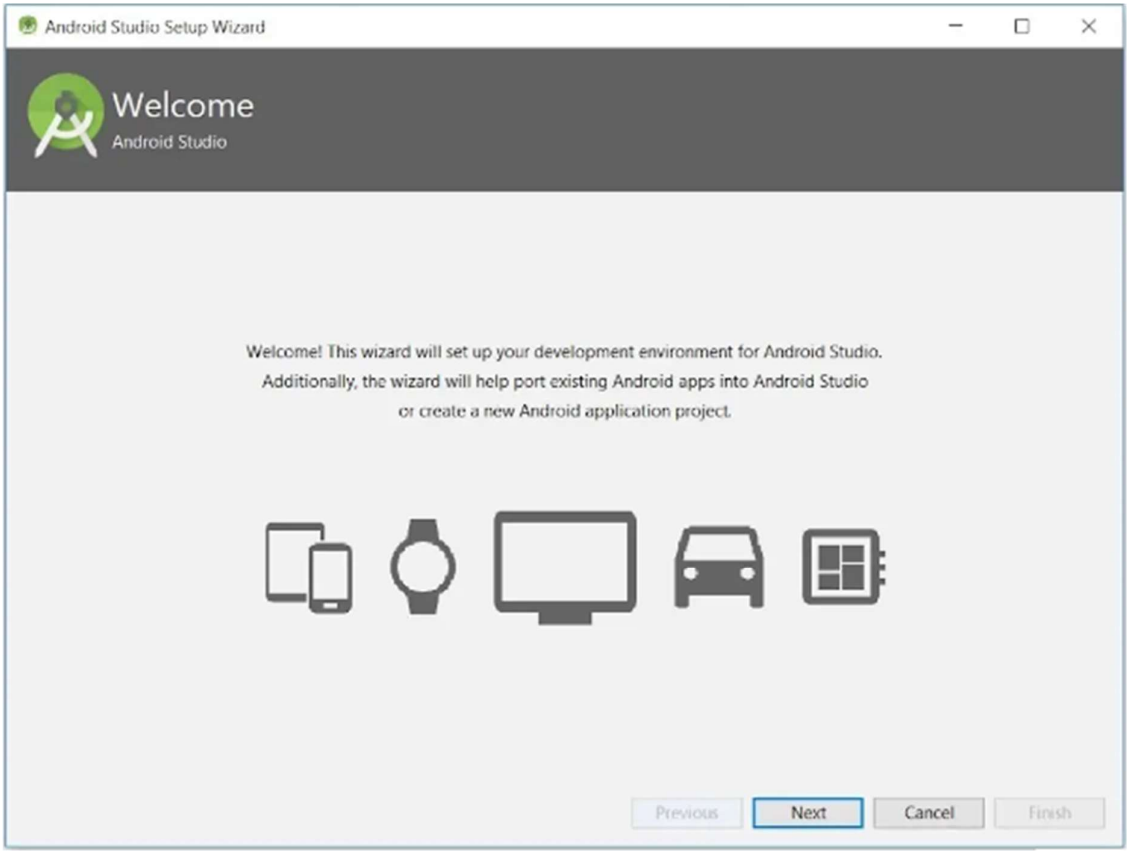

Android Studio Setup
Installing
Please wait while Android Studio is being installed.
Extract: google-http-client-jackson2-1.23.0.jar... 100%
Show details
< Back
Next >
Cancel

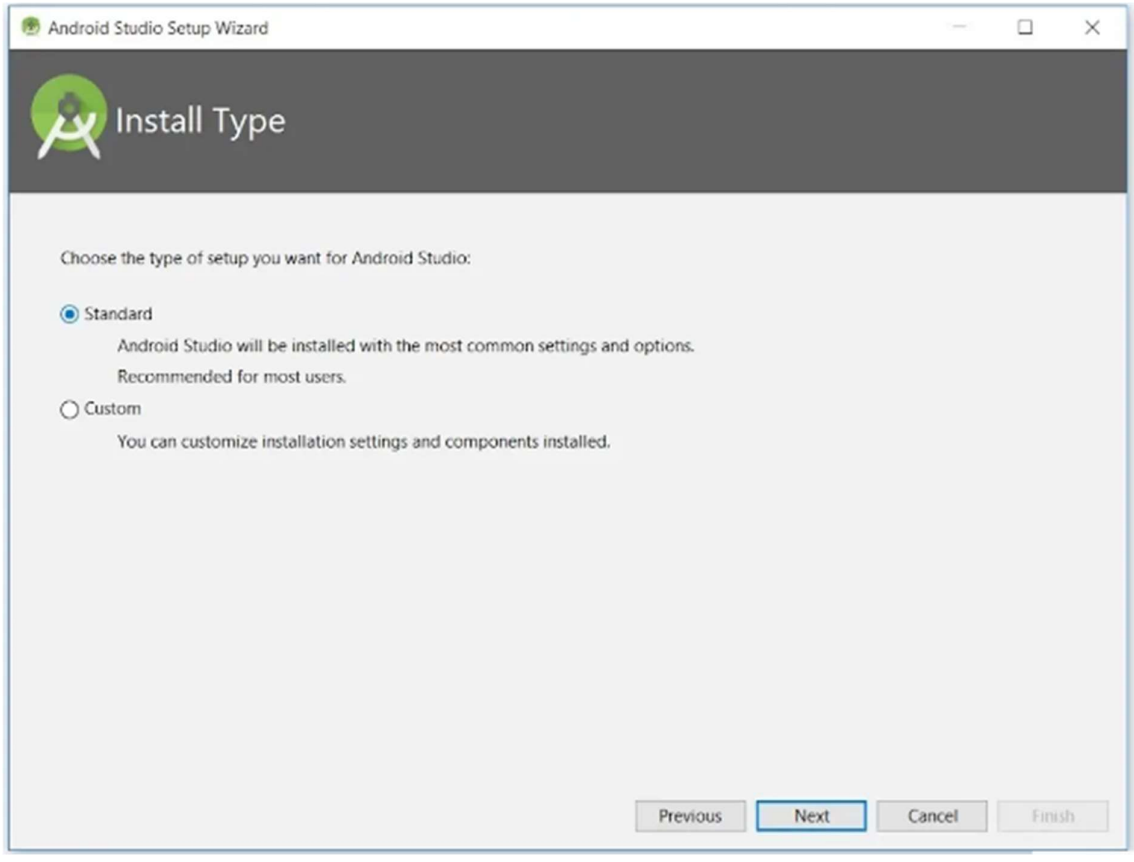

Android Studio Setup
Installation Complete
Setup was completed successfully.
Completed
Show details
< Back
Next >
Cancel

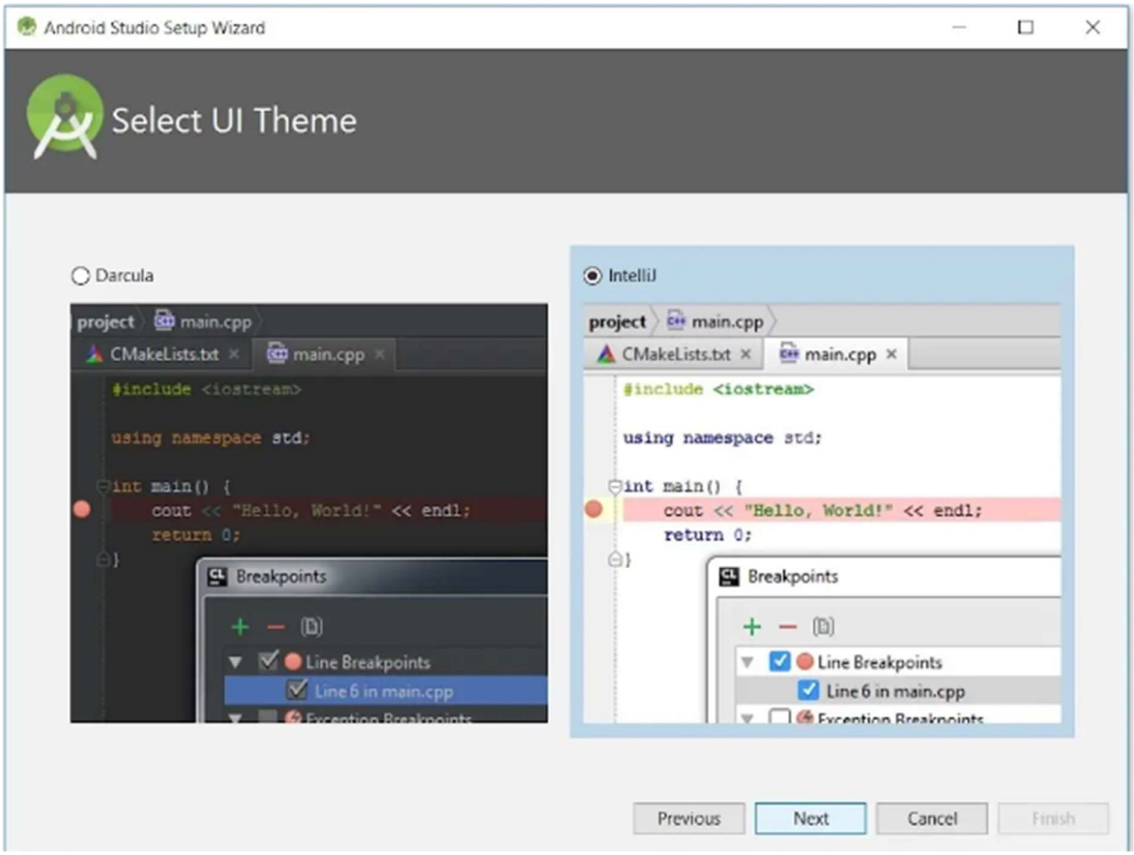

Android Studio Setup
Completing Android Studio Setup
Android Studio has been installed on your computer.
Click Finish to close Setup.
Start Android Studio
Android
Studio
< Back
Finish
Cancel

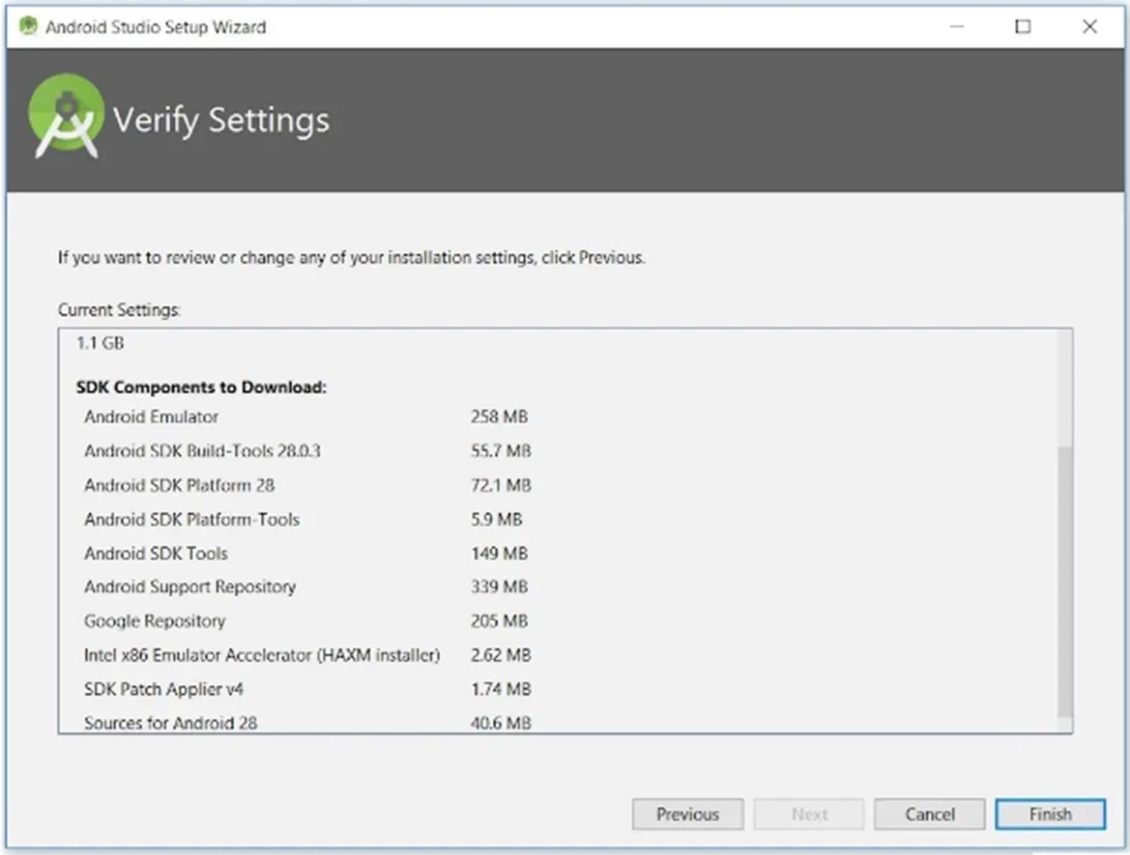

Complete Installation
Import Studio settings from:
Custom location. Config folder or installation home of the previous version:
...
Do not import settings
OK

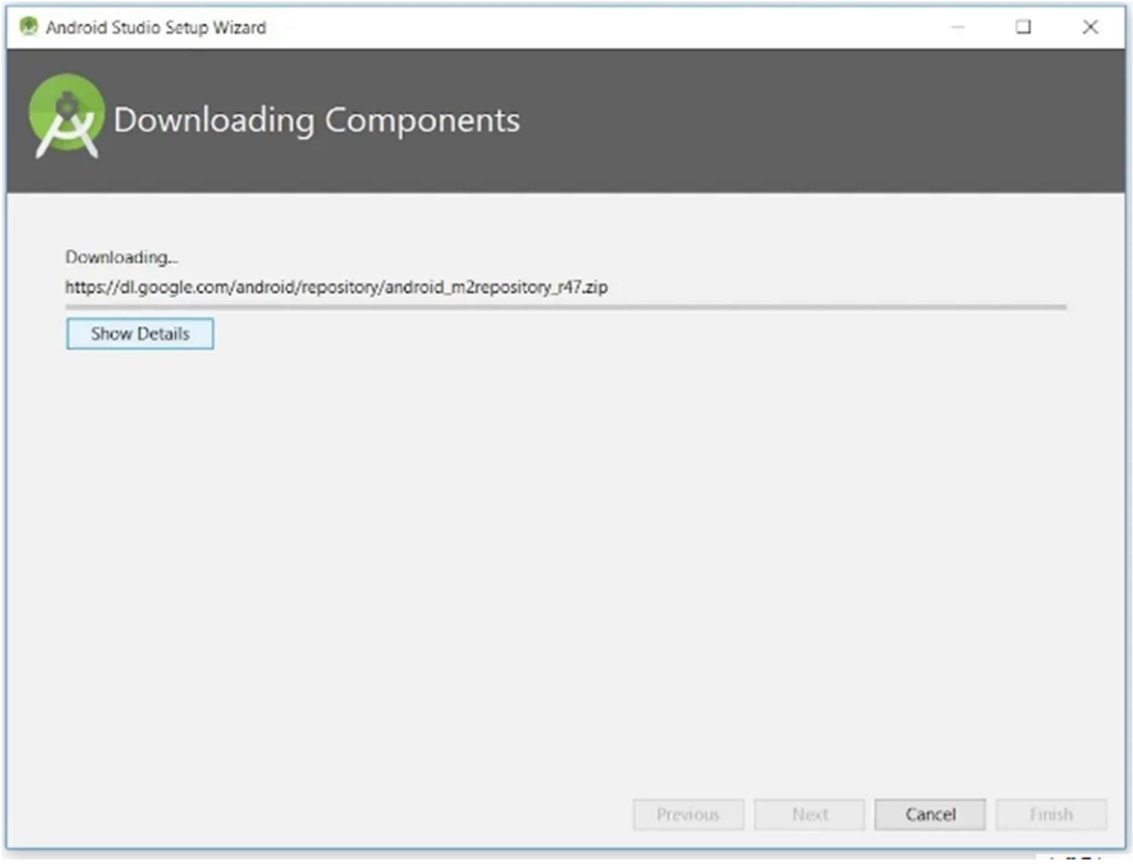

android studio
Powered by the IntelliJ® Platform

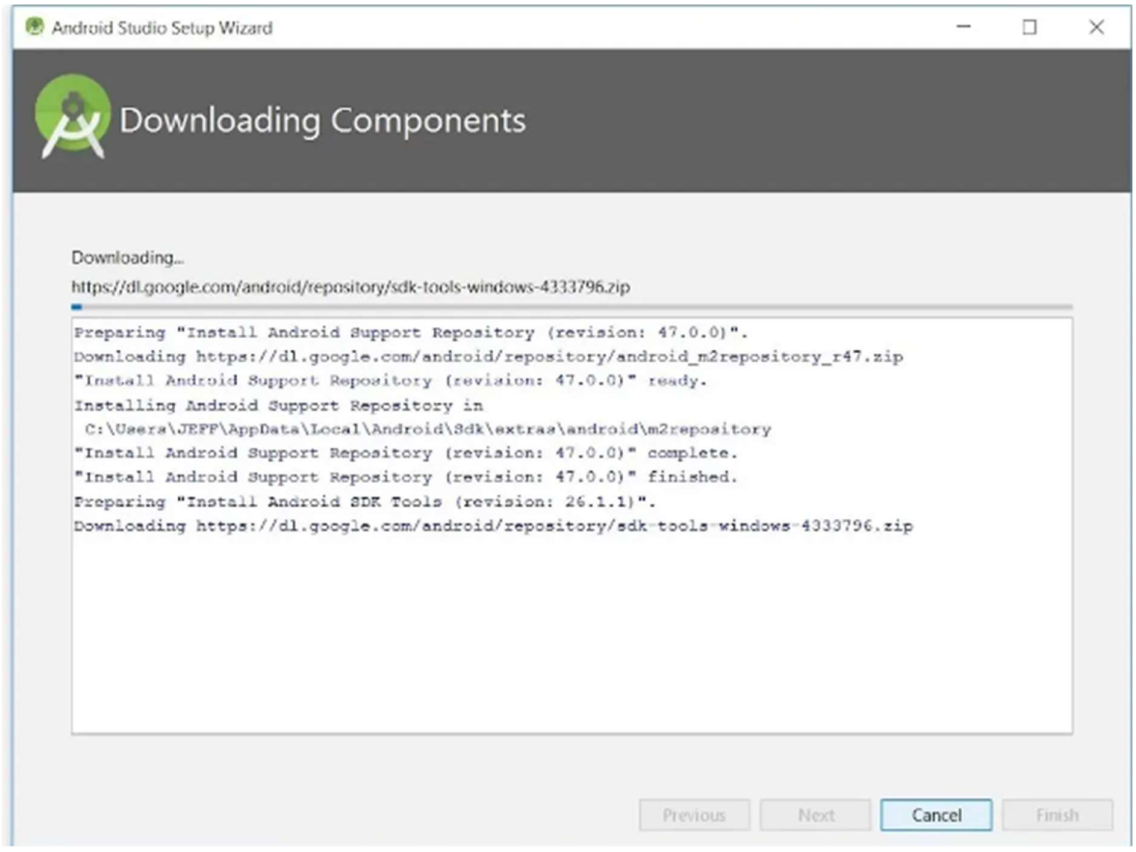

Android Studio Setup Wizard
Welcome
Android Studio
Welcome! This wizard will set up your development environment for Android Studio.
Additionally, the wizard will help port existing Android apps into Android Studio
or create a new Android application project.
Previous
Next
Cancel
Finish

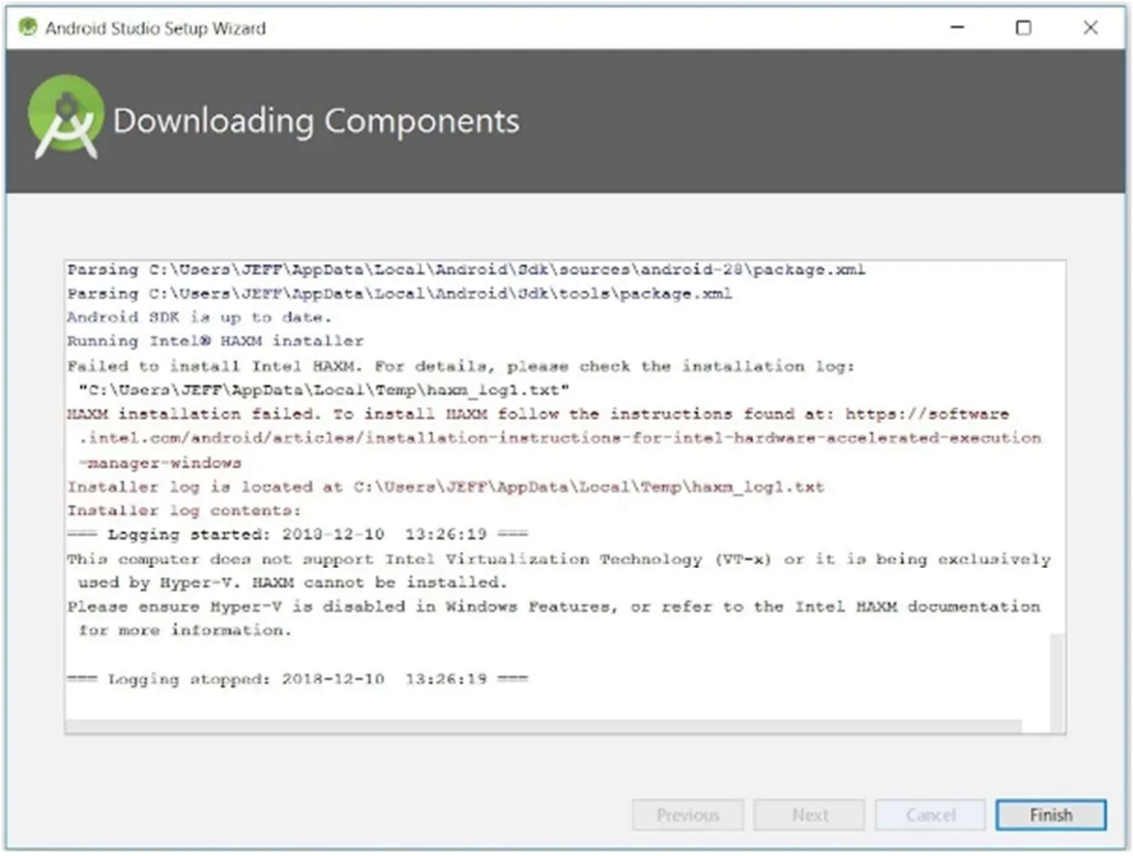

Android Studio Setup Wizard
Install Type
Choose the type of setup you want for Android Studio:
Standard
Android Studio will be installed with the most common settings and options.
Recommended for most users.
Custom
You can customize installation settings and components installed.
Previous
Next
Cancel
Finish


Android Studio Setup Wizard
Select UI Theme
Darcula
IntelliJ
project
main.cpp
CMakeLists.txt
main.cpp
#include <iostream>
using namespace std;
int main() {
cout << "Hello, World!" << endl;
return 0;
}
Breakpoints
Line Breakpoints
Line 6 in main.cpp
Previous
Next
Cancel
Finish

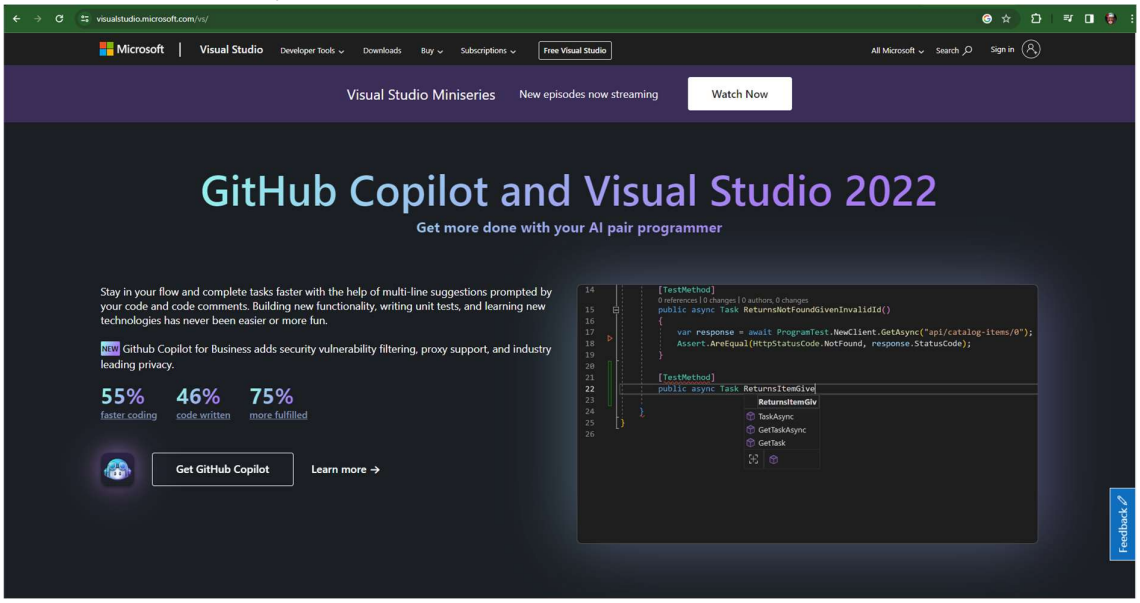

Android Studio Setup Wizard
Verify Settings
If you want to review or change any of your installation settings, click Previous.
Current Settings:
1.1 GB
SDK Components to Download:
Android Emulator 258 MB
Android SDK Build-Tools 28.0.3 55.7 MB
Android SDK Platform 28 72.1 MB
Android SDK Platform-Tools 5.9 MB
Android SDK Tools 149 MB
Android Support Repository 339 MB
Google Repository 205 MB
Intel x86 Emulator Accelerator (HAXM installer) 2.62 MB
SDK Patch Applier v4 1.74 MB
Sources for Android 28 40.6 MB
Previous
Next
Cancel
Finish

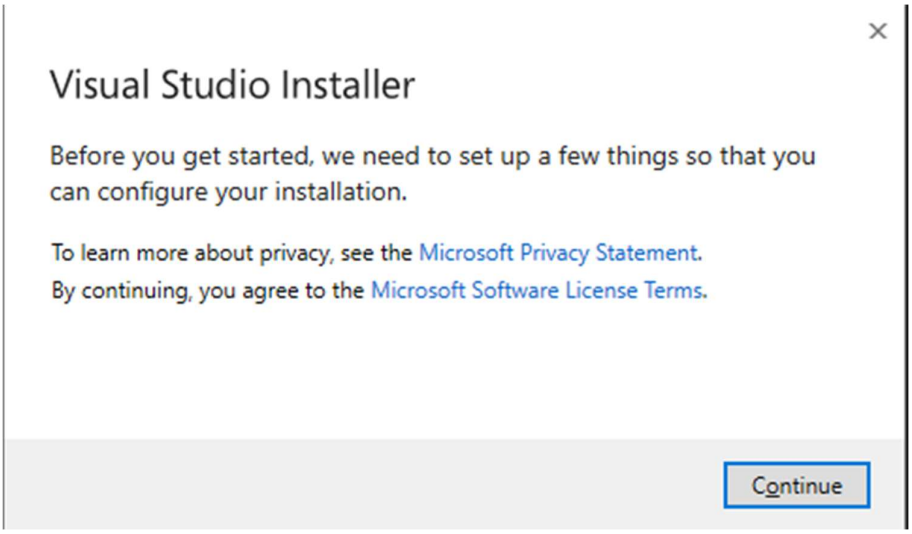

Android Studio Setup Wizard
Downloading Components
Downloading...
https://dl.google.com/android/repository/android_m2repository_r47.zip
Show Details
Previous
Next
Cancel
Finish


Android Studio Setup Wizard
Downloading Components
Downloading...
https://dl.google.com/android/repository/sdk-tools-windows-4333796.zip
Preparing "Install Android Support Repository (revision: 47.0.0)".
Downloading https://dl.google.com/android/repository/android_m2repository_r47.zip
"Install Android Support Repository (revision: 47.0.0)" ready.
Installing Android Support Repository in
C:\Users\JEFF\AppData\Local\Android\Sdk\extras\android\m2repository
"Install Android Support Repository (revision: 47.0.0)" complete.
"Install Android Support Repository (revision: 47.0.0)" finished.
Preparing "Install Android SDK Tools (revision: 26.1.1)".
Downloading https://dl.google.com/android/repository/sdk-tools-windows-4333796.zip
Previous
Next
Cancel
Finish

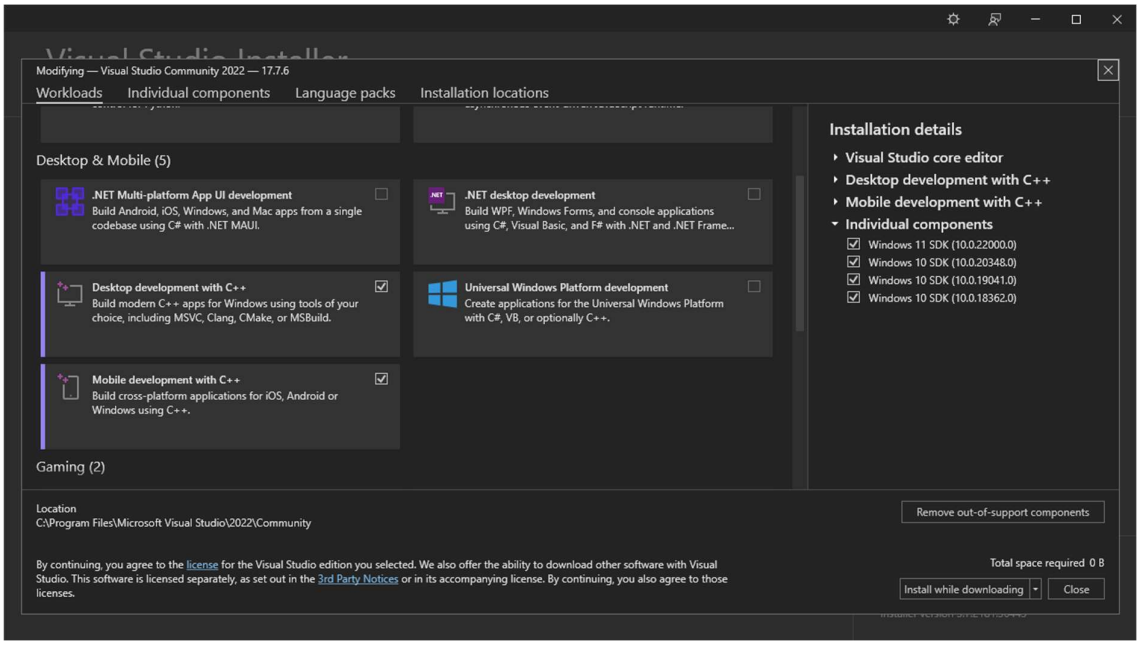


11. Visual Studio Install : https://visualstudio.microsoft.com/vs/





Tick Windows 10 SDK and “Desktop development with C++” and “Mobile development with C++”



12. Write the command “flutter doctor” again if your flutter is complete.

```
C:\flutter\flutter\bin>flutter doctor
Doctor summary (to see all details, run flutter doctor -v):
[√] Flutter (Channel stable, 3.13.9, on Microsoft Windows [Version 10.0.19045.3570], 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 17.7.6)
[√] Android Studio (version 2022.3)
[√] VS Code (version 1.78.2)
[√] Connected device (3 available)
[√] Network resources
```