

# Draft Two of Project Proposal -- 4

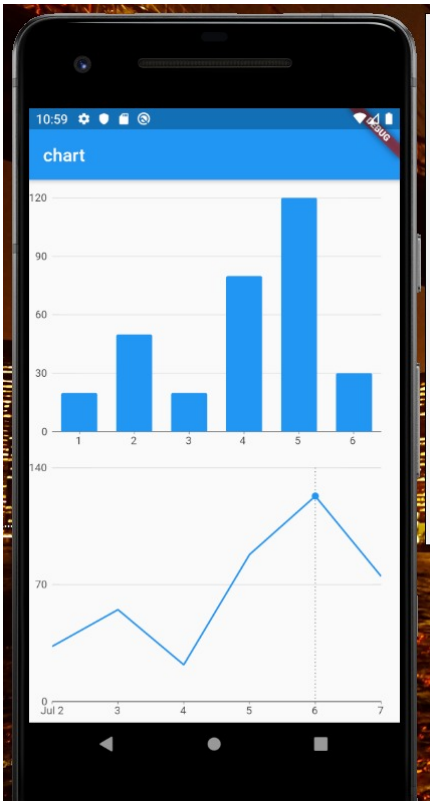
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## Results

### Project Structure

```
class _MyHomePageState extends State<MyHomePage> {
  @override
  Widget build(BuildContext context) {
    return Scaffold(
      appBar: AppBar(
        title: Text('chart'),
      ), // AppBar
      body: Container(
        child: ListView(
          children: <Widget>[
            Container(
              height: 300,
              child: getBar(),
            ), // Container
            Container(
              height: 300,
              child: getLine(),
            ) // Container
          ], // <Widget>[]
        ), // ListView
      ), // Container
    ); // Scaffold
  }
}
```

### Running interface



## Findings

## Setup the Dart and Flutter environment

- Flutter official website to download the installation package Flutter SDK

### Flutter SDK releases

[Docs](#) > [Development](#) > [Tools](#) > [SDK](#) > [Releases](#)

The Stable channel contains the most stable Flutter builds. See [Flutter's channels](#) for details.

[Windows](#) [macOS](#) [Linux](#)

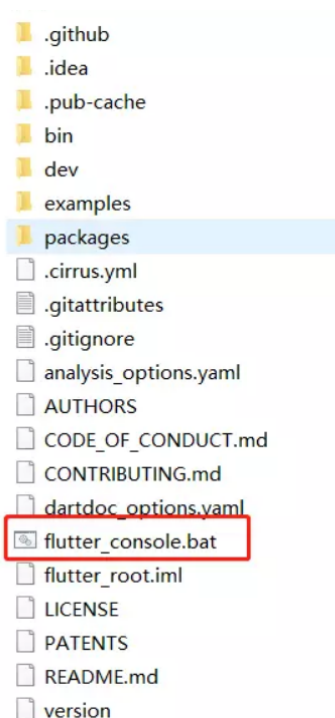
#### Stable channel (Windows)

Select from the following scrollable list:

Version	Ref	Release Date
<a href="#">v1.9.1+hotfix.6</a>	68587a0	2019/10/23

The Dart SDK is already bundled with the Flutter SDK, so there is no need to install the Dart SDK separately.

- Unzip the downloaded installation package to the path where you want to install the Flutter SDK (eg D:\flutter, be careful not to install flutter to a path that requires some high privileges such as C:\Program Files)
- Locate flutter\_console.bat under the flutter file in the Flutter installation directory. Double-click it to start the flutter command line automatically.



## Change system environment variables

- Open Control Panel > User Accounts > User Accounts > Change My Environment Variables
- Add Flutter to it.

## Flutter doctor test

Terminal input: `flutter doctor`

This command checks your environment and displays the report in a terminal window. This command may run very slowly for the first time. Flutter automatically installs the required dependencies and compiles them.

```
$ flutter doctor
Doctor summary (to see all details, run flutter doctor -v):
[✓] Flutter (Channel stable, v1.9.1+hotfix.6, on Microsoft Windows [version 10.0.17763.805], locale en-US)
[✓] Android toolchain - develop for Android devices (Android SDK version 29.0.2)
[✓] Android Studio (version 3.4)
[!] IntelliJ IDEA Community Edition (version 2018.1)
    X Flutter plugin not installed; this adds Flutter specific functionality.
    X Dart plugin not installed; this adds Dart specific functionality.
[!] IntelliJ IDEA Ultimate Edition (version 2019.2)
    X Flutter plugin not installed; this adds Flutter specific functionality.
    X Dart plugin not installed; this adds Dart specific functionality.
[✓] VS Code (version 1.39.2)
[✓] Connected device
    ! No devices available

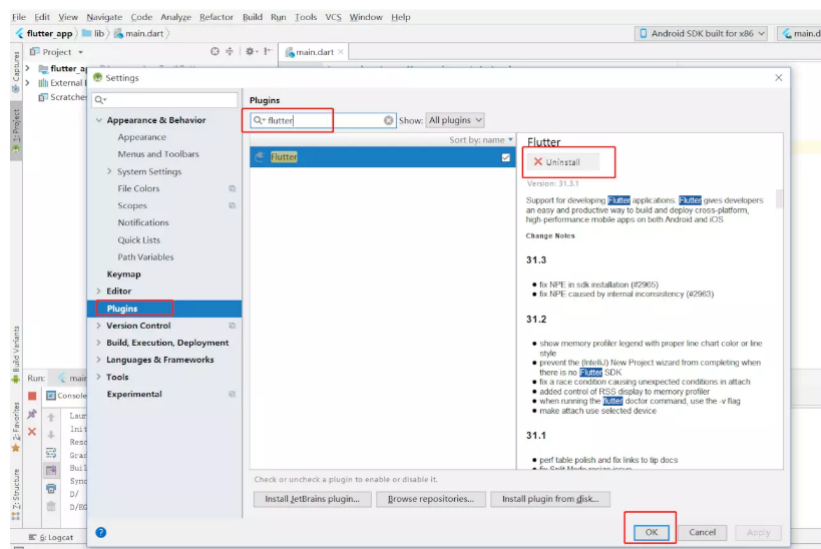
! Doctor found issues in 3 categories.
```

## Install Android Studio and create an emulator (AVD virtual machine)

[Official website to download the installation package](#)

## Android Studio installs the Flutter plugin

Open Android Studio, menu bar File => Settings => Plugins, enter flutter in the search box, click install, after the installation is complete, restart Android Studio.



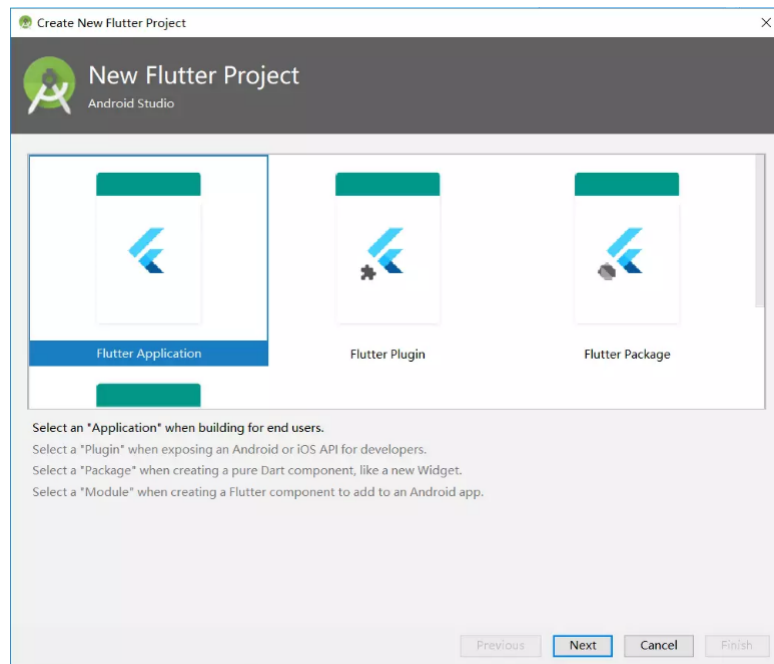
## Install Android certificate

Terminal input: `flutter doctor --android-licenses`

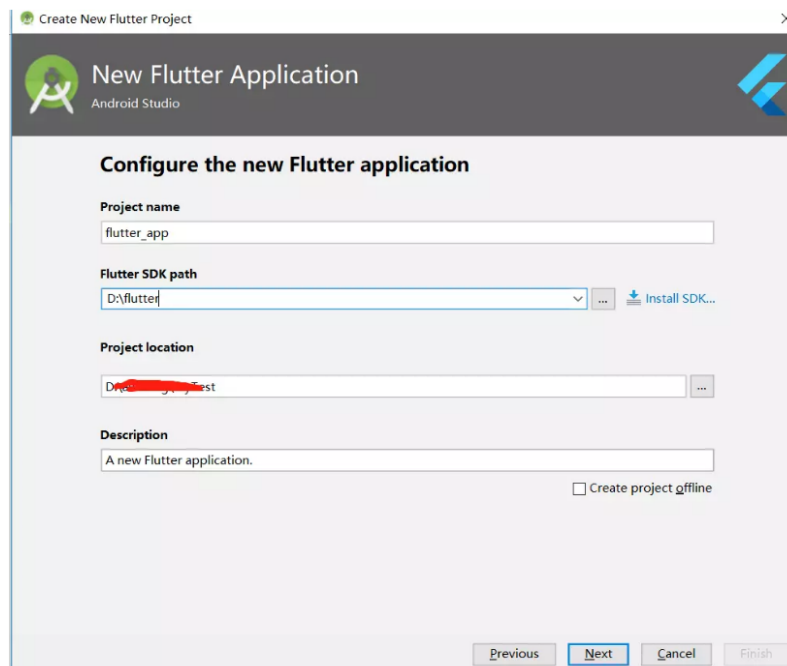
Note: Tips are always entered `y`

## Running Flutter

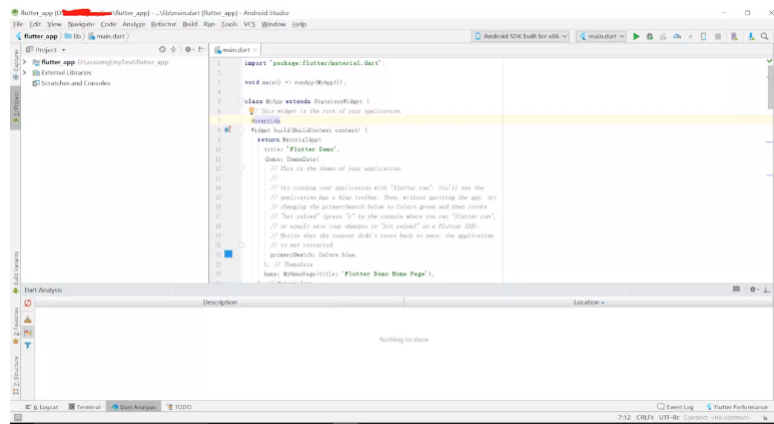
1. Open Android Studio, menu bar File => New => New Flutter Project, select the first option Flutter Application (flutter application)



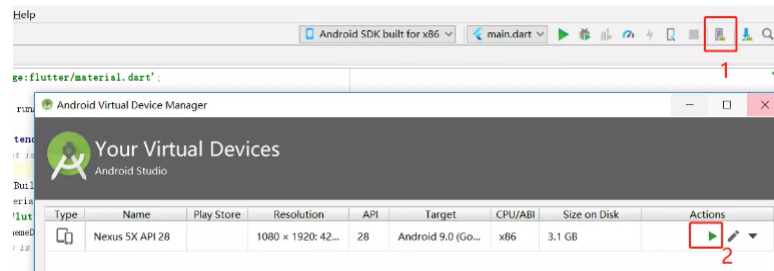
Enter the project name (note: the project name must be lowercase, the words are separated by underscores), always click next, and finally finish, the system can automatically create a Flutter project.



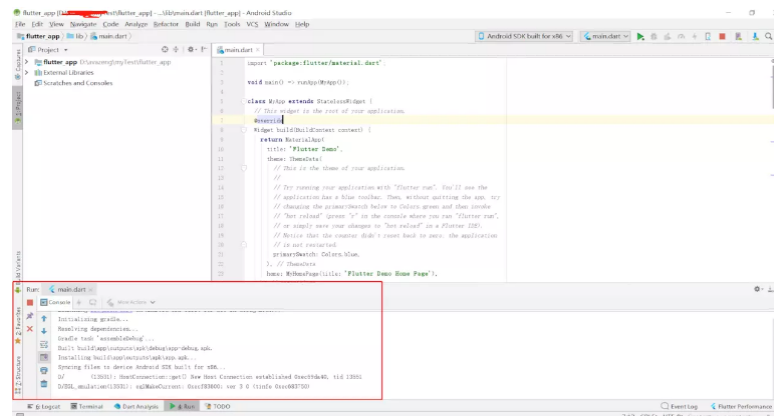
2. In the open Android Studio you can see the Flutter project created in the previous step.



3. Turn on the emulator (ADV Manager icon button in the upper right corner)



4. Once the emulator is running, click the debug or run icon button in the top right corner of Android Studio. (This step takes a little time, pay attention to observe the console area information, as shown below, the compilation is successful)



5. After the previous step is successfully compiled, you can see the flutter application page in the emulator.

