

**Aim** : Installation and Configuration of Flutter Environment.

## Theory

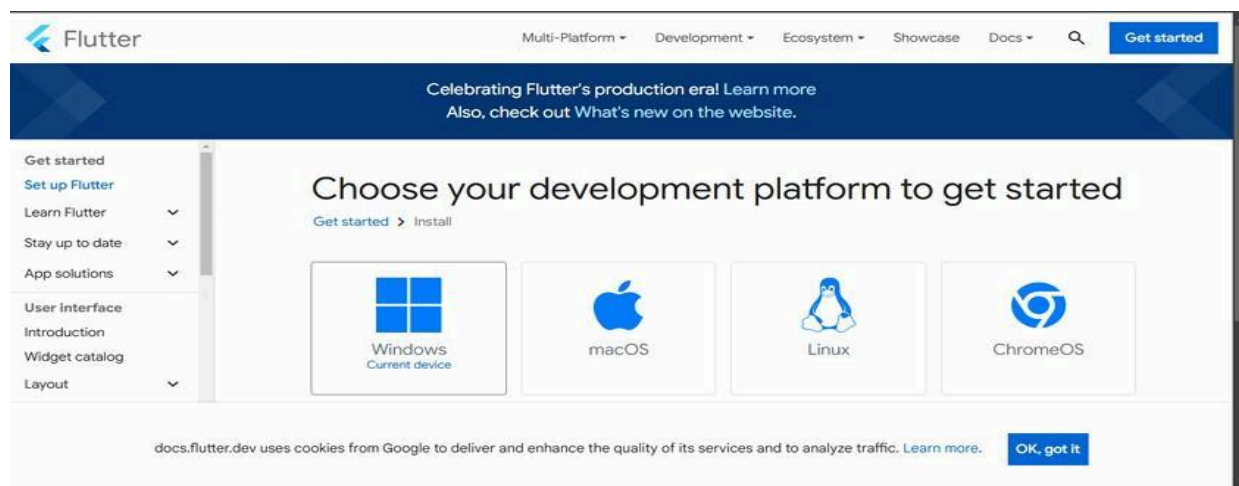
Flutter, an open-source UI development toolkit by Google, is widely used for building natively compiled applications for mobile, web, and desktop from a single codebase. The installation and configuration of the Flutter environment serve as the initial step for developers to harness this powerful framework for app development.

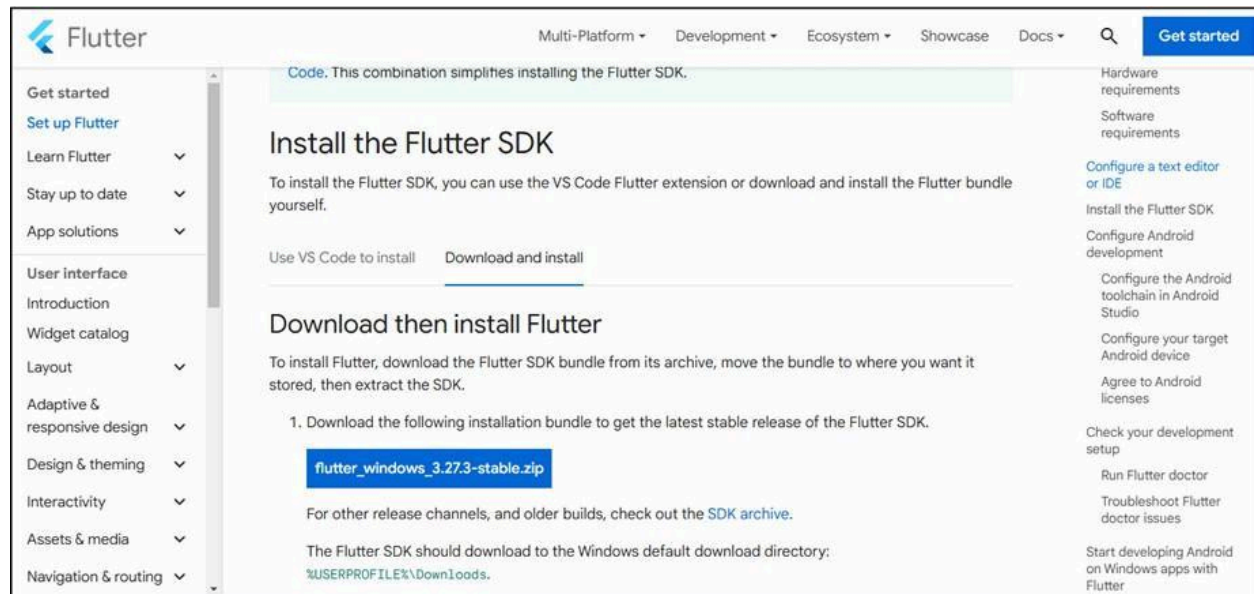
To achieve this setup, the process involves ensuring that all dependencies—such as the Flutter SDK, Android Studio, and required plugins—are appropriately installed. The configuration ensures the seamless functioning of Flutter's development and debugging capabilities. This experiment aims to familiarize developers with the essential tools and establish a robust development environment.

The underlying concepts include:

- **Flutter SDK:** A collection of tools, libraries, and documentation necessary for Flutter development.
- **Dart Programming Language:** The language used to write Flutter applications.
- **IDE Integration:** The role of Integrated Development Environments like Android Studio or Visual Studio Code in enhancing productivity.
- **Environment Variables:** Their importance in configuring tools like Flutter and ADB (Android Debug Bridge).

## Steps :





The image shows the 'Get started' page on the Flutter website. The page is divided into a left sidebar with navigation links, a main content area, and a right sidebar with additional resources. The main content area is titled 'Install the Flutter SDK' and provides instructions on how to install the SDK using VS Code or by downloading the bundle. It includes a section for 'Download then install Flutter' with a list of steps and a link to the Flutter SDK archive. The right sidebar contains links to hardware and software requirements, configuration guides, and troubleshooting resources.

Flutter

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Get started

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User interface

Introduction

Widget catalog

Layout ▾

Adaptive & responsive design ▾

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Code. This combination simplifies installing the Flutter SDK.

## 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.

Use VS Code to install [Download and install](#)

### Download then install Flutter

To install Flutter, download the Flutter SDK bundle from its archive, move the bundle to where you want it stored, then extract the SDK.

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

[flutter\\_windows\\_3.27.3-stable.zip](#)

For other release channels, and older builds, check out the [SDK archive](#).

The Flutter SDK should download to the Windows default download directory:  
`%USERPROFILE%\Downloads`.

Hardware requirements

Software requirements

[Configure a text editor or IDE](#)

Install the Flutter SDK

Configure Android development

Configure the Android toolchain in Android Studio

Configure your target Android device

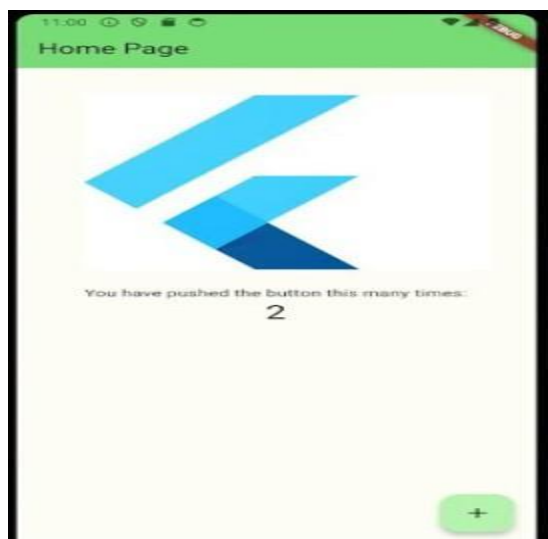
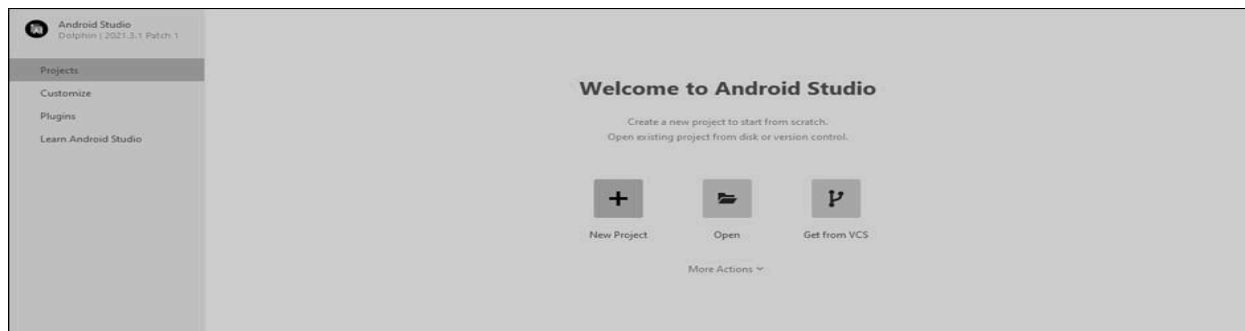
Agree to Android licenses

Check your development setup

Run Flutter doctor

Troubleshoot Flutter doctor issues

Start developing Android on Windows apps with Flutter



**Conclusion:** Thus we have successfully installed flutter and ran it to create a sample application.