Flutter Tutorial 3: Flutter Installation and Setup

Introduction

In this tutorial, we will cover the full process of **installing Flutter SDK**, **setting it up**, and using it with **Android Studio** and **VS Code**. This step-by-step guide ensures your development environment is ready for building Flutter apps.

Step 1: Download Flutter SDK

- Go to the official Flutter website and download the **Flutter SDK** zip file for your operating system.

Step 2: Extract ZIP File

- Extract the downloaded zip file to a desired location on your system, e.g., `C:\flutter`.

Step 3: Open Command Prompt and Type Flutter

- Open **Command Prompt**.
- Type `flutter` and press Enter.
- This will show Flutter commands if SDK is correctly downloaded.

Step 4: Set Flutter SDK Path in Environment Variables

- Go to **System Properties > Advanced > Environment Variables**.
- Under **User Variables**, click **New**.
- Set **Variable Name**: `FLUTTER_HOME`
- Set **Variable Value**: Path where Flutter SDK is extracted (e.g., `C:\flutter`).
- Add `C:\flutter\bin` to the **Path** variable.

Step 5: Verify Flutter Installation

- Open **Command Prompt** again and type `flutter`.
- All Flutter commands should now be recognized.

Step 6: Check Development Environment

- Run command: `flutter doctor`
- This will check if your development environment is properly set up.

Step 7: Download Android Studio

- Go to Android Studio website and download the installer.

Step 8: Download VS Code

- Go to VS Code website and download the installer for your operating system.

Step 9: Install Android Studio

- Run the Android Studio installer and follow the setup instructions.

Step 10: Verify with Flutter Doctor

- Open Command Prompt and run `flutter doctor`.
- It should list missing dependencies if any.

Step 11: Configure Android SDK in Android Studio

- Open Android Studio.
- Click on **More Options > SDK Manager**.
- Go to **SDK Tools** and make sure **Android SDK Command-line Tools** is checked.

Step 12: Verify Again with Flutter Doctor

- Run `flutter doctor` to ensure SDK is properly recognized.

Step 13: Accept Android Licenses

- Run `flutter doctor --android-licenses` in Command Prompt.
- Accept all licenses by typing `y`.

Step 14: Final Flutter Doctor Check

- Run `flutter doctor` to confirm all requirements are met.

Step 15: Create Flutter Project in Android Studio

- Open Android Studio.
- Click on **New Flutter Project**.
- Before creating, set the **Flutter SDK path** if prompted.
- After setup, you can easily create the project.

Step 16: Create Flutter Project Using Command Prompt

- Open Command Prompt.
- Navigate to the directory (e.g., `cd Desktop`).
- Run: `flutter create projectname`
- Open this project in Android Studio.

Step 17: Install Flutter and Dart Plugins in Android Studio

- Go to **File > Settings > Plugins**.
- Search for **Flutter** and **Dart**.
- Install both plugins and restart Android Studio if needed.

Step 18: Install VS Code

- Run the VS Code installer and complete the installation.

Step 19: Configure VS Code for Flutter

- Open VS Code.
- Go to **Extensions**.
- Search and install **Flutter** and **Dart** extensions.
- VS Code is now ready to develop Flutter apps.

Conclusion

After completing these steps, your system is fully configured to develop Flutter applications using both **Android Studio** and **VS Code**. You can create projects, run apps, and use all Flutter commands efficiently.

End of Flutter Tutorial 3