**Installation and Project Setup Guide for msecflutterdemo**

1. **Clone Repository**

* Open a terminal and navigate to the directory where you want to store the project.
* Use the following command to clone the repository:

git clone https://github.com/msecsys-dev/msecflutterdemo.git

* After cloning, navigate to the project directory:

cd project

1. **Install Dependencies**

**Install Flutter Dependencies**

* In the root directory of the project, run the following command to install the necessary Flutter dependencies:

flutter pub get

* This command will automatically download and install all libraries listed in the pubspec.yaml file.

**Install CocoaPods for iOS**

* Navigate to the ios directory within the project:

**cd ios**

* Open the Podfile and ensure it includes the correct configuration for Flutter
* Run the following command to install all necessary CocoaPods dependencies:

pod install

* Once completed, you’ll see a Runner.xcworkspace file in the ios directory. Navigate back to the project root:

cd ..

1. **Running the Project**

**Running on Android**

**Real Android Device**

* Connect your Android device to your computer via USB.
* Enable USB Debugging on the device.

**Android Emulator**

* Open Android Studio, go to **AVD Manager** to create and start an emulator.

**Check Connected Devices**

* To verify that the device has been successfully connected, run: **flutter devices**
* Use the following command to build and run the project on the Android device: **flutter run**

**Running on iOS (macOS only)**

**Real iOS Device**

* Connect your iPhone or iPad to your computer via USB.
* On the device, go to Settings and enable Developer Mode.

**iOS Simulator**

* Open Xcode, select **Xcode > Open Developer Tool > Simulator** to launch the iOS Simulator.

**Check Connected Devices**

* Run the following command to check connected iOS devices: **flutter devices**
* Make sure to open the project with Runner.xcworkspace (not Runner.xcodeproj) to avoid CocoaPods-related errors.
* In Xcode, go to **Runner > Signing & Capabilities** and configure the **Team** if necessary.
* Run the following command to build and run the project on iOS: **flutter run**

1. **Common Errors and Troubleshooting**

**Missing Dependencies**

If you encounter dependency-related errors, verify the pubspec.yaml file and run the following commands:

flutter pub cache repair

flutter clean

flutter pub get

Then, re-run pod install.