README

Updated Codes :-

PYTHON CODES:-

UDP.py is utilized for transmitting data via a specific UDP port and identifier, which should be stored on the **SCL** PC.

> Changes tailored to system and network settings need to be made at line 11 in Udp.py.

```
# UDP settings

UDP_IP = "ip address of ins system which is 134.32.20.102"  # Adjust if
the receiver is on a different machine

UDP_PORT = 8888  # Ensure this matches the receiver
```

> The path of the CSV file should be adjusted accordingly at line 14.

```
# Path to the CSV file

CSV_FILE = r"path of the csv file"
```

Udp_listener.py is designed to accept data from the sender and should be stored on the **INS** PC.

```
UDP_IP = "0.0.0.0"  # Listen on all available interfaces

UDP_PORT = 8888  # The port should match the one used by the sender
```

DART CODES:-

Modifications are now required in the **service_handler.dart** file, which constitutes the Flutter GUI code.

File-location of service_handler.dart :-
C:\Users\sclsy\OneDrive\Desktop\Flightgear\fgconfig-refactor**simulator\lib\utils\service_handler.dart**

Can find the below code at **line no. 25** . Just add runPythonScript() below **"** Future<void> runFlightGear(FGArgs args) async { **"**

```dart
Future<void> runFlightGear(FGArgs args) async {

   runPythonScript();

   try {

     String fgfsPath;

     if (Platform.isWindows) {

       fgfsPath = r'C:\Program Files\FlightGear 2020.3\bin\fgfs.exe';

     } else if (Platform.isMacOS) {

       fgfsPath = '/Applications/FlightGear.app/Contents/MacOS/fgfs';

     } else {

       throw Exception('Unsupported operating system');

     }
```

Insert the provided code snippet at **line 60** in service_handler.dart to enable integration of the Python code with Flutter, allowing the Python program to execute upon clicking the launch button.

```dart
// To Run Python Program

Future<void> runPythonScript() async {

   final result = await Process.run(

       r'C:\Users\sclsy\Programs\Python\Python312\python.exe',

       [r'C:\Users\sclsy\OneDrive\Desktop\udp.py']);
```

```
    int pid = result.pid;

    print('Process ID (PID): $pid');

    print('Exit code: ${result.exitCode}');

    print('Stdout: ${result.stdout}');

    print('Stderr: ${result.stderr}');

    // Update state to indicate FG-1 is not running

}
```

In this two part mentioned below
Part 1:-
    r'C:\Users\sclsy\Programs\Python\Python312**python.exe**'

Python.exe should pe present.

Need to change this according to your system and follow the steps 1,2,3 .