Main operations

Configuration

ConfigureDevice
- perform a operation responsible for sensor configuration, which provides a simple wizard

DecodeDataFrame
- extract a new recording from the character stream

DecodeNumericFrame
- extract a new decimal value from the hexadimal character stream

Measurements

GetPackets
- perform an operation which is responsible for downloading all new recordings from the device

JSONToSensorConfig
- convert a JSON stream to SensorConfiguration data being processed by the application

SensorConfigToJSON
- convert to a JSON stream from the SensorConfiguration data processed by the application

GUI update

EnqueueGUIUpdate
- add new GUI operation to the queue

EnqueueGUIMultipleUpdate
- add new GUI operations to the queue

DequeueGUIUpdate
- get GUI operation and perform it as soon as possible

Serial communication

ConfigureDevice
- prepare a Virtual COM port in order to establish a serial communication

GetAvailableFTDIDevices
- get available FTDI devices' names which are connected to the PC

ProcessRequest
- perform the selected operation of a serial port (e.g. transmit & receive)

File operations

ExportPacket
- export selected recording using a one of popular text formats (CSV, JSON)

TakeGraphsScreenshot
- save a PNG file using graphical representation of selected IMU data recordings

SavePackets
- save the current list of recordings to a binary file

LoadPackets
- load (and append if necessary) a file which consists of recordings saved in a binary format