ER Inertial Sensor Data Plotter

Added the source code to the GDrive share folder qt-er9plot-master

1. Imports a .csv data file
2. The project plots 10 channels of data and calculates a fixed sample time

Ax, Ay, Az, T, Gx,Gy,Gz, Mx,My,Mz (16 bit 2s complement)

We discussed adding a key(uints) to the plots

Sec, g, celcius, degrees/sec, uTesla

New data format has 32 bit Epoch time in the .csv

New data format does not have MX,My,Mz

But will soon

1. The project also exports the parsed and scaled data into a .csv file

The scalars for Ax,y,z, T, Gx,y,z should be located within the Qt source code

Added the New data format into the share directory inside data (newFormat.csv)

The new format has the time stamp in the first column and is 32 Epoch time

Year, month,day,hr,min,sec,ms

New format is less the Mx,My,Mz

Addendum April 16th

The negative representation of the data is inaccurate.

The data is formatted as a 16 bit number with the 15th bit the signed information

16 bit 2s compliment format

Signed value = (-1)(15th bit)(2^15) + (14h bit)(2^114) + … (1 st bit)(2^1) + (0th bit)(2^0)

A zoom feature would be nice

The date and time when exporting the scaled values needs to incorporate the millisecond value. It might be nice if only new values were printed, so printing the month day and year every line would not be necessary until there is a change, that could be implemented all the way down to the milliseconds as they should never be the same. Just a thought.

I have also added the parse.cpp, I think it is just c language, to show the way I have done conversion of the data.