MoteSense

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Chapter 1

Class Index

1.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

DataPlot	
GraphWindow	
MainWindow	
MotePacket	
MoteReading	1
packetHandler	1
Ui_MainWindow	1:
Ui::MainWindow	

2 Class Index

Chapter 2

Class Index

2.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

DataPlot			 																			
GraphWindow .			 																			
Ui::MainWindow			 																			9
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MoteReading			 																			12
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Ui MainWindow			 																			1.5

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Chapter 3

Class Documentation

3.1 DataPlot Class Reference

Public Slots

- void setTimerInterval (double interval)
- void setRange (double range)
- void setMinRange (double range)
- void newReading (MoteReading r)
- void disconnected ()

Public Member Functions

- DataPlot (QWidget *=NULL)

 Default constructor.
- void setId (int i)
- void setSource (packetHandler *p)

Protected Member Functions

• virtual void timerEvent (QTimerEvent *e)

3.1.1 Member Function Documentation

3.1.1.1 void DataPlot::disconnected () [slot]

Slot for notifying the datagraph that it's been disconnected from the packet source

3.1.1.2 void DataPlot::newReading (MoteReading r) [slot]

Slot for informing the graph of a new reading

Parameters

MoteReading r

3.1.1.3 void DataPlot::setId (int i) [inline]

Sets the dataGraph's id. Used to demultiplex mote readings.

Parameters

i

Returns

void

3.1.1.4 void DataPlot::setMinRange (double range) [slot]

Slot for setting the lower range of the graph

Parameters

double range

3.1.1.5 void DataPlot::setRange (double range) [slot]

Slot for setting the upper range of the graph

Parameters

double range

3.1.1.6 void DataPlot::setSource (packetHandler * p) [inline]

Mutator for packetHander Use this to set the packetHandler (server) for this plot

Parameters

packetHandler* p

3.1.1.7 void DataPlot::setTimerInterval (double interval) [slot]

Slot for changing the timer frequency

Parameters

double interval

3.1.1.8 void DataPlot::timerEvent (QTimerEvent * e) [protected, virtual]

Timer event function

- data_plot.h
- data_plot.cpp

3.2 GraphWindow Class Reference

Public Member Functions

• void **setSource** (packetHandler *p)

- graphwindow.h
- graphwindow.cpp

3.3 Ui::MainWindow Class Reference

Inheritance diagram for Ui::MainWindow:



The documentation for this class was generated from the following file:

• ui_mainwindow.h

3.4 MainWindow Class Reference

Public Slots

• void nodeChange ()

Public Member Functions

• MainWindow (QWidget *parent=0)

Protected Member Functions

• void changeEvent (QEvent *e)

Part of Qt Generated code.

- mainwindow.h
- · mainwindow.cpp

3.5 MotePacket Class Reference

- motepacket.h
- motepacket.cpp

3.6 MoteReading Class Reference

Public Member Functions

- MoteReading (int id, int mgx, int mgy, int accx, int accy, int temp, int ir, int mic, int vl)
- int getId ()
- int getMgx ()
- int getMgy ()
- int getAccy ()
- int getAccx ()
- int getTemp ()
- int getIr ()
- int getMic ()
- int **getVl** ()
- void **setId** (int i)
- QString toString ()

- · motereading.h
- motereading.cpp

3.7 packetHandler Class Reference

Public Slots

• void connected ()

Slot for when a connection is established. This also initializes communication with the serial forwarder.

• void disconnected ()

Slot for when we are disconnected from the serial forwarder.

• void dataReady ()

Slot for when there is new data ready from the serial forwarder.

Signals

• void nodesChanged ()

Signal emitted when a new node is detected.

• void disconnectNotice ()

Signal emitted when disconnected from the serial forwarder.

Public Member Functions

• packetHandler ()

Default constructor.

- QList< int > getNodeList ()
- MoteReading getReading (int i)

3.7.1 Member Function Documentation

3.7.1.1 QList< int > packetHandler::getNodeList ()

Function to return the list of nodes from which we have received packets.

Returns

QList<int>

3.7.1.2 MoteReading packetHandler::getReading (int i)

Function to get the most recent reading for node i

Parameters

int

Returns

MoteReading

- packethandler.h
- moc_packethandler.cpp
- packethandler.cpp

3.8 Ui_MainWindow Class Reference

Inheritance diagram for Ui_MainWindow:



Public Member Functions

- void setupUi (QMainWindow *MainWindow)
- void retranslateUi (QMainWindow *MainWindow)

Public Attributes

- QWidget * centralWidget
- QListWidget * nodeList
- QPushButton * plotButton
- QLabel * label
- QMenuBar * menuBar
- $\bullet \ \ QToolBar * \textbf{mainToolBar} \\$
- QStatusBar * statusBar

The documentation for this class was generated from the following file:

• ui_mainwindow.h

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