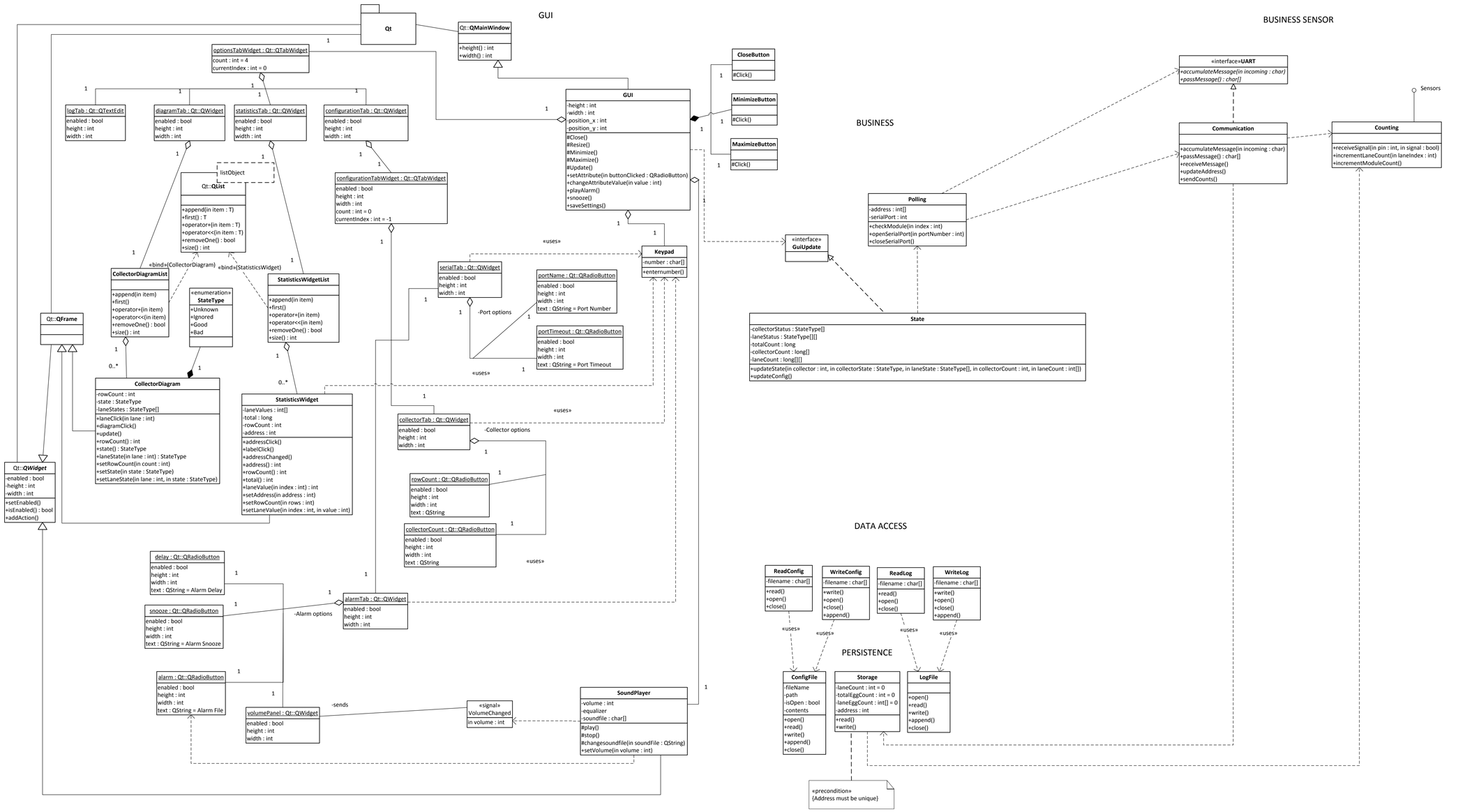
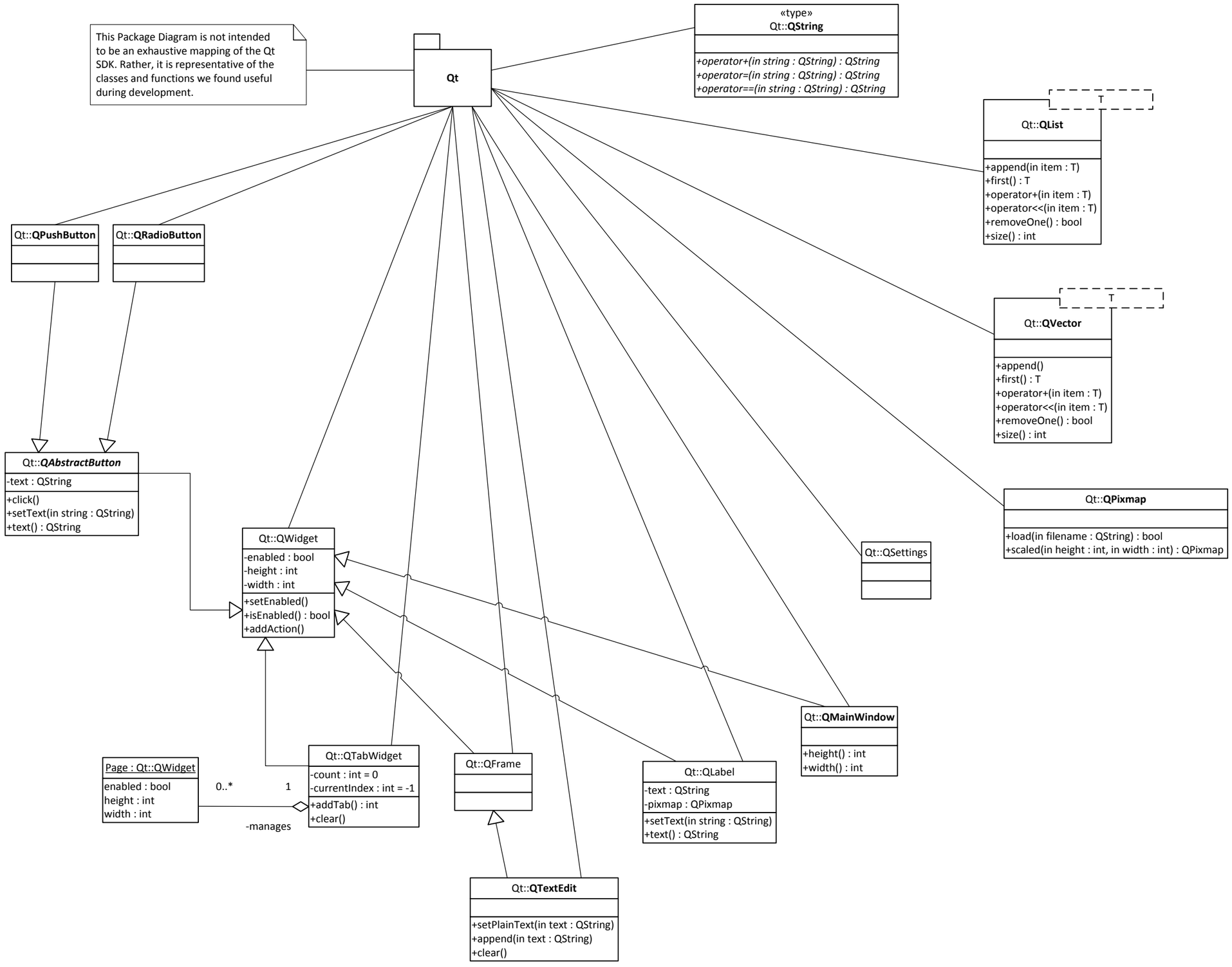

GUI
BUSINESS SENSOR
BUSINESS
DATA ACCESS
PERSISTENCE
Qt
Qt::QMainWindow
+height() : int
+width() : int
optionsTabWidget : Qt::QTabWidget
count : int = 4
currentIndex : int = 0
logTab : Qt::QTextEdit
enabled : bool
height : int
width : int
diagramTab : Qt::QWidget
statisticsTab : Qt::QWidget
configurationTab : Qt::QWidget
listObject
Qt::QList
+append(in item : T)
+first() : T
+operator+(in item : T)
+operator<<(in item : T)
+removeOne() : bool
+size() : int
configurationTabWidget : Qt::QTabWidget
count : int = 0
currentIndex : int = -1
GUI
-height : int
-width : int
-position_x : int
-position_y : int
#Close()
#Resize()
#Minimize()
#Maximize()
#UUpdate()
+setAttribute(in buttonClicked : QRadioButton)
+changeAttributeValue(in value : int)
+playAlarm()
+snooze()
+saveSettings()
CloseButton
#Click()
MinimizeButton
#Click()
MaximizeButton
#Click()
«interface»UART
+accumulateMessage(in incoming : char)
+passMessage() : char[]
Sensors
Communication
+accumulateMessage(in incoming : char)
+passMessage() : char[]
+receiveMessage()
+updateAddress()
+sendCounts()
Counting
+receiveSignal(in pin : int, in signal : bool)
+incrementLaneCount(in laneIndex : int)
+incrementModuleCount()
Polling
-address : int[]
-serialPort : int
+checkModule(in index : int)
+openSerialPort(in portNumber : int)
+closeSerialPort()
«interface»
GuiUpdate
State
-collectorStatus : StateType[]
-laneStatus : StateType[][]
-totalCount : long
-collectorCount : long[]
-laneCount : long[][]
+updateState(in collector : int, in collectorState : StateType, in laneState : StateType[], in collectorCount : int, in laneCount : int[])
+updateConfig()
«bind»(CollectorDiagram)
«bind»(StatisticsWidget)
CollectorDiagramList
+append(in item)
+first()
+operator+(in item)
+operator<<(in item)
+removeOne() : bool
+size() : int
«enumeration»
StateType
+Unknown
+Ignored
+Good
+Bad
StatisticsWidgetList
+append(in item)
+first()
+operator+(in item)
+operator<<(in item)
+removeOne() : bool
+size() : int
Qt::QFrame
CollectorDiagram
-rowCount : int
-state : StateType
-laneStates : StateType[]
+laneClick(in lane : int)
+diagramClick()
+update()
+rowCount() : int
+state() : StateType
+laneState(in lane : int) : StateType
+setRowCount(in count : int)
+setState(in state : StateType)
+setLaneState(in lane : int, in state : StateType)
StatisticsWidget
-laneValues : int[]
-total : long
-rowCount : int
-address : int
+addressClick()
+labelClick()
+addressChanged()
+address() : int
+rowCount() : int
+total() : int
+laneValue(in index : int) : int
+setAddress(in address : int)
+setRowCount(in rows : int)
+setLaneValue(in index : int, in value : int)
Qt::QWidget
-enabled : bool
-height : int
-width : int
+setEnabled()
+isEnabled() : bool
+addAction()
Keypad
-number : char[]
+enternumber()
«uses»
serialTab : Qt::QWidget
enabled : bool
height : int
width : int
-Port options
portName : Qt::QRadioButton
enabled : bool
height : int
width : int
text : QString = Port Number
portTimeout : Qt::QRadioButton
enabled : bool
height : int
width : int
text : QString = Port Timeout
collectorTab : Qt::QWidget
enabled : bool
height : int
width : int
-Collector options
rowCount : Qt::QRadioButton
enabled : bool
height : int
width : int
text : QString
collectorCount : Qt::QRadioButton
enabled : bool
height : int
width : int
text : QString
delay : Qt::QRadioButton
enabled : bool
height : int
width : int
text : QString = Alarm Delay
snooze : Qt::QRadioButton
enabled : bool
height : int
width : int
text : QString = Alarm Snooze
-Alarm options
alarmTab : Qt::QWidget
enabled : bool
height : int
width : int
alarm : Qt::QRadioButton
enabled : bool
height : int
width : int
text : QString = Alarm File
volumePanel : Qt::QWidget
enabled : bool
height : int
width : int
-sends
«signal»
VolumeChanged
in volume : int
SoundPlayer
-volume : int
-equalizer
-soundfile : char[]
#play()
#stop()
#changesoundfile(in soundFile : QString)
+setVolume(in volume : int)
ReadConfig
-filename : char[]
+read()
+open()
+close()
WriteConfig
-filename : char[]
+write()
+open()
+close()
+append()
ReadLog
-filename : char[]
+read()
+open()
+close()
WriteLog
-filename : char[]
+write()
+open()
+close()
+append()
ConfigFile
-fileName
-path
-isOpen : bool
-contents
+open()
+read()
+write()
+append()
+close()
Storage
-laneCount : int = 0
-totalEggCount : int = 0
-laneEggCount : int[] = 0
-address : int
+read()
+write()
LogFile
+open()
+read()
+write()
+append()
+close()
«precondition»
{Address must be unique}


This Package Diagram is not intended to be an exhaustive mapping of the Qt SDK. Rather, it is representative of the classes and functions we found useful during development.
Qt
«type»
Qt::QString
+operator+(in string : QString) : QString
+operator=(in string : QString) : QString
+operator==(in string : QString) : QString
T
Qt::QList
+append(in item : T)
+first() : T
+operator+(in item : T)
+operator<<(in item : T)
+removeOne() : bool
+size() : int
T
Qt::QVector
+append()
+first() : T
+operator+(in item : T)
+operator<<(in item : T)
+removeOne() : bool
+size() : int
Qt::QPixmap
+load(in filename : QString) : bool
+scaled(in height : int, in width : int) : QPixmap
Qt::QSettings
Qt::QPushButton
Qt::QRadioButton
Qt::QAbstractButton
-text : QString
+click()
+setText(in string : QString)
+text() : QString
Qt::QWidget
-enabled : bool
-height : int
-width : int
+setEnabled()
+isEnabled() : bool
+addAction()
Qt::QMainWindow
+height() : int
+width() : int
Page : Qt::QWidget
enabled : bool
height : int
width : int
0..*
1
-manages
Qt::QTabWidget
-count : int = 0
-currentIndex : int = -1
+addTab() : int
+clear()
Qt::QFrame
Qt::QLabel
-text : QString
-pixmap : QPixmap
+setText(in string : QString)
+text() : QString
Qt::QTextEdit
+setPlainText(in text : QString)
+append(in text : QString)
+clear()