## **Device**

int: batterybool: operational

- bool: shockable

- int: state

- QTimer: \*battery\_timer QTimer: \*init\_timer

- QTimer: \*rhythm\_analysis\_timer

- patient: \*myPatient

+void get patient status()

+int get\_battery\_capacity()

+void shock()

+void display\_device\_status() +void detect\_rhythm()

+void workflow()

+void display bad CPR feedback()

+void display\_good\_CPR\_feedback()

+void display\_bad\_electrode() +void display\_good\_electrode()

+void init\_sequence()

+void battery\_decrease()

+void heart\_rhythm\_analysis(int heartRate)

+void shut\_down()

<<friend class>> MainWindow

<<signals>> void text\_prompt\_update(const QString &str)

<<signals>> void text CPR update(const QString &str)

<<signals>> void text\_status\_update(const QString &str)

<<signals>> void signal shock()

<<signals>> void battery\_changed()

<<signals>> void image\_timer\_statr()

<<signals>> void image\_timer\_stop()
<<signals>> void battery\_label\_clear()
<<signals>> void image\_clear()

<<signals>> void image\_select()

## QMainWindow

- Ui::MainWindow \*ui

- device \*myDevice

- QPixmap: myPixmap

- QTimer: \*timer

- int: startingX

- int: startingY

- int: cur\_length - int: cur\_height

- int: max\_length

- int: max height

- int: origin length

+ void update\_text\_prompt(const QString &text)

+ void update\_text\_CPR(const QString &text)

+ void update text status(const QString &text)

+ void update\_battery\_label()

+ void battery shut down()

+ void update image()

+ void timer\_start()

+ void timer\_stop()

+ void image\_stop()
+ void input\_patient()

+ void vf\_true\_input()

+ void vf false input()

+ void select\_image()

## **Patient**

- bool: vf

- int: heart rate

- bool: shocked

+ void set status()

+ int: get\_heart\_rate()

+ bool: get\_vf()
+ bool: get\_shock\_status()
+ void set\_heart\_rate(int)

+ void set\_vf(bool)

<<signals>> void signal shocked()

<<signals>> void signal\_heart\_rate(int heart\_rate)

<<signals>> void signal\_vf(bool vf)