## **Device**

- int: battery
- bool: operational
- bool: shockable
- int: state
- int: counter chest
- int: counter\_breath

- 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()
- +void cpr\_analysis(int chest,int breath)
- +void on press breath()
- +void on\_press\_chest()
- <<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)