mainwindow
+ bool flag
- **UI::MainWindow *ui**   - Device* device   - int selectedSession   - int selectedGroup   - int connectionIntensity   - int timesIntensityAdjusted   - bool endSessionEarlyFlag   - QElapsedTimer blinkTimer   - QElapsedTimer powerPressedTimer   - QElapsedTimer selectTimer   - QElapsedTimer pauseTimer   - QElapsedTimer therapyTimer   - QElapsedTimer timeoutTimer

- therapy(int groupNum, int sessionNum, int recordingFlag, int overrideIntensity)
- connectionTest()
- addRecording(const string& name, int group, int batteryPercent, int initialIntensity, int intensity)
- replayRecording(Recording* recording)

- changeTextColor(QTextBrowser *text, QColor color)
- changeBackgroundColor(QPushButton *button, const QString& color, const QString& image, const QString& radius)
- bootConnectionTest()
- blinkSession(int sessionNum)
- cycleGroupButton()
- turnOffUI()
- softOff()
- updateIntensityLog()
- displayIntensityOnGraph()
- powerLightOnOff(bool status)
- endSessionEarly()

- ui_initializeBattery()
- ui_turnOffBattery()

- blinkBattery()
- drainBattery(int intensity)
- checkBattery(): bool
- batteryWarning()

- sleepy(int sleepTime)

Device

- string deviceName

- Battery* battery
- Button* powerButton
- Button* upArrowButton
- Button* downArrowButton
- Button* selectButton

- Light* powerLight

- Group* groupTypes[3]
- Session* sessionTypes[3][4]
- User* users[5]
- Recording* recordings[100]

- int currentIntensity
- int numUsers
- int numRecordings

- bool isPowered
- bool isSoftPowered
- bool inSession
- bool firstBoot
- bool timeout
- bool recordingFlag

+ Device(const string& name)
+ ~Device()

+ *WidgetChanged(Widget*, const string& widgetName)*

+ powerOn()
+ setSoftPower(bool value)
+ powerOff()
+ addUser(const string& name, int intensity): int
+ addRecording(const string& name, int intensity, int initialIntensity, int group, int batteryPercent, int connection): int

Recording

- string name
- int intensity
- int initialIntensity
- int group
- int connection
- double batteryPercent

User

- string name
- int duration

Group

- string groupName
- int lengthMS

Light

- string lightName
- bool isLightOn

Button

- string buttonName

+ pressed()

Battery

- double batteryLevel
- bool blinkFlag

Session

- string sessionName
- int intensity

```
                         ┌─────────────────────────────────────┐
                         │              Widget                 │
                         ├─────────────────────────────────────┤
                         │ - DeviceMediator* device            │
                         ├─────────────────────────────────────┤
                         │ + changed(const string& widgetName) │
                         └─────────────────────────────────────┘
                                          △
                                          │
          ┌──────────────────────────────────────────────────────┐
          │                    DeviceMediator                     │
          ├──────────────────────────────────────────────────────┤
          ├──────────────────────────────────────────────────────┤
          │ + WidgetChanged(Widget*, const string& widgetName)    │
          └──────────────────────────────────────────────────────┘
```