## MainWindow - ui: MainWindow - aed: AEDSimulator - user: User - patient: Patient - \*timer: QTimer - time\_seconds: int - \*ledIndicatorTimer: QTimer led\_indicator\_counter: int - analyzing\_led\_indicator\_counter: int - pads\_applied\_led\_indicator\_counter: int - shock\_advised\_counter: int - expected\_shock\_counter: int - stage: int - cpr\_counter: int - compression\_strength\_counter: int - stop\_cpr\_counter: int - shock\_or\_CPR: QTimer + on\_power\_button\_released(): void + on\_shock\_button\_released(): void + on\_defib\_pads\_button\_released(): void + on\_VF\_button\_released(): void + on\_VT\_button\_released(): void + on\_PEA\_button\_released(): void + on\_asystole\_button\_released(): void + elapsed\_time(): void + led\_indicator\_lights(): void + on\_apply\_compression\_button\_released(): void + on\_replace\_battery\_button\_released(): void + on\_detach\_pads\_released(): void AEDSimulator(Machine) battery\_percent: int - display\_message: string - audio : string power\_switch: bool - shockCount: int + power():bool + performSelfTest(): bool + analyzeHeartRhythm(Qstring): bool + evaluateCPRQuality(int): Qstring + getBatteryPercent(): int + setBatteryPercent(int): void + replaceBattery(): void + getShockCount(): int + setShockCount(int): void + increaseShockCount(): void + getPowerSwitch(): int

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User

- compressionStrength: int

+ getPadsApplied(): bool

+ setPadsApplied(bool): int

+ getCompressionStrength(): int

+ setCompressionStrength(int): void

- padsApplied: bool

**Patient** 

- cprCount: int

- heartCondition: Qstring

+ getCPRCount(): int

+ setCPRCount(int): void

+ getHeartCondition(): Qstring

+ setHeartCondition(QString): void