Task Scheduler

every 200 mS

- check (+/-) buttons for activation

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- update set point temperature accordingly

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- update heat activation status to 1 for set point temperature > room temperature, or to 0 otherwise

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- update LED to on if heat status is 1, or to off otherwise

every 500 mS

- check embedded system temperature sensor

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- update room temperature

every 1 Second interval

- Calculate current activation time

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- transmit room temperature, set point temperature, heat activation status, and seconds since last system rest to server