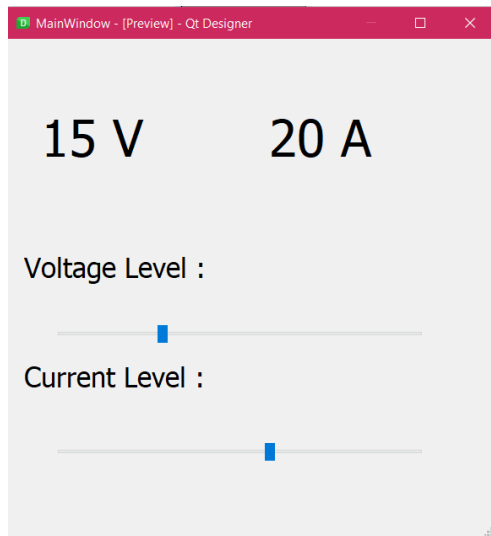


Project Idea 1

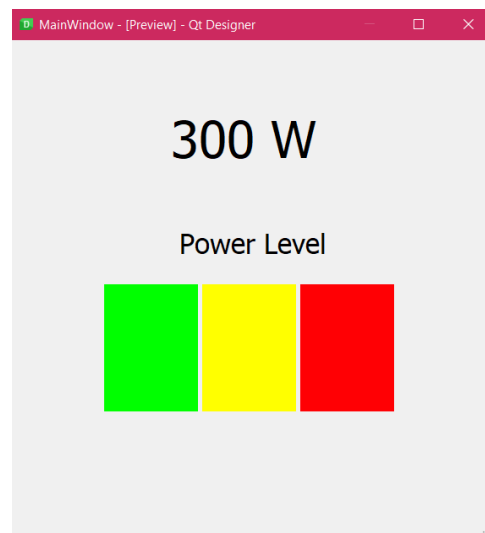
Sensor value reading and monitoring simulation

UI specification :

Tkinter Window 1 :



Tkinter window 2 :



Requirements :

1) the first window has the following elements :

- Two labels for showing current and voltage values
- Two Sliders which can be used to input voltage and current values from user

2) The second window has the following elements :

- One label for showing the calculated power value
- Three labels with colors red, green and yellow indicating level of power
- Safe , moderate and danger

3) The current and voltage values are got from user by the slider element (current 0-100 A , voltage 0-500 V)

4) The values in the slider must be shown in the corresponding labels of the first window

5) Then the values of the first window must be sent to the second window (use a flask route)

6) then the second window must show the power value calculated using ($P=V \times I$)

7) after that the values of indicator must change colors based on Power value calculate (ie 0-100 => safe , 100-1000 => moderate etc , use your own range but ensure the indicator actually works)

8) you can also do something more like add a new sensor slider or transfer text through to second window or play sounds when danger is reached

9) Discuss as a team and plan the structure carefully , you might be adding more features to this project on the way

10) you can also try the same in react and other frontends, just make sure the Ui looks the same as described

PS : this is not a homework 🤖🤖 just try to do it on your own so that YOU will gain skills , but don't hesitate to ask help if you're completely stuck.

TIME ALLOTTED : 1 week +/- 2 days