```
1 from kivy.uix.popup import Popup
 2 from kivy.uix.label import Label
 3 from kivy_garden.graph import LinePlot
 4 from kivy.uix.boxlayout import BoxLayout
 5
 6
 7 class ModbusPopup(Popup):
 8
 9
       Popup da configuração do protocolo MODBUS
10
11
       _info_lb = None
       def __init__(self, server_ip, server_port, **kwargs):
12
13
14
           Construtor da classe ModbusPopup
15
16
           super().__init__(**kwargs)
           self.ids.txt ip.text = str(server ip)
17
           self.ids.txt_porta.text = str(server_port)
18
19
       def setInfo(self, message):
20
           self._info_lb = Label(text=message)
21
           self.ids.layout.add_widget(self._info_lb)
22
23
       def clearInfo(self):
24
25
           if self._info_lb is not None:
                self.ids.layout.remove widget(self. info lb)
26
27
28
29
30
31 class ScanPopup(Popup):
32
33
       Popup da configuração do tempo de varredura
34
35
       def __init__(self, scantime, **kwargs):
36
37
           Construtor da classe ScanPopup
38
39
           super().__init__(**kwargs)
40
           self.ids.txt st.text = str(scantime)
41
42
43 class DataGraphPopup(Popup):
       def __init__(self,xmax, plot_color,**kwargs):
44
           super().__init__(**kwargs)
45
           self.plot = LinePlot(line_width=1.5, color=plot_color)
46
           self.ids.graph.add_plot(self.plot)
47
           self.ids.graph.xmax = xmax
48
49
50 class LabeledCheckBoxDataGraph(BoxLayout):
51
       pass
52
53
54 class HistGraphPopup(Popup):
       def __init__(self,**kwargs):
55
           super().__init__()
56
```

```
for key,value in kwargs.get('tags').items():
57
58
              cb = LabeledCheckBoxHistGraph()
               cb.ids.label.text = key
59
              cb.ids.label.color = value['color']
60
              cb.id = key
61
              self.ids.sensores.add_widget(cb)
62
63
64
65 class LabeledCheckBoxHistGraph(BoxLayout):
66
       pass
```

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