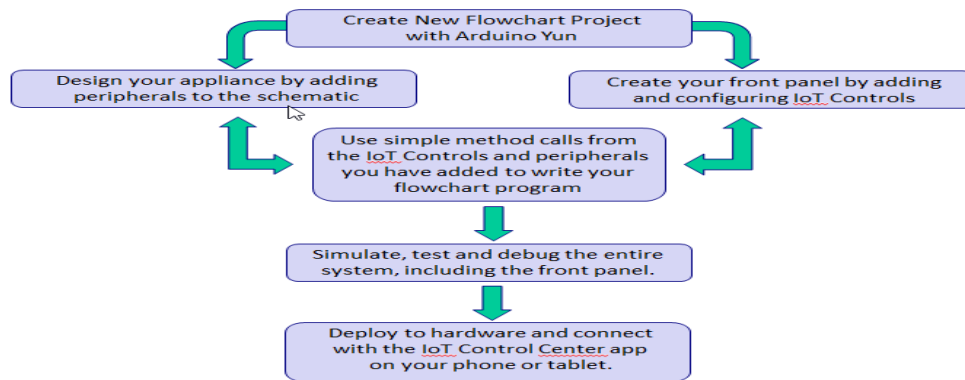


Projects Arduino using Proteus IoT builder



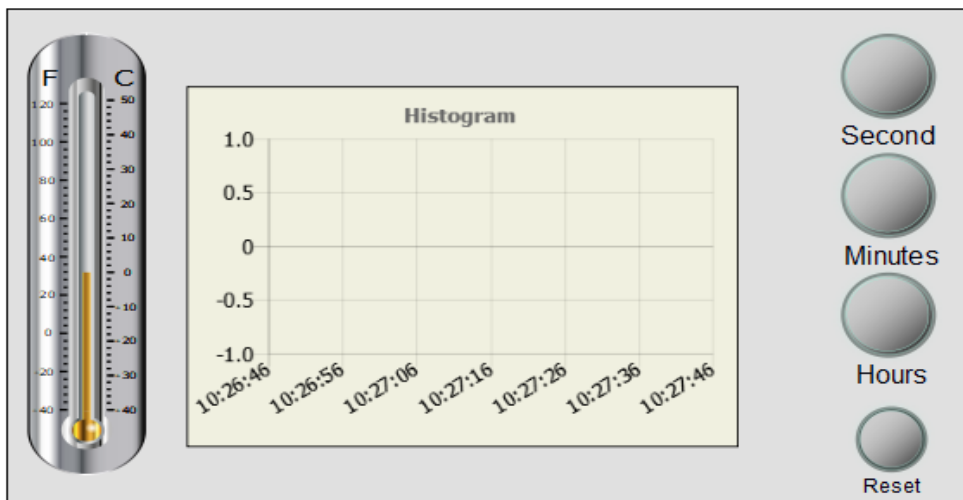
Thermometer application

First step

Create new flowchart with Arduino Yun.

Second step:

- Add the temperature sensor peripheral (from Grove category)
- Design Front Panel for thermometer application



Add the following IoT controls:

1. A Mercury thermometer -40 to 50 Celsius (from category Display Controls)
2. A line chart with time x-axis (from chart controls category)
3. Radio buttons (round) with three elements (from Button category > Generic)
4. Push-button (from Button category > Generic)
5. AlertBox control (from Text Controls category > Generic)

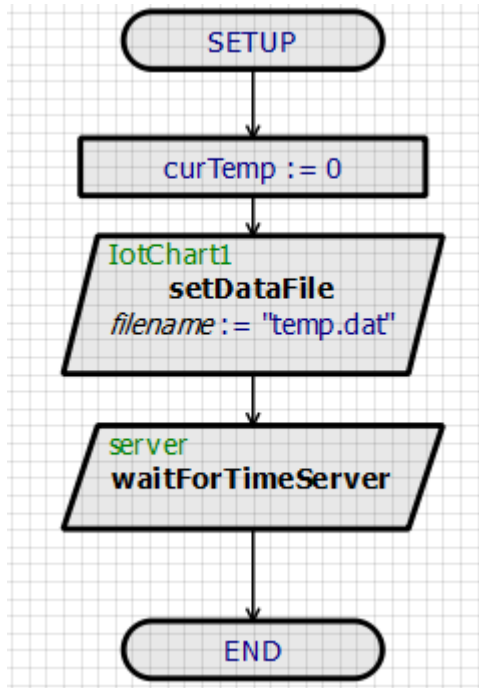
Notes:

- Giving the chart a title (Histogram) and, since there will be but one dataset, we can remove the legend.
- Change label for Push-button to be reset and rename to OnIotBtn2Reset.
- For Radio buttons:
 - Rename name to IotBtn3Group
 - Change the property direction from left-right to top-bottom.
 - Enter the labels as a comma separated list beside the buttonLabels property.
 - The spacing property under element replication and set this to 30.
 - Set them to be width 60 and the height (of all three buttons) to be 225.

Third step:

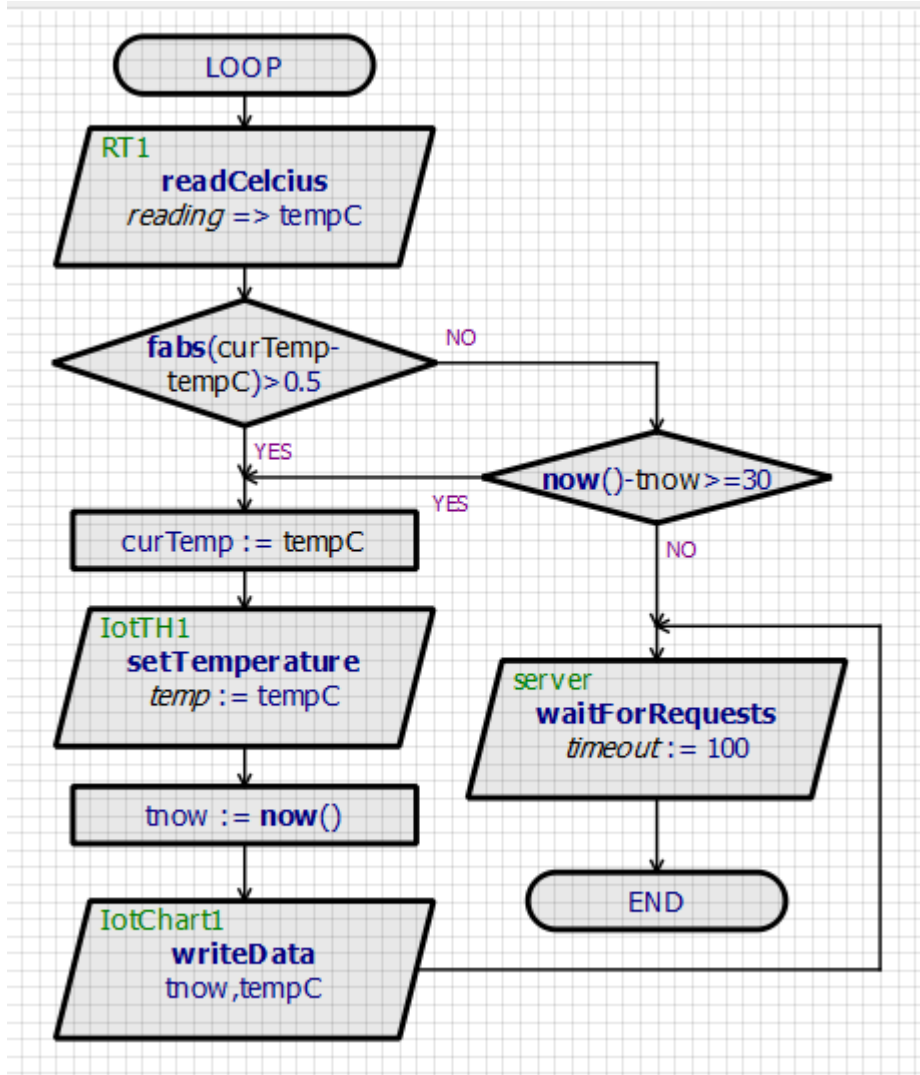
- Create the structure of the program (follow chart)
- Will contains 5 basic routines/functions so drag Push-button, Radio buttons, and AlertBox control event.
 1. Loop
 2. Setup
 3. OnIotBtn3Group
 4. OnIotBtn2Reset
 5. OnIotAlert1
- Create 4 variables: curTime (float), tempC(float), range (int), and tnow(time).

Setup



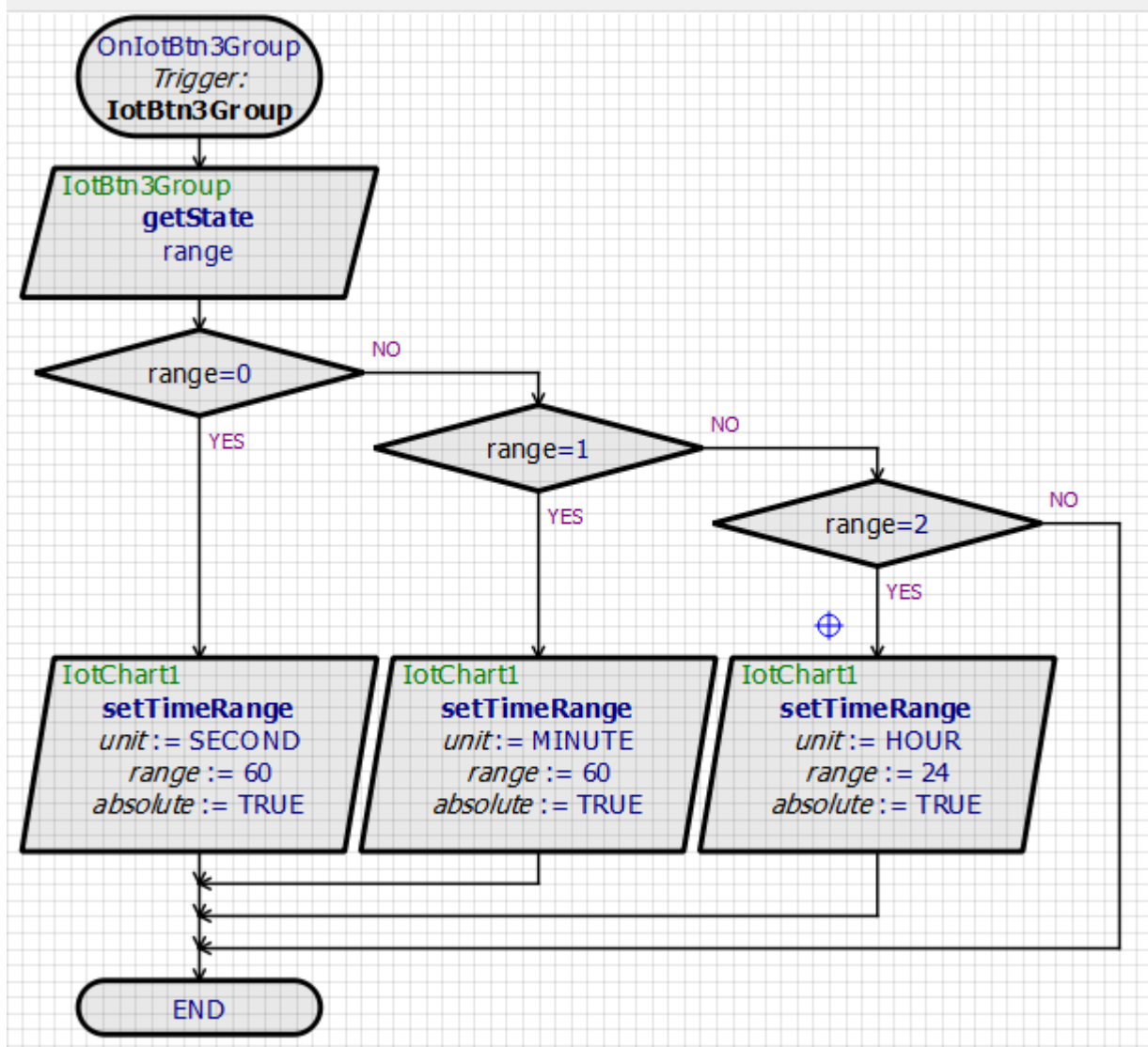
Loop

0



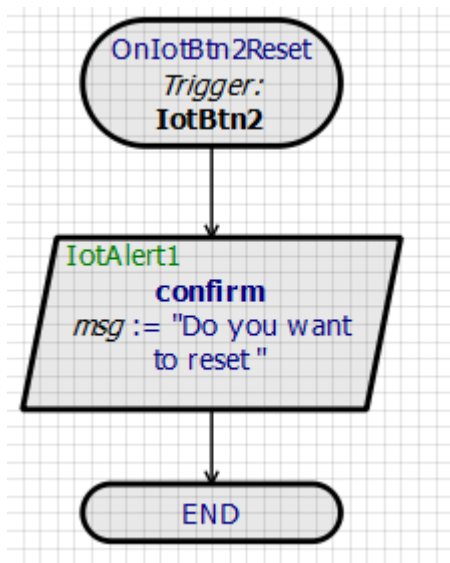
OnIotBtn3Group

0



OnIotBtn2Reset

0



OnIotAlert1

0

