**1. Starting the System**

After turning on the device, the system starts automatically and opens the graphical interface (GUI). It shows:

* Temperature in a box with a thermometer icon
* Humidity in a box with a droplet (goutte d’eau) icon
* Cooler lid status in a box with a door icon

If everything is within normal limits:

* The text and visuals use neutral or green tones
* An LED turns on when both temperature and humidity are in their ideal range

If values are outside the thresholds:

* The red alert label displays messages like:
  + "TEMPERATURE TOO HIGH" (if temperature exceeds the max)
  + "TEMPERATURE TOO LOW" (if it drops below the minimum)
  + "Temperature is normal." (if it stays within range)

If the cooler lid opens, the interface updates:

* The middle label changes from “Cooler lid is closed” to “Cooler lid is open”
* The icon switches from a checkmark to a bell (to signal that the buzzer is making a sound

**2. Setting Thresholds**

Click the "Set Thresholds" button to open the threshold settings popup.

You can adjust:

* Maximum temperature (°C)
* Minimum temperature
* Maximum humidity (%)
* Minimum humidity

Click Apply to save. The system will now alert you if these values are exceeded. These settings are saved even after reboot.

**3. Manual Cool Mode**

Click the "Manual Cool Mode" button to activate the simulated cooling mode.

* The LED turns on for 5 seconds
* A green label confirms the manual mode is active

**4. Changing the Language**

Click "Language: FR / EN" to toggle between English and French.

* All interface messages and labels update instantly to the selected language

**5. Controlling the System from Terminal**

To stop, start, or restart the application manually, use the following commands in a terminal:

To stop the app:  
sudo systemctl stop cooler.service

To start it again:  
sudo systemctl start cooler.service

To restart it:  
sudo systemctl restart cooler.service

**Conclusion**

This IoT system helps monitor your cooler's temperature, humidity, and lid status in real time. With clear visual alerts and simple controls, you can keep food and drinks fresh during barbecues or outdoor events. The use of real sensors and actuators makes this an ideal project for learning and applying smart monitoring in a fun and useful way.