# ClimaCautions Stay Prepared

"Experience a smarter way to tackle the weather with ClimaCautions. Our project is your daily weather companion, offering real-time forecasts and personalized precautions. No more unexpected rain showers or sunburns. ClimaCautions keeps you ahead of the weather, ensuring you step out prepared and confident. Embrace each day with ClimaCautions by your side, your trusted partner in weather wisdom."

- arnavsharma2807
- February 20, 2024
- ClimaCautions. Stay Prepared



"Imagine you wake up to a beautiful morning, but you're not sure what to expect from the weather today. You have a busy day ahead, and it's crucial to be prepared. That's where ClimaCautions comes to your rescue.

Before stepping out, you check the ClimaCautions app on your phone. It provides you with a concise weather forecast for the day, complete with temperature, humidity, and precipitation predictions. But it doesn't stop there. ClimaCautions also offers tailored precautions based on today's weather conditions.

Today's forecast shows a high chance of rain in the afternoon. ClimaCautions advises you to grab your umbrella and a waterproof jacket. It also suggests wearing comfortable shoes for potential puddles.

As the day progresses, you receive timely reminders from ClimaCautions about the changing weather conditions. When the rain starts, you're ready, and your day goes smoothly despite the unexpected downpour.

With ClimaCautions, you stay ahead of the weather, allowing you to make informed decisions and adapt to whatever Mother Nature throws your way. It's like having a personal weather advisor in your pocket, ensuring you're always weather-ready."

ClimaCautions keeps you informed and helps you take the right precautions to make your day more comfortable and stress-free, no matter what the weather brings.

## Elements used in this Project:

#### 1. Software Components:

- a. Bolt IOT Cloud.
- b. Bolt IOT Android App.
- c. Libraries:
  - 1. Bolt IOT python library.
  - 2. Twilio library.
  - 3. Openweathermap Library.
  - 4. Requests library.

#### 2. Hardware Components:

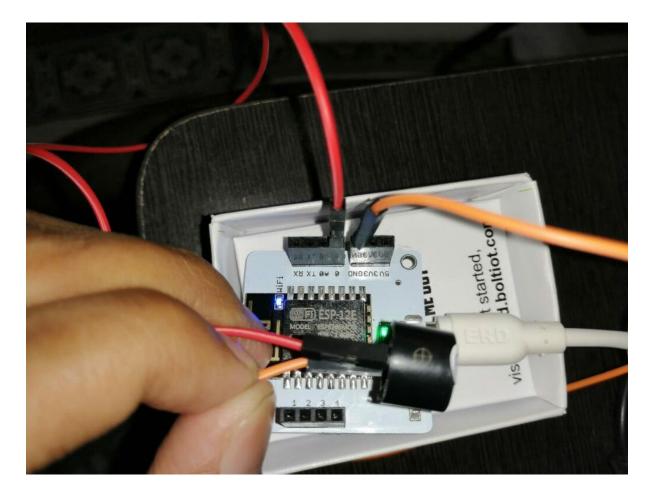
- a. Bolt IOT WIFI Module.
- b. Male/Female jumper wires.
- c. Buzzer.

# **Hardware Configuration:**

#### 1. Hardware Linkages:

- a) Take your bolt wifi module and make a connection from small pin of buzzer to GND of bolt module with the use of male female connecting wire.
- b) Take another wire and connect longer pin of buzzer to A0 of bolt module
- c) Give power supply with the help of usb cable.

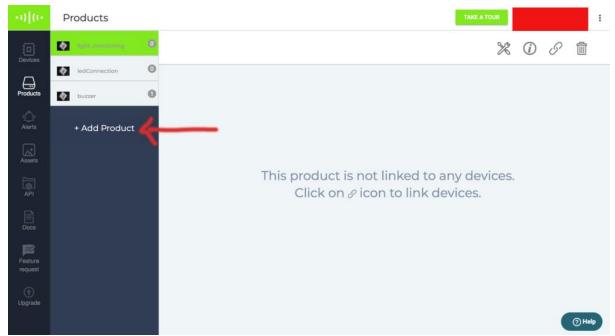
## 2. Schematics:



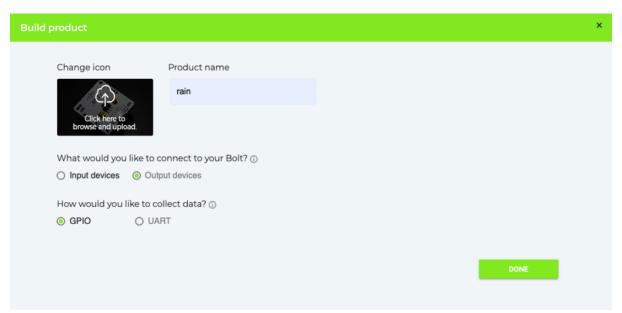
# **Software Configuration And Coding:**

## **Bolt IOT Cloud Configuration:**

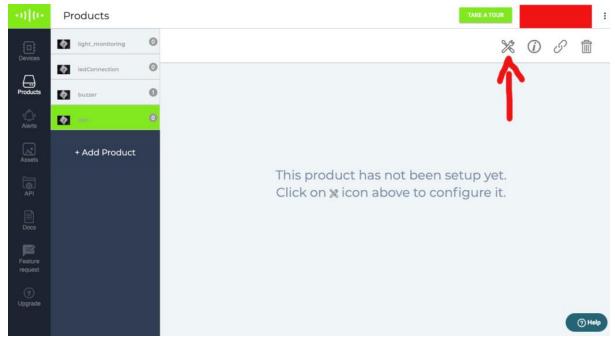
- 1. The process starts by first getting registered at **Bolt Cloud**.
- 2. Now go to Products tab in sidebar and click on add product to create a product.



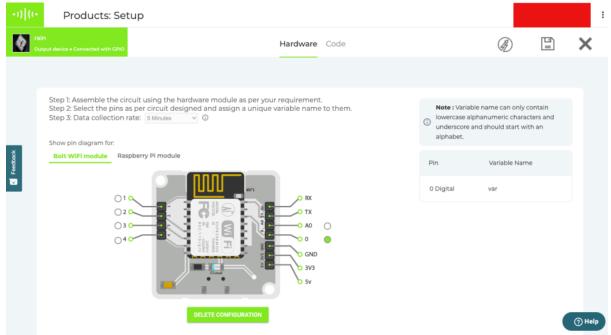
3. As soon as you will click the add product button, build product window will pop up. Enter product name and upload icon image as per your choice. Beside that select other options as shown in the image below.



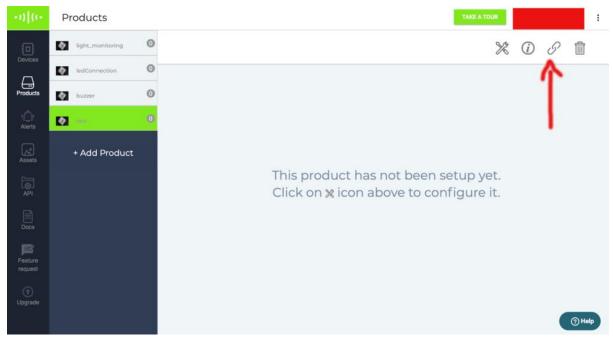
4. After product build is completed your product will be available in products tab. Select it and then select configure product as shown in the image below.



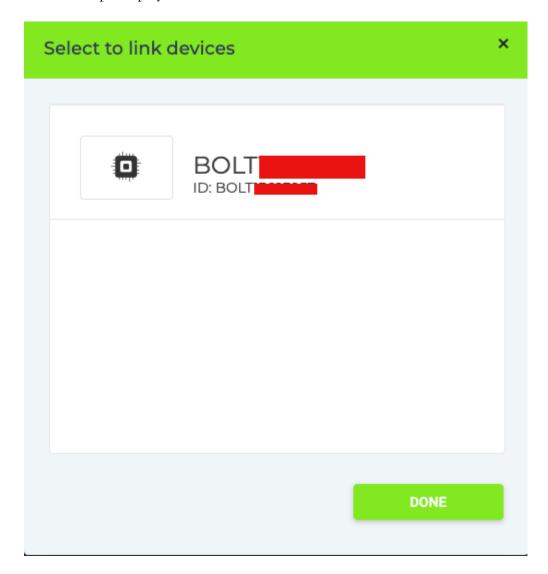
5. Here you just need to specify the design because the coding part will be carried out using bolt python library which will be later taken care of. So as you can see in the below image, you need to select a digital pin which we have selected as pin 0 for one end of buzzer and the another end is connected to the ground. As soon as the pin is selected it needs to be assigned a variable name of your choice. Beside this you can also select the data collection rate ranging from 5 minutes to 24 hours. As soon as you are done with configurations you can save it by selecting save option from top right.



6. Now our product is ready to be linked with the bolt device.



7. As soon as you click the button showed in the above pic an alert will be displayed which will prompt you to select a device.



With clicking done your product is ready being linked to a device. Now we will head towards coding part.

#### Code:

https://github.com/ARNAVSHARMA28/boltiot/tree/main

#### **Conclusion:**

In summary, ClimaCautions is your go-to for weather wisdom and preparedness. With real-time forecasts and personalized precautions, it ensures you're always ready for any weather twist. Say goodbye to surprises and hello to a smarter, safer day with ClimaCautions!

- EditClimaCautions. Stay Prepared
- · TagsBoltIOT, Buzzer, smartalertsystem, weather