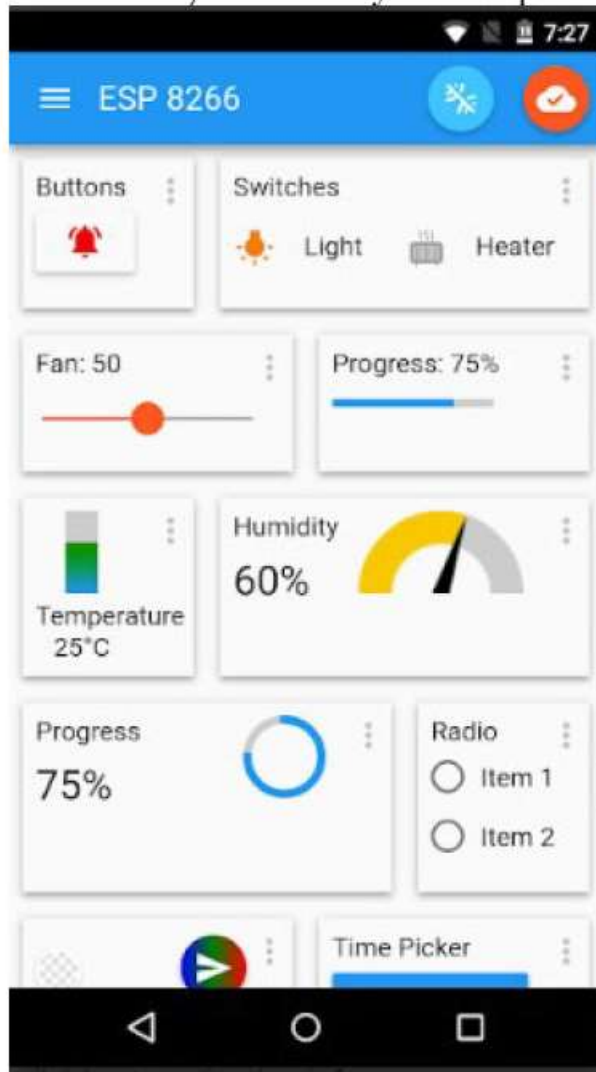


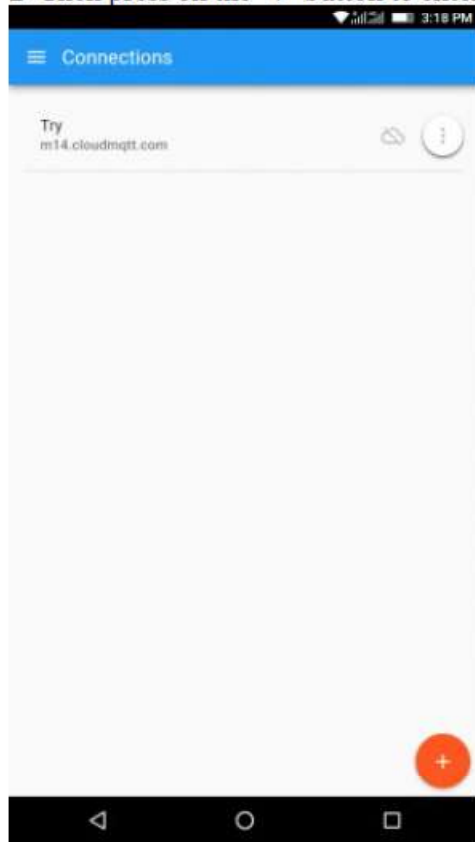
There are many Apps there for connecting the smartphone to a broker and using it to publish and subscribe for topics. I have chosen a beautiful, simple and easy to use one. It's called "IoT MQTT Panel ". In addition, it has many UI components to use as a visual indicator for the subscribed and published topics. You can download it from [here](#) for the Android phones



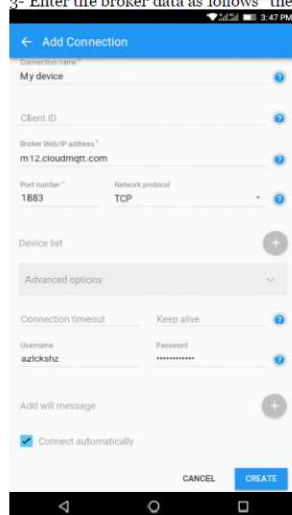
Steps:

1- After downloaded, open the App.

2- Then press on the "+" button to enter the broker authentication data.

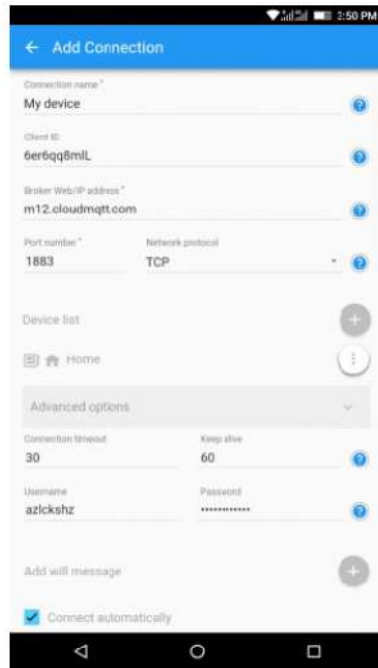


3- Enter the broker data as follows "these data will differ from yours of course".



You have to enter choose the password as it is, capital or small letters aren't the same.

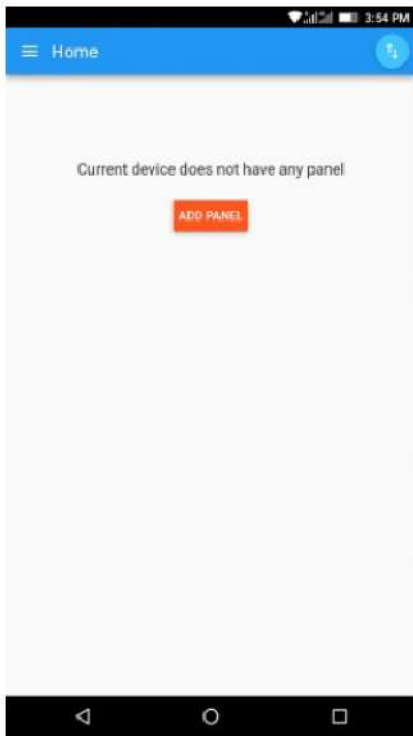
4- Then on the "Device list" press the "+" button and add a device that will connect to this broker. Let's call it "Home". Then press the "create" button.



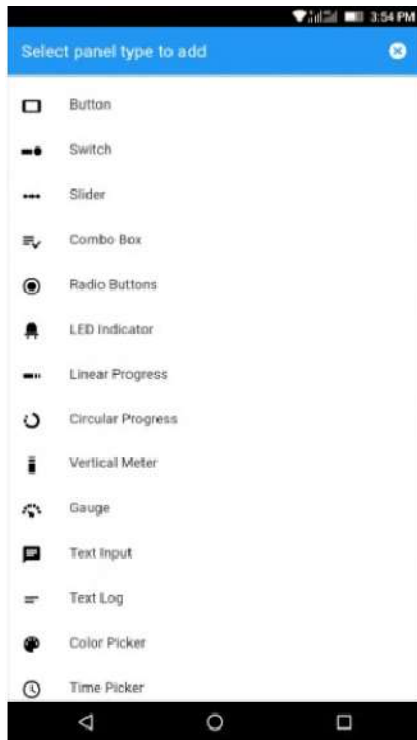
5- You will see the broker that you have just made is ready, press it.



6- Let's add some a button to use it to visualize publishing and a bar to visualize subscribing. Press "ADD PANEL" button.



7- You will see a list of many buttons and figures. Let's select the second element, the "switch" to use as the event that's responsible for publishing.



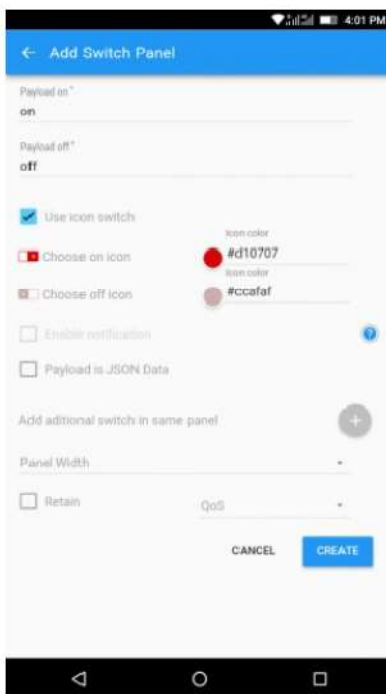
8- Then fill in the fields with the Panel name, the Topic which is "switch", the message to be sent when the switch is on "called here Payload on" and the message to be sent when the switch is off "called here Payload off"



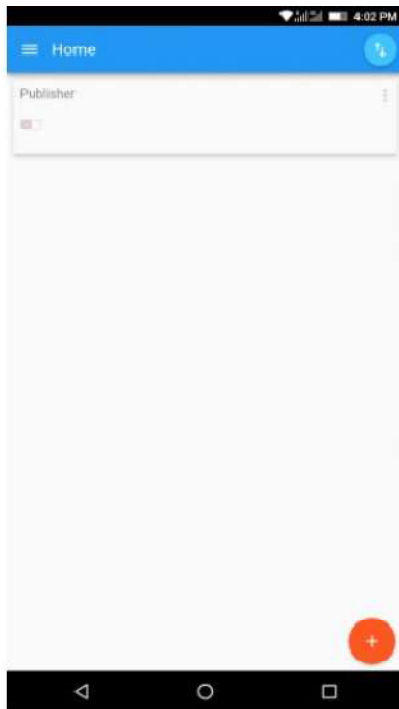
8- Press on "Use icon switch" then choose a color for the "on" icon to make it distinguishable.



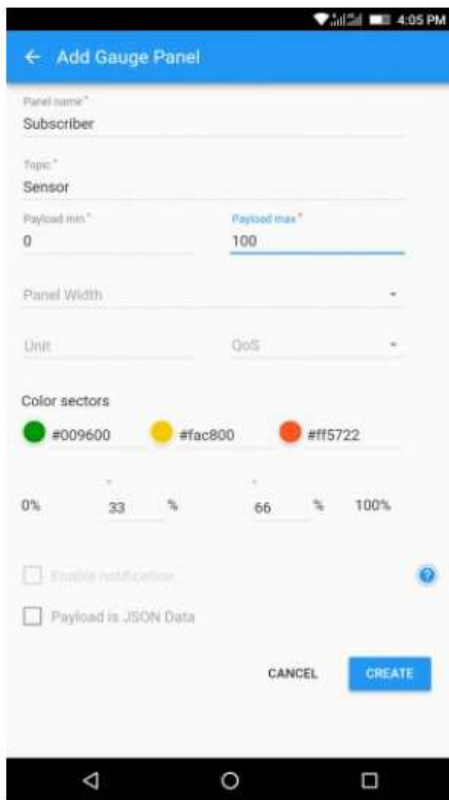
9- Once finished, press "create".



10- Now, press the "+" button to add the subscriber. Let's choose the "Gauge".

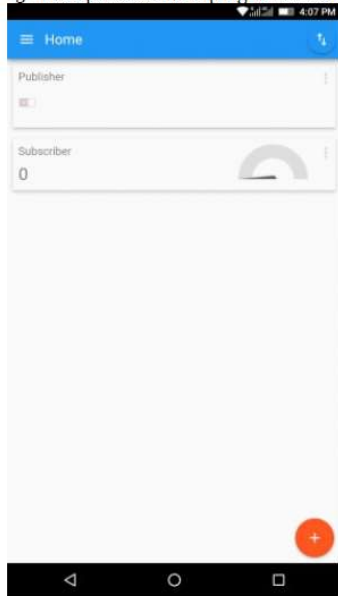


11- Then fill in the Panel name, the Topic that this Gauge will visualize its messages and the min, max values of the gauge.



12- Press the "create" button.

13- Then press on the top right arrows icon to connect this device to the broker.



14- As a result of the succeeded connection, the icon will be colored with orange to indicate that the device is now connected to the broker.

