**EE 499 – Lab 9**

Question 1)

client.subscribe(topics\_prefix + '#')

Question 2)

document.getElementById("subscribe").addEventListener('touchend',function(ev){

if (!connect)

{

alert("First establish connection then try to subscribe");

}

else

{

cordova.plugins.CordovaMqTTPlugin.subscribe({

topic:document.getElementById("topic\_sub").value,

qos:0,

success:function(s){

document.getElementById("subscribe").style.display = "none"; document.getElementById("unsubscribe").style.display = "block";

document.getElementById("activity").innerHTML += "--> Success: you are subscribed to the topic, "+document.getElementById("topic\_sub").value+ <br>;

cordova.plugins.CordovaMqTTPlugin.listen(document.getElementById("topic\_sub").val e, function(payload,params,topic,topic\_pattern){

//params will be an empty object if topic pattern is NOT used.

document.getElementById("activity").innerHTML += "--> Payload for"+topic+" topic: "+JSON.stringify(payload)+"<br>"

});

},

error:function(e){document.getElementById("activity").innerHTML += "--> Error: something is wrong when subscribing to this topic, "+e+"<br>";

document.getElementById("subscribe").style.display = "block"; document.getElementById("unsubscribe").style.display = "none";

//alert("err!! something is wrong. check the console")

console.log(e);

}

});

}

});

document.getElementById("unsubscribe").addEventListener('touchend',function(ev){

cordova.plugins.CordovaMqTTPlugin.unsubscribe({

topic:document.getElementById("topic\_sub").value,

success:function(s){

document.removeEventListener(document.getElementById("topic\_sub").value);

document.getElementById("unsubscribe").style.display = "none" document.getElementById("subscribe").style.display = "block";

document.getElementById("activity").innerHTML += "--> Success: you are unsubscribed to the topic, "+document.getElementById("topic\_sub").value+"<br>"

document.getElementById("topic\_sub").value = "";

},

error:function(e){

document.getElementById("activity").innerHTML += "--> Error: something is wrong, "+e+"<br>";

document.getElementById("subscribe").style.display = "block";

document.getElementById("unsubscribe").style.display = "none";

//alert("err!! something is wrong. check the console")

console.log(e);

}

});

});

Question 3)

The parameter we need to subscribe and unsubscribe is the topic name. The topic name is used to subscribe, so the subscriber can tell the broker the information that the subscriber has interest.

Question 4)

How are the received messages processed in PhoneGap?

In our project, we use subscriber.py code to process the received messages in PhoneGap. Moreover, the RaspberryPi is used as the publisher that sends information from our circuit to the broker. Since the subscribers subscribe to the broker with the topics they have interest, the broker will share the information of the topics desired to every single subscriber, in this case our PhoneGap project.

If I subscribe to multiple topics using a wildcard, how I am able to distinguish the received data?

The wildcard is used to be able to retrieve all the information of a specific board or topic. The subscriber will be able to distinguish the information because this does not affect how the broker is going to send the data. The broker will only send the data that the subscriber requires to get and it will indicate what specific data the subscriber end is receiving. The wildcard is only used to subscribe and it has the same effect as creating a loop that subscribes individually to every single topic.