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[{"id":"a66716b3.5998e8","type":"mqtt-broker","z":"","broker":"j3yjz2.messaging.internetofthings.i
bmcloud.com","port":"1883","clientId":"d:j3yjz2:MqttDeevice:testDevice","usetls":false,"verifyserv
ercert":true,"compatmode":true,"keepalive":"15","cleansession":true,"willTopic":"","willQos":"0","
willRetain":"false","willPayload":"","birthTopic":"","birthQos":"0","birthRetain":"false","birthPayload
":"","{"id":"abbd4f8a.5442b","type":"inject","z":"5638e08.fa9c72","name":"injector","topic":"","payl
oad":"","payloadType":"string","repeat":"","crontab":"","once":false,"x":92,"y":347,"wires":[["d3a73
816.2c58c8"]]},{"id":"a6fd4c68.5902b","type":"ibmiot
in","z":"5638e08.fa9c72","authentication":"boundService","apiKey":"","inputType":"evt","deviceId
":"","applicationId":"","deviceType":"MqttDeevice","eventType":"eid","commandType":"","format":"j
son","name":"IBM IoT App
In","service":"registered","allDevices":true,"allApplications":"","allDeviceTypes":true,"allEvents":tr
ue,"allCommands":"","allFormats":true,"x":268,"y":63,"wires":[["b37fd10.f4c803"]]},{"id":"1df5038
6.e20afc","type":"ibmiot
out","z":"5638e08.fa9c72","authentication":"boundService","apiKey":"","outputType":"cmd","devi
ceId":"","deviceType":"MqttDeevice","eventCommandType":"cid","format":"json","data":"
","name":"IBM IoT App
Out","service":"registered","x":1318,"y":249,"wires":[{}],{"id":"b37fd10.f4c803","type":"function","z"
:"5638e08.fa9c72","name":"Data Preprocessor","func":"var returnMessage =
{};\n\nreturnMessage.volts = (msg.payload.d.light * 3.3) / 1024;\nreturnMessage.temperature =
(msg.payload.d.temperature - 50)/10;\nreturnMessage.moisture = (msg.payload.d.moisture *
3.3) / 1024;\nreturnMessage.deviceId = msg.payload.d.deviceId;\nreturn
returnMessage;","outputs":1,"noerr":0,"x":529,"y":43,"wires":[["2d559d2c.d2aa62"],["6fde607a.902
1a"],["81bebe42.05dfb"]]},{"id":"e3e0cd8c.1c1f3","type":"function","z":"5638e08.fa9c72","name":"P
ush To UI","func":"var returnMessage ={};\nreturnMessage.payload=
JSON.stringify({'d':msg});\nreturnMessage.deviceId = 'UIDevice';\nreturn
returnMessage;","outputs":1,"noerr":0,"x":1135,"y":215,"wires":[["1df50386.e20afc"]]},{"id":"2d55
9d2c.d2aa62","type":"function","z":"5638e08.fa9c72","name":"Live Data Mapper","func":"var
returnMessage = {};\nreturnMessage.payload ={\n
'TEMPERATURE_DEGREE_CELCIUS':msg.temperature,\n  'LIGHT':msg.volts,\n
'MOISTURE':msg.moisture,\n  'DEVICEID':msg.deviceId,\n
'DATA_TIME':'TIMESTAMP'\n}\nreturn
returnMessage;","outputs":1,"noerr":0,"x":807,"y":64,"wires":[["f737aaff.08c858"]]},{"id":"f737aaff.
08c858","type":"sqldb out","z":"5638e08.fa9c72","service":"SQL
Database-6m","table":"PLANT_HEALTH_DATA","name":"Store Health
Data","x":1068,"y":64,"wires":[{}],{"id":"501aeb40.afe514","type":"mqtt
out","z":"5638e08.fa9c72","name":"publisher","topic":"iot-2/evt/eid/fmt/json","qos":"0","retain":"","
broker":"a66716b3.5998e8","x":323,"y":454,"wires":[{}],{"id":"cb2fddb5.34d02","type":"debug","z":
"5638e08.fa9c72","name":"display","active":true,"console":false,"complete":true,"x":1267,"y":
128,"wires":[{}],{"id":"3e3b43f1.c1c4bc","type":"http in","z":"5638e08.fa9c72","name":"Alert
Receiver from IOT
RTI","url":"/RTI-alert","method":"post","swaggerDoc":"","x":515.75,"y":388.5,"wires":[["8e9f204d.7
160e"],["1740eaea.e8bf15"]]},{"id":"1740eaea.e8bf15","type":"function","z":"5638e08.fa9c72","na
me":"Send Alert to Plant Device","func":"var returnMessage ={};\nvar result={\n
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\Alert\":"Warning\","\n  \Reason\":"Temperature or Moisture or Light value out of range as per
per
\"+msg.payload.ruleName\n};\nreturnMessage.payload=JSON.stringify(result);\nreturnMessage.
deviceId = msg.payload.deviceId.split("\\")[2];\nreturn
returnMessage;","outputs":1,"noerr":0,"x":884,"y":377,"wires":[["1df50386.e20afc"]]],{"id":"8e9f20
4d.7160e","type":"debug","z":"5638e08.fa9c72","name":"","active":false,"console":false,"compl
ete":"payload","x":766,"y":297,"wires":[]},{id:"6fde607a.9021a","type":"function","z":"5638e08.fa
9c72","name":"Fetch Pvalues","func":"var returnMessage ={};\nreturnMessage.rawData =
msg;\nvar temperature = parseInt(msg.temperature);\nwhile(temperature<=60){\n
if(temperature%5===0)\n    break;\n    temperature++;\n}\nreturnMessage.payload = \"select
PVALUES from PNORTH where temperature="+temperature;\nreturn
returnMessage;","outputs":1,"noerr":0,"x":742,"y":138,"wires":[["fc9c3d60.0363c"]]],{"id":"fc9c3d6
0.0363c","type":"sqldb in","z":"5638e08.fa9c72","service":"SQL
Database-6m","query":"","params":"","name":"","x":899,"y":137,"wires":[["51ce62cc.ae319c"]]],{"i
d":"51ce62cc.ae319c","type":"function","z":"5638e08.fa9c72","name":"Water
Consumed","func":"var returnMessage = {};\nvar values=msg.payload.PVALUES.split("\\")\nvar
p = values[new Date().getMonth()];\nvar eto = p*((0.46*msg.rawData.temperature)+8)\nvar
water = msg.rawData.moisture*eto;\nmsg.rawData.water = water+"mm/day\";\nreturn
msg.rawData;","outputs":1,"noerr":0,"x":1066,"y":137,"wires":[["e3e0cd8c.1c1f3"],"cb2fddb5.34d0
2"]]],{"id":"f856cdf2.07a93","type":"e-mail in","z":"5638e08.fa9c72","name":"Get Email from
Coordinator","server":"imap.uni-stuttgart.de","port":"993","box":"INBOX","repeat":"300","x":407.1
7859649658203,"y":836.0714263916016,"wires":[["7bb365c4.844c9c"]]],{"id":"7bb365c4.844c9c
","type":"function","z":"5638e08.fa9c72","name":"Process Mail","func":"var returnMessage
={};\n\nif(msg.from == \"\\\"IoT Real-Time Insights\\\" <noreply.iotrtinsights@bluemix.net>\"){\n
var deviceId = msg.payload.split("\\")[4];\n
deviceId=deviceId.replace("</p><p><b>Date</b>","");\n
deviceId=deviceId.replace("\\r\\n","");\n    returnMessage.details={\n
\"DEVICEID\":deviceId,\n    \"MESSAGE\":msg.payload\n    };\n    \n    returnMessage.payload
=\"select USER_ID from PLANT where PLANT_DEVICE="+deviceId+"\";\n    \n}\n\nreturn
returnMessage;","outputs":1,"noerr":0,"x":653.178596496582,"y":840.0714263916016,"wires":[["
7080b461.8f7f4c"],"ced76b57.312898"]]],{"id":"7080b461.8f7f4c","type":"sqldb
in","z":"5638e08.fa9c72","service":"SQL
Database-6m","query":"","params":"","name":"","x":820.178596496582,"y":835.0714263916016,
"wires":[["e2b75a9e.1d48a8"],"ced76b57.312898"]]],{"id":"e2b75a9e.1d48a8","type":"function","z"
:"5638e08.fa9c72","name":"Add Alerts","func":"var returnMessage
={};\nreturnMessage.payload={\n    \"DEVICEID\":msg.details.DEVICEID,\n
\"MESSAGE\":msg.details.MESSAGE,\n    \"USERID\":msg.payload[\"USER_ID\"]\n};\nreturn
returnMessage;","outputs":1,"noerr":0,"x":991.178596496582,"y":843.0714263916016,"wires":[["
8fa46f51.705b9"]]],{"id":"8fa46f51.705b9","type":"sqldb
out","z":"5638e08.fa9c72","service":"SQL
Database-6m","table":"ALERTS","name":"","x":1168.178596496582,"y":842.0714263916016,"wi
res":[]},{id:"ced76b57.312898","type":"debug","z":"5638e08.fa9c72","name":"","active":false,"co
nsole":false,"complete":"payload","x":924.178596496582,"y":937.0714263916016,"wires":[]},{i

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d":"81bebe42.05dfb","type":"function","z":"5638e08.fa9c72","name":"Push To
FlowThings","func":"var returnMessage ={};\nreturnMessage.payload=
JSON.stringify({\"elems\":msg});\nreturnMessage.deviceId = \"FIODevice\";\nreturn
returnMessage;\",\"outputs\":1,\"noerr\":0,\"x\":442,\"y\":249,\"wires\":[[\"1df50386.e20afc\",\"8023a150.74
104\"]]],{\"id\":\"8023a150.74104\",\"type\":\"debug\",\"z\":\"5638e08.fa9c72\",\"name\":\"\",\"active\":false,\"con
sole\":\"false\",\"complete\":\"true\",\"x\":791,\"y\":195,\"wires\":[]},{\"id\":\"25ca3d28.29c56a\",\"type\":\"http
in\",\"z\":\"5638e08.fa9c72\",\"name\":\"getSpecs\",\"url\":\"/specs\",\"method\":\"get\",\"swaggerDoc\":\"\",\"x\":40
9.67859649658203,\"y\":675.8214225769043,\"wires\":[[\"58d58020.ccb03\",\"378eb79e.c87148\"]]],{
\"id\":\"5ec4f698.9b5d4\",\"type\":\"http
response\",\"z\":\"5638e08.fa9c72\",\"name\":\"responseToFlowthings\",\"x\":1037.678596496582,\"y\":66
5.8214225769043,\"wires\":[]},{\"id\":\"58d58020.ccb03\",\"type\":\"function\",\"z\":\"5638e08.fa9c72\",\"na
me\":\"fetch Ranges\",\"func\":\"/*msg.payload = {\\n  \\\"MAX_TEMP\\\":40,\\n  \\\"MIN_TEMP\\\":10,\\n
\\\"MAX_MOISTURE\\\":0.6,\\n  \\\"MIN_MOISTURE\\\":0.4,\\n  \\\"MAX_LUMS\\\":0.6,\\n
\\\"MIN_LUMS\\\":0.3,\\n};*/\\n\\nmsg.payload=\\\"SELECT
MIN_TEMP,MAX_TEMP,MIN_MOISTURE,MAX_MOISTURE,MIN_LUMS,MAX_LUMS FROM
PLANT_TEMPLATE pt,PLANT p where p.PLANT_DEVICE=\\\"+msg.payload.deviceId+\\\" and
p.DEVICE_TEMPLATE=pt.ID\\\";\\nreturn
msg;\",\"outputs\":1,\"noerr\":0,\"x\":643.678596496582,\"y\":671.8214225769043,\"wires\":[[\"f8cf460a.d
1cd88\"]]],{\"id\":\"6a2cfb5d.68185c\",\"type\":\"http in\",\"z\":\"5638e08.fa9c72\",\"name\":\"Alert Receiver
from
FlowThings\",\"url\":\"/FlowThingsAlert\",\"method\":\"post\",\"swaggerDoc\":\"\",\"x\":532,\"y\":496,\"wires\":[[\"f
304cc79.9179a\",\"1c76d30e.8fa43d\",\"3b89ca32.f6efb6\"]]],{\"id\":\"f8cf460a.d1cd88\",\"type\":\"sql db
in\",\"z\":\"5638e08.fa9c72\",\"service\":\"SQL
Database-6m\",\"query\":\"\",\"params\":\"\",\"name\":\"\",\"x\":853.678596496582,\"y\":669.8214225769043,
\"wires\":[[\"5ec4f698.9b5d4\",\"532a5258.acd5ac\"]]],{\"id\":\"f304cc79.9179a\",\"type\":\"function\",\"z\":\"56
38e08.fa9c72\",\"name\":\"send to Device\",\"func\":\"var returnMessage ={};\nvar result={\\n
\\\"Alert\\\":\\\"Warning\\\",\\n
\\\"Reason\\\":msg.payload.messages\\n};\nreturnMessage.payload=JSON.stringify(result);\nreturn
Message.deviceId = msg.payload.deviceId;\nreturn
returnMessage;\",\"outputs\":1,\"noerr\":0,\"x\":938.7500152587891,\"y\":461.5000066757202,\"wires\":[
[\"1df50386.e20afc\"]]],{\"id\":\"1c76d30e.8fa43d\",\"type\":\"function\",\"z\":\"5638e08.fa9c72\",\"name\":\"Se
nd to UI\",\"func\":\"var returnMessage ={};\nvar result={\\n  \\\"alert\\\":\\\"Warning\\\",\\n
\\\"reason\\\":msg.payload.messages,\\n  \\\"deviceId\\\":msg.payload.deviceId,\\n
\\\"timestamp\\\":msg.payload.timeStamp\\n};\nreturnMessage.payload=JSON.stringify(result);\nretu
rnMessage.deviceId = \\\"UIDevice\\\";\nreturn
returnMessage;\",\"outputs\":1,\"noerr\":0,\"x\":929,\"y\":525,\"wires\":[[\"1df50386.e20afc\",\"f7d76ab8.e69
1\"]]],{\"id\":\"f7d76ab8.e691\",\"type\":\"debug\",\"z\":\"5638e08.fa9c72\",\"name\":\"\",\"active\":false,\"console
\":\"false\",\"complete\":\"false\",\"x\":1193.000015258789,\"y\":522.0000076293945,\"wires\":[]},{\"id\":\"3b8
9ca32.f6efb6\",\"type\":\"debug\",\"z\":\"5638e08.fa9c72\",\"name\":\"\",\"active\":false,\"console\":\"false\",\"co
mplete\":\"false\",\"x\":789,\"y\":575,\"wires\":[]},{\"id\":\"d3a73816.2c58c8\",\"type\":\"function\",\"z\":\"5638e08.
fa9c72\",\"name\":\"Random generator\",\"func\":\"function getRandom(min, max) {\\n  return
Math.random() * (max - min) + min;\\n}\\nvar randomDataMessage =
{};\nrandomDataMessage.payload = JSON.stringify({ \\\"d\\\":{\\n\\t\\\"temperature\\\":

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Math.floor(getRandom(100,1059)),\n\t\t"moisture": Math.floor(getRandom(100,200)),\n\t\t"light":  
getRandom(100,200),\n\t\t"deviceId": "testDevice"\n\t}\n});\n\nreturn  
randomDataMessage;\n\n\n","outputs":1,"noerr":0,"x":304,"y":326,"wires":[["501aeb40.afe514"]  
]],{"id":"378eb79e.c87148","type":"debug","z":"5638e08.fa9c72","name":"","active":false,"console  
":"false","complete":"false","x":533.678596496582,"y":601.8214225769043,"wires":[]},{  
"id":"532a5258.acd5ac","type":"debug","z":"5638e08.fa9c72","name":"","active":true,"console":"false","com  
plete":"false","x":1049,"y":739,"wires":[]}]}
```