HOME ASSIGNMENT #4

IoT 19-20

Name Surname	Person Code	ID Number
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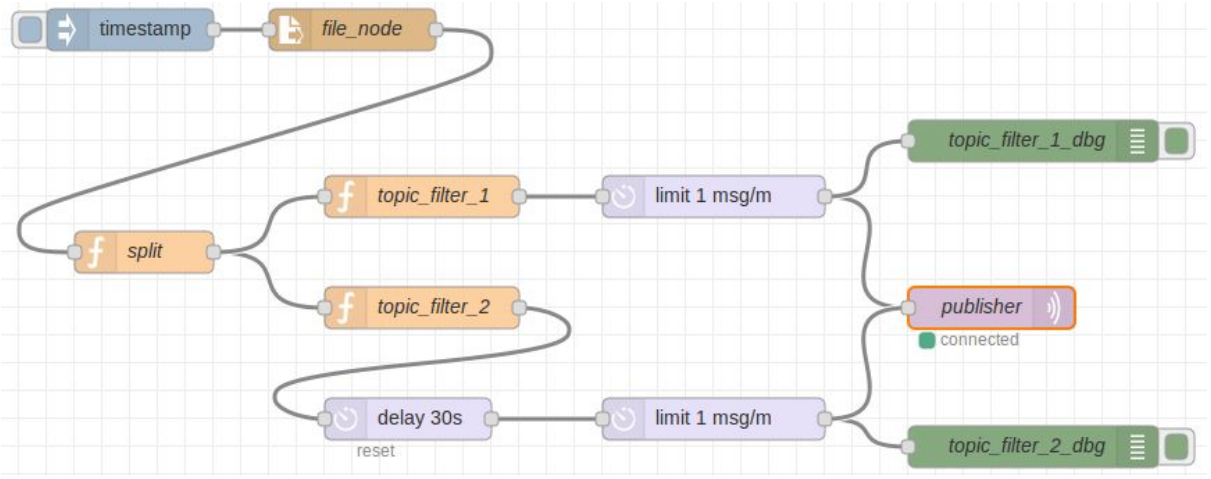
ThingSpeak channel:
https://thingspeak.com/channels/1066030



Node list:

- **timestamp** and **file_node**: read the content of the traffic.csv file giving as output single string. The file name in the file_node **is an absolute path**, so in order to deploy the system into your machine you will have to modify it.
- **split**: first we split the input string into different messages (message is a line of the csv file); then we split each message into single words and we output only those messages which are Publish Messages
- **topic_filter_1**: this node filters the messages that contain the topic *factory/department1/section1/plc* or *factory/department3/section3/plc*. Then converts the payload of the filtered messages into a JSON object and extract the value. The output of the node is a message with the payload of the form: "field1=*VALUE*&status=MQTTPUBLISH"
- **topic_filter_2**: has the same behaviour of topic_filter_1 but filtering only those messages that contain the topic: *factory/department1/section1/hydraulic_valve* or *factory/department3/section3/hydraulic_valve.* The output is in the form: "field2=*VALUE*&status=MQTTPUBLISH"

- **limit/delay** nodes: the only function is to delay the message rate to one message every 30 seconds
- **publisher**: this node's function is to publish the mqtt messages to the thingspeak channel at the topic *channels/1066030/publish/4FUU9AQAG96IV8LQ*