***IOT Final Project***

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(secondo me gli possiamo mettere anche il link a thingspeak e fare un public channel, così giusto per completezza)

1. ***Introduction***

The aim of the project was to create a LoraWan like network in TinyOs, network nodes should periodically generate messages with random data and send them (through the network server) to Node-Red, whom have to extract the relevant data from them and send them via MQTT to a ThingSpeak channel. The ThingSpeak channel must finally plot the random values on 5 charts (one for each node of the network).

TinyOs network has also an ack confirmation message functionality: when the server node receives a message, it must send an ack to the sender node, if the sender node doesn’t receives the ack within a 1 second window, it sends again the message (LoraWan-like). In addiction, server node must discard duplicates.

1. ***TinyOs***

TinyOs is able to simulate a network,