Student Name : Marianna Mazzette

Project Repo URL : <https://github.com/mmazzet/IoT-project>  
Web App : <https://roomtempconsys-mmazz.glitch.me/>

YouTube Link : https://youtu.be/l7EY69F5L-0

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| --- | --- | --- | --- | --- |
| Grade Band | Combined Knowledge | Networking Technologies | IoT Solution | Communication |
| Base |  |  |  |  |
| Good | *Apply concepts from more than two modules/strands.*  Programming, computer systems, web development(Glitch), IoT (integration with ThingSpeak and IFTTT), Firebase (database). | *Wireless/Wired protocols including network and transport layer. > 1 protocol Interconnected devices.*  Wireless communication from Arduino to ThingSpeak and Firebase  HTTP requests from Arduino to ThingSpeak to update temperature and to ThingHTTP to control the smart plug | *Solution with clean IoT and domain application. Includes data processing/ gateway function.*   Clean IoT domain application: Sensors in Arduino MKR IoT Carrier make temperature readings and interact with other services. Arduino code processes temperature readings and triggers actions based on data (switching plug on and off). | *Portfolio/repository includes clear presentation, documentation*   <https://youtu.be/l7EY69F5L-0> <https://github.com/mmazzet/IoT-project>  project-instructions.docx for general instructions |
| Excellent |  | *Lightweight messaging. Network/API programming. Architecture/IOT Framework that mediates between high and low level devices.*  IoT framework where Arduino is the low level device collecting temperature data that is transmitted over to WiFi, using protocols like HTTP. The data is sent to higher-level services like ThingSpeak, Firebase and IFTTT. |  |  |
| Outstanding |  |  |  |  |

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Additional Comments:  
  
IFTTT used PRO plan to create Webhooks in the “If this” action to allow communication with Tapo actions.   
I tried to implement hysteresis as suggested, as far as I could understand.  
The pre-recorded video is available for reference but not uploaded in youtube as it is too long.

Table

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