Student Name: Gráinne O' Connor
Project Repo URL: https://github.com/GrainneOC/home_weather_station
Video Demo URL: https://tinyurl.com/rpi-demo

Grade Band	Combined Knowledge	Networking Technologies	IoT Solution	Communication
Base	More than 2 strands, as outlined below.	Physical - RPi+SenseHat Data- Gateway used to receive and display the data captured through RPi	Basic weather data sent from sensor to RPi	Basic read me as well as additional below included in project
Good	CompSys: using physical computer - RPi and device - SenseHAT that interacts with physical world Programming: Python scripting Networking: MQTT + client-server communication	MQTT protocol at app layer, on top of TCP for transport and IP for addressing. This is more than one protocol across different layers of networking stack.	sensor.py on RPi reads raw sensehat data structured as JSON. gateway.py receives data and presents in human-readable format.	GitHub Repo and Video demo linked above. Proposal, ReadME included.
Excellent				
Outstanding				

Additional Comments:

Grade Spectrum

	Combined knowledge (15)	Networking/IoT Technologies (35)	IoT Solution (35)	Communication (15)
Base (40-49)	2 programme strands present in output. Basic knowledge of each exhibited. (e.g. programming, database, computer systems)	Physical/Data link layer solution. Minimal devices	Basic solution that may form basis of overall application. Sensor focused.	Minimal (1) communication resource used (simple read me) and video.
Good (50-64)	Apply concepts from more than two modules/strands..	Wireless/Wired protocols including network and transport layer. >1 protocol. Interconnected devices.	Solution with clear IoT and domain application. Includes data processing/ gateway function.	Portfolio/repository includes clear presentation, documentation.
Excellent (65-80)	>2 strands as above and including more advanced knowledge and concepts.	Lightweight messaging. Network/API programming. Architecture/ IOT Framework that mediates between high and low level devices.	IoT Application of good prototypical standard. Used to evaluate overall suitability for a production system.	Additional communication resources (e.g. instruction video, learning resources, installation guide)
Outstanding (80-100)	All above, including self-acquired knowledge over and above module content.	All previous to excellent level. Excellent Use of Cloud/IoT specific platforms	Novel solution of clear applicability to specific domain. **Could result in employment offer.**	All the above to excellent level, accessible project platform (e.g. web site)