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Project Repo URL : <https://github.com/Whystech/REVmetry>

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Grade Band	IoT Solution	Networking/IoT Technologies	Combined Knowledge	Communication
Base	Gathers data from the Sense HAT sensors.	Pi reacts to data sent from sensors (RPM indicator)	Linux environment (USB, bluetooth package installations)	-
Good	Processes data from 2 sensors, makes it readable on a dashboard that is accessible online or locally. Data can be stored and reviewed, manipulated into a graph.	2 extra devices, one USB, one Bluetooth – trusting, paring, connecting	Python libraries	-
Excellent	-	MQTT client set up on pi, MQTT server set up on node app. MQTT client also works on deployed scenario (Render).	Linux manipulation, python, WebSockets, WebDev for front-end, setInterval - Javascript	Github with Readme, instructions on how to set sensors (OBD, GPS). Some troubleshooting.
Outstanding	-	-	-	-

Additional Comments:

WebSockets did not work in the end as I've wanted to, needing to resort to different methods (setIntervals in this case) – the on.message would not trigger the DOM change.

The OBD connection is flaky, needing 2-3 reconnects (or python program restarts) to work.

I could have handled the separation of concerns within the node app a bit better, but when trying I got to break more stuff so I bundled everything together.

Relied a lot on guides, tutorials. Using a Pi5 was not helpful either as, apparently, some stuff is still not ready or required additional tinkering. e.g. The joystick would not work unless specifically updating and making some settings.

I am happy how it turned out, I should have kept the cookies or user functionality, but I had problems managing a "Record state" for the trip without breaking stuff (one device, one mqtt connection, multiple users, same trip?)