Iteration two review

Planning: 08/05/2023 – 11/05/2023  
Development: 12/04/2023 – 19/05/2023  
Review: 20/05/2023 – 21/05/2023

## What went well:

This iteration was characterized good communication between and the mentor between Factory IO issues and expected deliverables. Our team came together for UI Design and our Factory IO Prototype and Middleware server came together well. The team came together to decide on an agreed branching strategy for Git going forward, being a ‘staging main’ branch. This was to ensure master’s Firebase configuration would remain secure.

Issues and challenges:

The original license for Factory IO did not provide communication protocols required. This was identified and Matthew applied for the Ultimate edition license provided by AUT. To mitigate this, we decided to create further trial accounts which would let us use the Ultimate Edition for 30 days a time, however this did not work entirely as each Factory IO instance was stored on the machine and could not be worked around by simply creating a new account. Even with this delay the Factory IO simulation was still completed on time.   
The UI Design mock up approval was slightly delayed due external workload factors experienced by the team. However, with our new change management plan in place, this will be worked into the planning phase of the next iteration.

Milestone Reports:

* Develop Factory IO prototype:

A Factory IO simulation was created to represent the clients Factory as close as possible. Development was limited due to Factory IO not allowing for a range of customization options as it became apparent it was more of a learning tool. The simulation designed was created to prototype a similar production process from moving boxes along a conveyor whilst gathering data on each machine.

* Develop backend server (Middle ware)

Develop backend server: Throughout the iteration, a middleware application was created to provide a middle point between factory IO and the web dashboard. This was necessary as we do not want to expose our dashboard to PLC communication directly. This is also because not every browser may support the API.

* UI Design Mock-up is designed and approved.

UI Design Mock-up is designed and approved: A UI Design was created which reflected the interface seen at Jadcup’s factory as close as possible. The design houses a home page which shows each machine, with the option to click further into a machine to see more properties and data for the respective machine.