Brief Description –

Eli.zehetner@students.mq.edu.au  0479022287 – 2nd degree, and work fulltime while studying full time

Adrian.dedona@students.mq.edu.au – 0455551123 - basketball, started degree in Argentina

Colm.moore@students.mq.edu.au  0474789123 – basketball, lived in Ireland for most of pandemic

alyanna.delacerna1@students.mq.edu.au  047401303– Video games, Laser cutting

Got a good group today, where everyone was participating and actively engaged even though some of our ideas were getting pretty far out there. Adrian initially started studying in Argentina due to covid and shares a love of basketball with Colm. Colm has also lived in Ireland for most of the pandemic. While Alyanna, loves video games and a particular fascination with laser cutting.

We initially discussed general ideas such as a future fridge with all these additional capabilities around efficiency gains, and utility around connecting various devices and information. We also talked about an eye tracker for engagement with advertisements, and human monitoring system of pedestrians around traffic lights to minimise accidents.

We ended up going with the fridge and came up with a name of Cool N’ Control’d, with the initial purpose of just a fridge which monitored usage to manage energy efficiency across the day. We just chose this option as it seemed the most interesting idea out the three.

Our discussions quickly evolved into additional capabilities such as scales for weighing food in the fridge to notify when running low, hydraulics to help physically disabled people, to finally machine learning to recognise food, and notify users of when due dates were coming or that food was particularly low.

Each idea that was raised I considered I rolled through in my own mind, including the difficulty, any additional possibilities, costs, time to develop, whether it was genuinely useful.

We also shut down several ideas, as it was getting more and more complicated, one of those being a self-cleaning function. While we didn’t shut down this outright, we talked through what would be needed and the overall complexity of the project.

Overall, while our ideas are very difficult to implement, we came up with some solutions such as using an existing smart fridge to avoid starting from scratch, as these fridges may already contain several devices that we require.

Logbook Week 2 –

We started off today discussing that we had massive function creep, including several ideas that were not viable. We cut down the ideas to the following.

* Capturing & analysis of usage Data
* Downloadable app with data on energy use, issues with the fridge, notifying when leaving the door open, connecting to an internal camera to view inside the fridge remotely.

We had a very solid discussion on one of the ideas which was monitoring what was being put in the fridge based on receipts. We realised the receipts are not complex enough to determine when due dates were coming through, and ultimately its overall utility.

Once we had cut through the fuss of functions, we also discussed instead of modifying the fridge ourselves, we would move to providing the software and hardware needed for traditional home appliance companies to implement into their products. “Don’t dig for gold, sell shovels”.

We quickly moved to constraints, and because of above had covered requirements. Was able to get through this quick quickly with minimal discussion.

The design phase was also quite straight forward in terms of exactly what we needed, which including application development, machine learning component, database, servers, external screen on fridge, sensors, and hydraulics. We had some creative differences on how to display the software architecture but ultimately just decided to create two types, one simple version, and a graphical type.

Finally, the process model we decided to go with was the iterative model, with the primary factor behind that decision being the low risk factor, and the ability through that model to independently build and bring products to the market. This reasoning automatically excluded spiral and waterfall process models. We did have a bit of a discussion on whether the prototyping model was more appropriate, and if we had a limited R&D budget this likely would’ve been appropriate, however, because our primary cost is human resources, which is free, the iterative model made more sense to use.

Overall, the team is still working quite well together, but we do sometimes go a bit off topic, additional thoughts to minimise this is possibly to create a bit more structure to the team such as chairperson, minute taker etc.

Logbook Week 3 –

* What tasks did you have assigned to you?
* Did you need to wait for any other tasks to be completed before you could start your tasks?
* Did you have anyone else in your group asking (politely or otherwise) if you had completed

a certain task yet?

* How could these tasks have been assigned (but still equally distributed) so that the project

could run faster?

* Would any more information at the beginning of the project been useful for you or the team?
* What would your team do differently to better do a project like this if you were assigned a

similar one in future weeks?

* When doing project task allocations in other units, do you think it is important to look at the

task dependencies when allocating them and scheduling them? Why? How could team member availabilities and workloads affect this?

During today lesson I was assigned to create squares, the colouring of the flow chart, noting any constraints that came up with our design and then collaborating with the team to complete the chart. During this I did have to wait for others to finish their tasks before I could complete mine, this was mainly focused on my colouring activity. I wasn’t asked if I had completed anything, but we were waiting on a team member who wasn’t contributing. I think it would have been a bit hard to allocate equally, maybe a volunteering system would’ve helped with any perceived differing workloads. Information at the start of the session would’ve helped particularly around just everyone getting set up on lucidchart and trello before any activities started and getting verbal confirmation. My team would have approached this differently, possibly by using the scrum approach to outline the entire task at the start, and then only starting the actual activity. It is important during task allocation activities to think about task dependencies and how that affects allocation and scheduling. For example, different working hours or time zones can impact dates/ and times when people can get together or when confusion on when items are due. Other difficulties may be differing skill levels in the team, and general performance. There is a potential for a domino effect to sink the project.

Some observations on trello is how it could apply to my current corporate role as well as how useful it would be to ensure correct software project design, accountability, highlighting of issues, quality of work. I do intend to incorporate this into different aspects of my life including in-class team work, assignments, possibly goal planning, and work. I think there could be some increased functionality added to trello,