IoT Project Planning

Project name: The Smart Lunch Box

Group members: Jørgen, Simon, Jonas and Christian

Motivation/Value: ***Our lunchbox helps parents/kids who wants to prevent bacteria growth in lunchboxes by monitoring growth factors and nudge/optimize behaviour for both parents and kids.***

Adressing the need:

By nudging children using gamification

By providing parents with insight/data

How will the group manage the project work?

By both on-site and online collaboration, including individual workloads.

Inputs

Which resources are needed (equipment, budget, people, competences)? Which technologies will be used?

Main input is the temperature.

Additional sensors which would benefit the objective of the product such as;

- Humidity
- Light

are also considered.

Actuator of the product will be a display of some kind

- 8x8 matrix

3D-Printing and material for that

Actions

Which actions need to be taken when and by whom?

General structure: Both online and physical groupwork depending on task of the day.

We try to challenge ourselves by working with what we are not typically working with, and then utilize that we can aid each other within different field.

Main responsibilities:

Jørgen: CAD

Simon: Thingspeak and communication

Christian: C++ Programming

Jonas: Electronics

Outputs

What will be delivered and when?

21. April: 1. Iteration of complete product.

This will include a 3D printed lid for the lunch-box which can contain the electronic components. It will also include final electronic circuit with code that works. Lastly it will communicate with Thingspeak service.

28. April: Final product

Polished product where problems from last delivery will be fixed.

4. May: Handin rapport and presentation.

Outcomes

The project will help school children avoid bacteria corrupted lunch boxes.

It will help parent monitor and teach children good food safety practice.

If the project can succesfully nudge these behaviours, it is a succes.

Assumptions:

Assuming the environment of a brought-to-school lunch and the possibility of storing this in a fridge.

Risks: *What are the risks of the project?*

We will think about how the product should be designed to make it suitable for the environment. (Washable ie. Water resistant, placement of device etc.)

Stakeholders/Customers:

Children as the main user

Parents as the costumer and secondary user

Food Safety Actors as interest partners