# Abstract

This report describes a 4th semester project made by six Aarhus School of Engineering ICT students.

## Problem summary

The idea behind the product is to design a digital refrigerator, which allows registration of the items of a physical refrigerator. This allows customers to manage or view their groceries, even when they are not near their refrigerator.

## Goal

Our goal, according to the introductory presentation, is to:

* Develop applications with graphical user interfaces, databases and network communication.
* Practice techniques, methods and tools used in software testing.
* Practice an iterative development process.
* Practice project- and distributed revision control.
* Practice object oriented analysis and design in system development.

Based on this semester’s curriculum, these are the learning goals.

## Requirements and selected solutions

Requirements from the introductory presentation:

* *The project must include elements from all 4th semester ICT courses. This is to be documented in the report, and should be mentioned by the students during the exam.*
* *The project must be of an appropriate scope, so that everyone in the group is able to contribute.*
* *The project must be substantial enough to allow the learning objectives in the course to be met.*
* *A proposed project (1 A4-page) with a problem summary (which problem does the project aim to solve) and a project description (how do you intend to solve the problem) must be handed in prior Friday of the first week of the semester.*

The selected solution a web application, as well as a WPF application.

## Applied methods

During project execution, we used elements from Scrum to manage tasks and meetings. Three times a week, stand up meetings have been organized. Once every one to three weeks, sprint meetings and retrospect meetings have been held.

## Results

The system, with all of its core functionalities, has been implemented; a local database, an online database, a WPF application and a web application. In addition, two extension use cases have also been implemented.