

## *Project Self Service Store 2020*



### **Project description**

#### **Background**

The supermarket chain Rema 1000 has requested a new product for their stores. They would like to offer the same option as the Norwegian Supermarket chain Coop (See link for example).

<https://www.youtube.com/watch?v=5GmtAmGsqIE>

To keep costs low Rema 1000 wants to use standard Cellphones and not special scanning devices. Furthermore, they want the new product to be integrated with their existing Microsoft Business Central 365 platform.

The app must be implemented in Xamarin, so that Rema 1000's own in-house developers can take over the prototype project. Therefore, an overall system architecture diagram must also be submitted as part of the project deliveries.

Due to previously failed projects, Rema 1000 demands a one-pager description of the prototype, no later than the 2<sup>nd</sup> work day after project start. (By mail to [FHA@EASV.dk](mailto:FHA@EASV.dk))

As Rema 1000 only needs one prototype, the best solution and presentation of it will win the contract.

### **Customer requirements:**

- The app must be user friendly.
- It must be possible to scan and buy products with as few steps as possible.
- After a scan, it must be possible to change the number of products to buy.
- The user must sign in to verify their identity.
- The user must exist or be created in Navision. (here you may cheat and only have a few test customers predefined in Navision)
- At all-time it must be possible to see the total cost of the purchase. (Remember VAT)
- The user must be logged out after submitting the purchase; if no purchase is committed then the user must be logged out after a period of inactivity.
- At least 5 test products must be added to Navision with corresponding barcode ID's.
- It must be possible to generate a bill manually in Navision (This will be automated later)
- The app should not communicate directly with Navision WS but through a middle layer.
- Finally all app purchases must be presented in Power BI for further analyzes.

### **Educational goals:**

The student will learn have to:

- Work in multiple environments
- Acquire new knowledge
- Split up a task into small surmountable tasks
- Get hands on experience with Dynamics Business Central and Xamarin
- Learn how to do a sale presentation pitch (Like Løvens hule/Dragons Den)

### **Work form and project requirements:**

- The project will be executed in groups (4-5 persons)
- The groups may be created by the students themselves, but all students must be part of a group
- A report is not part of the project delivery, instead a presentation is performed with an internal censor.
- Each student must create a log which must contain an entry for each day containing:
  - What did I accomplish yesterday (Specific)
  - What do I want to do today (Specific; Today I want to create the backend part of the login)
- All source code + log must be submitted to Moodle

### **Project start and solution pitch**

Project start and introduction:	The 23 of April at 0900
Solution sketch (one pager):	The 27 of April
Status meetings:	See normal schedule
Code hand-in	The 6 <sup>th</sup> of May
Evaluation and presentation:	In groups from kl 9.00 the 7 <sup>th</sup> of May

### **Guidance**

Guidance will follow our schedule, but a zoom meeting can always be requested (It is better to ask one time too many then not to ask).

### **Teacher**

Frank Østergaard Hansen, 2020-04-17