**Drivers**

1. The application to be developed must be accessible from a variety of platforms using a web browser.
2. Ingredients, allergens and nutrition data for meals are to be accessible without the need for authentication, and the application should provide fast responses in comparison to inventory updates.
3. This application must be developed by the school’s technical staff and should be available in nine months.
4. Within four weeks queries related to the number of available items for specific meals, but also adding and removing new items to inventory (microservices) should be demonstrated to many stakeholders. These functionalities are especially relevant to the organization and extremely difficult for the team that never worked with microservices. Aware of these difficulties, this very initial prototype does not need to use service discovery registries, but local method calls need to be replaced by synchronous remote calls, or better options. Direct dependencies in the database are to be eliminated depending on the adopted data management strategies. The use of messaging needs more time and will be covered in another prototype.
5. For the nutritional descriptors, it is necessary to consider their designation, measure unit, but also the maximum reasonable amount to be used for validation purposes.
6. Given the team’s lack of awareness of microservices, a presentation/discussion session on the decomposition approach and proposed microservices is also scheduled in 4weeks. An experienced technical team will be present.
7. The team is free to choose the technological stack to use in the project, but, for cost reasons, only open-source technologies can be used.

**Business** capability

Business capability is a description of what a business does independently of how or why. They offer a view into a business that is free of details such as processes and strategy. Capabilities may be captured at various levels of detail such as organizational, department or team capabilities.

In the project several were identified 5 global capabilities.

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| --- | --- |
| Id | C1 |
| Title | Inventory Management |
| Definition | The company manages the inventory of their meals. It can add and update the meals in the inventory. Also includes the POS (point of sale) id. |
| Inputs | 1. A meal is produced, and a member of the staff adds that meal to the inventory. 2. A sale occurs and the specific item is updated. 3. The item reaches its expiration date, so it is updated/removed. |
| Outputs |  |
| Artifacts | UC1-4, P2D4 |

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| --- | --- |
| Id | C2 |
| Type | Meal Management |
| Definition | The company provides information about the ingredients, allergens and nutrition data for the available meals. |
| Inputs | 1. A user requests information about a meal. |
| Outputs | 1. A list of information about the meal is provided, including the ingredients, allergens and nutrition. |
| Artifacts | P2D2, P2D5 |

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| --- | --- |
| Id | C3 |
| Type | Descriptor Creation |
| Definition | A meal descriptor formula is used to generate the meal descriptor. The company has the capability to change/update that formula |
| Input | 1. A admin/staff updates the formula for the meal descriptor. |
| Output | 1. The new formula is adopted in the creation of meals. |
| Artifacts | UC6-7, UC9 |

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| --- | --- |
| Id | C4 |
| Type | Report Generation |
| Definition | The company creates reports about the several business activities. |
| Input | 1. A report is requested with specific parameters (date, items, meals, sales, etc) |
| Output | 1. A report is generated and made available. |
| Artifacts | UC8, UC12 |

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| --- | --- |
| Id | C5 |
| Type | POS Location |
| Definition | The company as several POS that have different locations. |
| Inputs | 1. A admin/staff updates the POS location.  2. A admin/staff adds a new POS.  3. A ServiceUser consults the near POS. |
| Outputs | 1. A POS location is made available. |
| Artifacts | P2D4 |