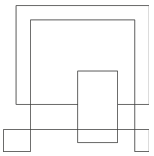

Project Description

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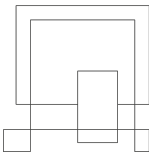
Iulia Ispas, 331460

Software Technology Engineering

Second Semester

22/02/2023



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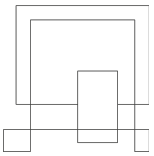


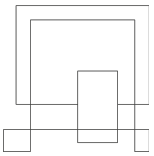
1. Background Description

Considering the energy and resources used in processing, shipping, storing, and cooking the food, food waste is an issue that affects people all over the world and has a significant negative influence on the environment. (Move For Hunger, 2023). This problem is mostly generated by high-developed countries, especially from Europe and North America. It is estimated that 931 million tonnes of food were wasted in 2019, which is equivalent to ⅓ of all food production. (UNEP, 2021).

Planning a meal based on already purchased ingredients is among the best strategies to avoid food waste. It prevents people from overbuying food and using completely different ingredients for each recipe, resulting in saving money (L.R., 2021). Studies show that an average family in Denmark spends around 3200 DKK on food that is wasted (S.V., L.L., 2018). This leads us to the project's main goal which is to help those who have trouble coming up with meal ideas by using ingredients that have already been bought.

The target audience are people who want to change personal eating habits and focus on preventing food waste. The purpose is to unite them by creating a society, which focuses on finding productive uses of leftovers. Being part of this kind of community may inspire and motivate people to break their routines and attempt new activities. As the awareness about the impact of household food waste grows, the amount of people who would want to join these kinds of societies might also increase (H.A., C.J., K.N., B.C., N.J., 2014).

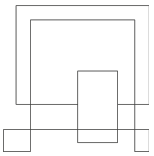
Formation of the association can be beneficial for both the people who would be part of it and the planet. The association could have a positive impact on the environment, since reducing food wastage saves energy and prevents pollution of land, water and the atmosphere (B.J., 2021). Moreover, it would significantly influence people’s well-being, since communities provide social engagement, which is the basis



of social relationships. The sense of belonging is stronger when a person identifies as a member and has interactions within a society (B.T., 2021). Therefore, the association would enable people to become a member of it. Members could engage in the community by exchanging recipes and giving each other feedback as well as collecting their favourite ones. To become a member, some personal information would be required and in case of unwillingness to provide it, the person could remain a guest and still benefit from the association by the opportunity to see other's meal ideas.

Furthermore, most associations need to have a person who is in control of actions and decisions made within it (W.F., 2022). The activities of members should be supervised by an administrator, who would be obligated to check people's recipes in order to avoid incorrectness and remove or modify them if necessary. If any member would not follow the social rules of the society, the administrator could exclude that person from the association. Additionally, the administrator would be able to share recipes and view the other's ones.

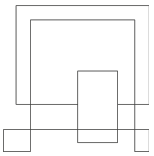
In conclusion, a society that emphasises using leftovers productively is a good way to reduce food waste and its damaging effects on the environment. This type of society could serve as a model for others to follow as people become more conscious of the effects of household food waste, creating a movement towards sustainable eating habits and lowering the amount of food waste produced worldwide.



2. Problem Statement

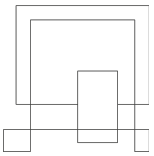
More and more people might experience difficulties in finding recipes made from already owned ingredients. Raising public awareness leads to increased interest in the association, which could result in administration management problems.

1. Which information is necessary to find or create the suitable recipe?
2. How would the members give feedback to other people's recipes?
3. How would members be able to store their favourite recipes?
4. What kind of personal information is needed to become a member and how to store it?
5. How can society members be supervised?



3. Definition of purpose

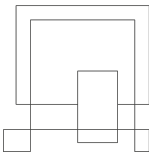
The purpose of the project is to address the issue of food waste by providing a solution that encourages guests and members of the society to utilise leftover ingredients in the creation of new and delicious meals.



4. Delimitation

1. Verification of the members' recipes will not be included.

2. Verification of personal information will not be included.



5. Methodology

The methodologies that are expected to be used during the project are Unified Process and Scrum combined together. The first development process is divided into four phases: Inception, Elaboration, Construction and Transition. After each step the previous work is improved and the number of developed features is increased.

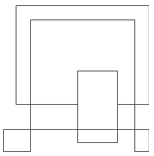
The project's goals and vision are decided upon during the Inception phase. Its foundation is outlined, along with its delimitations and potential risks. Moreover, some of the most significant requirements are drafted in detail, defining the scope. The elaboration plan has to be estimated by counting the amount of time that is expected to be spent on each task.

The Elaboration phase consists of designing diagrams and the system's behaviour, implementing the core of the application and testing it in a limited time frame. Around 80% of the major requirements are defined in depth and some of the most significant risks are determined. At this step, the amount of required effort and the duration can be estimated.

In the Construction phase, the system that was partially developed during the previous stage should be completed including only crucial features and ready for deployment, but the final touches will be made in the Transition phase.

Except the Unified Process, Scrum, which consists of roles, ceremonies and artefacts, is intended to be used throughout the Elaboration, Construction and Transition phases. The roles, which are the Product Owner and the Scrum Master, will be splitted in the Scrum Team, but are allowed to change only between sprints.

Initially, the Product Owner is responsible for communicating with the client and developing the Product Backlog by prioritising the user stories by their business value. Before each Sprint, a Sprint Planning Meeting is held, during which the Scrum Team, Product Owner and Scrum Master discuss the top priority user stories, determining what

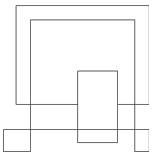


can go into the next Sprint. The output of this meeting is the Sprint Backlog, which consists of requirements that have been committed to for the upcoming Sprint.

For this project and the current circumstances, each Sprint will last three days, during which the development work is done. Nothing that can affect the Sprint Goal should be changed during this time. During the Sprint, the daily stand-up meeting will be held, when the Team is expected to discuss what has been completed and what to work on as well as if any impediments have occurred, for no longer than 15 minutes.

At the end of each Sprint, a Sprint Review and Sprint Retrospective Meeting are held. During the Sprint Review, the team presents its accomplished work to the Product Owner, and during the Sprint Retrospective Meeting, the team discusses how to improve the development process.

The Sprint process is repeated until the Product Owner on behalf of the client accepts the presented product as a potentially shippable one.



6. Time schedule

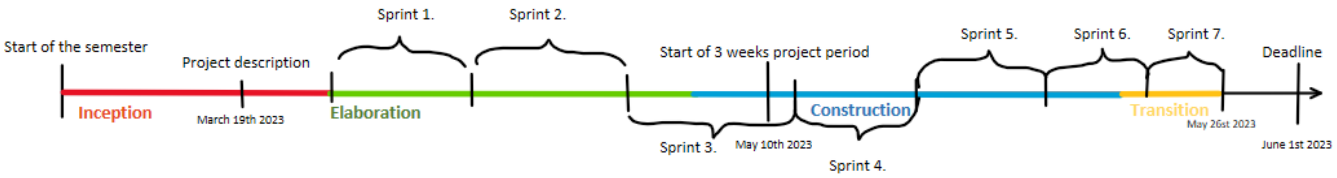
The time expected to be spent during the project period during the project (week 19th- week 22nd) is approximately 8 hours per day, 5 days a week, resulting in a total of 128 hours per student.

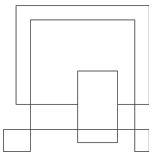
One week prior to the project period (week 18th), each member of the team should work on the project for approximately 25 hours.

The meetings that are expected to be held before the previously mentioned periods would take around 12 hours per week, which leads to a total of 120 hours per student in total.

Since some problems may occur at any time, 40 hours were intended for such circumstances.

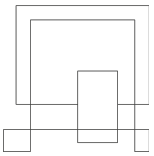
Finally, there are 31.3 hours per ECTS for each student. The group will spend 1252 hours in total.





7. Risk assessment

Risks	Likelihood Scale: 1-5 5 = high risk	Severity Scale: 1-5 5 = high risk	Product of likelihood and severity	Risk mitigation e.g. Preventive- & Responsive actions	Identifiers	Responsible
Low control of recipes created by members	5	2	10	If any social rules has been broken, the member is excluded from the society	Usages of inappropriate language or fake recipes	Iulia Ispas
Low control of verifying members' personal information	4	3	12	If personal information prove to be fake, the member is excluded from the society	Usages of fake personal information	Dominika Janczyszyn



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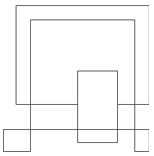

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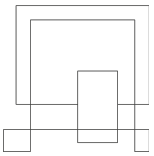


Appendices

GROUP CONTRACT

Group Contract - VIA Engineering Guidelines

Group Contract

Group Name : **DOSI** Date: **15/02/2023**

These are the terms of group conduct and cooperation that we agree on as a team.

Participation:

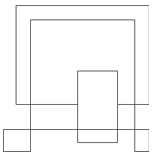
We are looking to be involved in a manner that is equal and share the workload. We will only accept absences with reasonable excuse that are acknowledged ahead of time and no one should be late.

Communication:

Regular meetings will be held so communication is expected to be in person. Additionally, we created a group on messenger, where we discuss the meetings schedules and essential information about the project. In case someone does not regularly participate or respond to any form of contact, a supervisor meeting is required. Criticism is allowed, only if it is constructive.

Meetings:

Periodic meetings will be held prior to the project's start. During the project period, we agree to meet every week day from 9am to 4pm with a break for lunch (about 30 minutes) and a few 5-minute breaks in between. Following each meeting, a plan for our upcoming work will be developed. If the work is done earlier, it is unnecessary to stay longer. If one of the group members cannot attend a meeting, an online session can be organized or the person can work individually.



Group Contract - VIA Engineering Guidelines

Conduct:

We work as equals without choosing a group leader. Each person is responsible for their part of the project and has to find a solution by themselves. If necessary, we try to fix the problem together or with a supervisor.

Conflict:

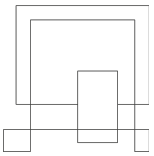
We agreed that when we have opposing viewpoints, we must discuss the which advantages and disadvantages of each position with the others before deciding is better. If a group member breaks the agreements made by the group, they will receive several warnings from the other group members, and if the situation persists the group decides that a split is necessary, the supervisors will be contacted. We should also schedule a meeting with our supervisor if our conflicts become personal.

Deadlines:

We intend to split our major objective into smaller ones and assign internal deadlines to each one. We wish to finish our project until *28*□□ May and spend last three days on finding and correcting mistakes if some occur.

Other Issues:

To make sure we have sufficient time and are not rushing, we decide to begin the project's work one week before the scheduled start date. We decided to set aside a few days prior to the exam to analyze the program's capabilities, to create a presentation regarding our project and to rehearse it. Each member is accountable for the documentation of the code written by them.



Group member's name	Student number	Signature
Iulia - Maria Ispas	331460	
Simona - Luana Drăghici	332353	
Dominika Janczyszyn	331076	
Oliwier Wijas	331106	

Version: August, 2018
Template responsible: dans@via.dk