Group

Members

- Project leader: Tommy Johan Jacobsen (s354524)
- Christer-Daniel Phan Ton (s354405)
- Martin Tørris Kjone (s354393)
- Robert Larsen (s349967)
- Sigurd Sandlie (s354571)

Notes

Meetings

10.11.2020

Participants: Christer-Daniel, Martin, Robert, Tommy
Topic: UN SDG Goal
Group came with possible problems and solutions. Martin submitted possible problem 2, Robert came with 1 & 3, while Tommy came up with possible problem 4. Christer-Daniel made this word document, took notes and sorted the assignment.

12.11.2020

Participants: Christer-Daniel, Martin, Sigurd, Tommy, Robert (30 min l)
Topic: Website Prep
Group expanded on the problem and solution. Answered why the problem is important to solve from a social and technological perspective. How our solution is tied to the problem and how it helps to solve it. Made a more in-depth description of the solution. Planned the content of the webpages and general theme. The group attempted to design a prototype of the website using adobe xd in which Tommy's is the one being finalized. Continued developing the app and its usage. Martin wrote the "three steps how our solution solves the problem". Sigurd and Christer-Daniel wrote a description of the problem and solution. Tommy designed a prototype of the app to be displayed in the website.

17.11.2020

Participants: Christer-Daniel, Martin, Robert, Sigurd, Tommy
Topic: Starting to make the website
Robert wrote "Why the problem is important from a social and technological perspective" between the previous meeting and this meeting. Group started to work on coding the website. Tommy focused on the home page, Martin focused on the app webpage, Sigurd jumped around, Robert worked in the start on the front page and then focused on some CSS. Christer-Daniel made the nav buttons on the top of the pages. Christer-Daniel and Robert worked on the problem and solution. Martin further sketched the app.

23.11.2020

Participants: Christer-Daniel, Martin, Robert, Sigurd, Tommy
Topic: Making website
Between the two meetings, Martin further developed the lo-fi model of the app. Christer-Daniel worked on the problem and solutions webpage i.e. added in the text, made read more section that works without javascript, and made it more user-friendly with javascript without making it necessary for the webpage. Martin worked on the lo-fi model and further developed the app webpage, adding in pictures of the model and making the text more 'to the point'. Robert had to leave early to prepare for exams. Sigurd left halfway through since he had to watch his little brother. Tommy designed SVG icons and placed them in the homepage, sketched some ideas in Adobe XD and further developed how the app would work. Sigurd worked a bit on the CSS and replaced the placeholder images on problem and solution webpage.

30.11.2020

Participants: Christer-Daniel, Martin, Robert, Sigurd, Tommy
Topic: Finalization & Group evaluation
Started out with filing out the group evaluation form. Tommy showed off a more concrete layout with better cohesion as the webpage's looks had drifted a bit from each other throughout the process. The group gave their thoughts such as commenting on the font size and the heading needing to be more eye-catching (can't remember who). Christer-Daniel suggested using headings with expandable text, akin to what was used in the previous iteration for read more, where the paragraphs would be under headings and hidden till a toggle is pressed.

01.12.2020

Participants: Christer-Daniel, Martin, Robert, Sigurd, Tommy
Topic: Finalizing the website and delivering in
We didn't have time to implement the subheadings for problem and solution and decided to go with the original layout. We tried to find problems with the website on various web browsers and removed them, such as text being hidden behind images. We also tried different color combinations as and tried to increase contrast between background and text. Went with a simple blue and white combination to keep it simple and increase dark and bright contrast within the website. Robert and Christer-Daniel restructured some text to prioritize the important information is read first and arguments for the statements follows. Martin changed the prototype pictures to fit the color theme of the website. Added sources to the bottom of problem and solution webpage.

Problem and goal

UN SDG goal & Problem: 2. Zero Hunger & 3. Good Health and Well Being
Solution to problem doesn't have to be feasible in current time, but within three to five years
Solution: An app that gives food consumption advice and tells you if leftovers can be used for something rather than thrown away. Something similar to "TooGoodToGo" **(Possible Problem 4)**

Possible problems

1. Improvement on helsenorge.no
2. Machine that tests blood and slime to check for virus and can connect to phones. Similar to blood glucose meter, but checks for viruses
3. VR zoom i.e. VR university auditorium
4. An app that gives food consumption advice and tells you if leftovers can be used for something rather than thrown away. Something similar to "TooGoodToGo"

Why the problem is important to solve

1. Norwegians are one of the most wasteful when it comes to food (social)
2. Reducing waste to diminish food shortage (social)
3. Better health (social)
4. Increased awareness of food usage (social)
5. Easy to use and informative (technological)

How our solution helps solve the problem

1. People aren't aware of how to use leftovers
2. Easy to use and doesn't require much thought and time
3. Use of leftovers reduces waste and decreases the food shortage

Solution description

1. Mobile app
2. How to use leftovers (making food or throwing away)
3. Planning dinners around health and waste
4. When it's safe to use food, which has gone beyond "best before" date

5. How long food can be stored in cooked form
6. Donate and receive food
7. Calculate and advice food intake based on user inputted diet, weight, height, age, and possible fat to muscle ratio/fitness scale
8. Dispelling general food misconceptions such as food intolerance being the same as food allergy when they're not

Application

Application name:
Logo:

Website layout

Content

Links of sources and used content on webpages

- Hvor mye mat kaster nordmenn hvert år? (melk.no)
- Tall og fakta – Matvett
- Om matsvinn – Matvett
- Matsvinn – Wikipedia

Need

9. App name
10. Slogan
11. Three step how our solution solves the problem,
preferably minimalistic descriptive pictures (example: Use app, make food, input leftovers to find out how to use)
12. More detailed description of the problem and our solution
13. Description of why the problem is important from a social and technological perspective

Three steps

Consumer

- 1) INPUT:

Weight, age, gender.
Illnesses: e.g., celiac disease, lactose intolerance, nut allergies etc.

- 2) OUTPUT:

Specifics about the persons health (BMI etc.), change over time, then a description of what types of food they need.

- 3) Pick-up food:

Map where you can search and choose location, which gives you a list of people giving away food in this area, type of food, pricing, location, time (within the time frame).

Producer

- 1) INPUT: Guidelines about food expiration and amount of time cooked food can be stored etc. Which type of food has been prepared (ingredients to register allergens), location, time frame it can be picked-up in. (Changed to location.)
- 2) OUTPUT: Information from previous step is posted on the app for possible consumers. (Type of food moved here)
- 3) Notification: A notification will be sent to the producer when someone has chosen their meal. (May cut out the producer part, because there will be a very long page on mobile etc.)

Description of app

The functionality of the app is based around three main features.

- Smart dish planning based on ingredients to make a healthy and waste-less dish.
- Food waste reduction based on smart planning and donation of leftovers.
- Health and diet suggestions based on eating patterns and user inputted data.

Planning ahead

Leftovers

Health and diet

Description of problem and solution – Sigurd

According to an article from FramtidiNord.no, every person in Norway throws away around 73 kilos of food every year on average, whereas most of that food can still be used.
Most of our population do not have an understanding of how they can contribute to lowering this number, and that is what we are trying to help with.
Our solution is an app that is primarily focused on reducing food waste among the Norwegian population.
Within the app, you get access to different recipes for meals you can make based on the leftovers you have at home.
In addition to this, there are also other great features, like checking how long you can keep different foods before they turn bad, both before and after it has been cooked.
To make the app more versatile and useful in other areas, it will give users the ability to get real time advice on their nutrition and food consumption based on information they provide about their health status.

Sources:

Article from FramtidiNord - https://www.framtidinord.no/meninger/leserbrev/2019/10/20/Vi-kaster-for-mye-mat-20203303.ece

Description of problem and solution – Christer-Daniel

Food is a finite resource many Norwegians take for granted. Norwegians are amongst the most wasteful of people and hence contribute to the food shortage starving many around the globe. Calculations done by matvett.no tells us that Norwegians waste about 385 000 metric ton on a yearly basis and that the general population is to be blamed for 58% of this waste. In conclusion, on average a Norwegian citizen wastes 42,5 kg of edible food every year. This 58% wastage could feed half a million people and reduce world hunger.
Our solution aims to reduce the wastage of food by introducing an accessible and easy-to-use app. There are many reasons to wastage of food but seeing as 20% of it comes from dinner leftovers, we believe one of the major factors are laziness and lack of accessible information. Therefore, have we prioritized the ease of use of the app and the amount of time it takes to use.
The main functionality of the app is to inform how leftovers from meals inputted by the user can be used, be it used in another dish or donated. The secondary function of the app is to be an accessible and correct informed library of information regarding food. The information on the app is as an example how long cooked food and leftovers can safely be stored and what the optimal storage condition is. The app will also contain information about how long after a product has gone past its “best before” date it is

safe to consume and dispelling of general misconceptions such as food intolerance being the same as food allergy while they're not.
The app can also be personalized by inputting age, weight, height and fitness. It can then help plan healthy meals and by also inputting your meals throughout the week, help find vitamins and nutrients you are lacking in your diet.
The app also works to share leftovers. By deciding to donate your leftovers rather than using them yourself or throwing it away, other users of the app can come to you and receive the donation.

Why the problem is important from a social and technological perspective

Why the problem is important from a social point of view - Robert Larsen:

People in poor countries are suffering from poverty. By 2030 one expect 37 countries to be in the worst kind of food condition. With covid-19 roaming about, the situation is only getting worse. There are also homeless people in many countries who are struggling financially, and who may not be able to afford food in an honest way. The struggle for food can lead to crime, and potentially a gathering of people on poor diets that can quickly become a burden on society.

Hunger can indirectly create instability in a country, which can potentially create instabilities in the world through terror and mass immigration.

Why is the problem important from a technological point of view:

Utilizing the resources in nature is important, as they are limited. The number of people on the planet is potentially growing, and we must to a greater extent try to avoid throwing away food that can still be eaten. Food that can be eaten should be given to those who need it instead.

It can also be of interest for food producers to focus on creating products for dishes that are more likely to be given to others than being thrown. One reason for this, is because it can give rise to new kind of products that can that are more focused towards utilizing ability to be given to others after being part of a meal, instead of being thrown.

Sources (probably covers most of the claims):
1. https://www.globalhungerindex.org/results.html
2. https://www.latimes.com/archives/la-xpm-2009-oct-16-oe-berger16-story.html
3. https://www.refinery29.com/en-us/how-hunger-is-connected-to-terrorism
4. https://www.iisd.org/system/files/publications/link-between-hunger-migration.pdf

Layout

14. Color theme: Main background white, and accent/secondary color green and blue
15.

Webpages

Front page: Short introduction to problem and solution. Slogan and hyperlinks to the other webpages.
Secondary page 1: How app works and what it accomplishes
Secondary page 2: What our problem is and how our solution solves it in-depth.

Grading

- Is graded from A to F

- Grading scale according to MNT/UHR:
    - **A:** 90-100
    - **B:** 89-80
    - **C:** 79-60
    - **D:** 59-50
    - **E:** 49-40
    - **F:** 39-0
- Part 1, 2 and 3 are not individually weighted, but is graded as a whole and **count for 100% of the final grading**
- Submission deadlines are subject to change and if changed, you will be informed well in advance

Must be met

- Group of 3-7 – Achieved
- Group declared by 1st November – Achieved
- Self-evaluation form by 24th November
- Group-evaluation form by 1st December
- Website:
    - At least uploaded to one student's server
    - Contain at least one webpage
    - Use of HTML and CSS
    - Must work in web browsers without JS support
    - No use of framework and libraries
    - At least 95% according to http://checkers.eiii.eu
    - 4.5:1 contrast

Recommended for design of website

- Minimum use of text
- Information and interaction over quantity of pages
- Any language, but grammar and punctuation are important
- One consistent theme across all the webpages

Evaluated skills:

Technical

- Layout
- Coding
- Content development

"Power"

- Leadership
- Communication
- Innovation

Guidelines:

Group

1. Within **3-7 members**
2. **Declared** by 1. Nov
3. You may **not leave** or **change** group **after 1. Nov**
4. **May not** participate in **more than one group**
5. **Participation** in group is student's **individual responsibility**
6. **Delays** caused by group members are the **groups responsibility**
7. It is up to the group to maintain **professional** working environment

8. Cooperation within the group is **mandatory**

Submission

1. Self-evaluation form **by 24th November**
2. Group-evaluation form **by 1st December**
3. Submit **one URL** using hand-in function on canvas and **include all members** of the group **by 1st December**. Only one submission per group, **not one for each group member**
4. **Verify URL** works as expected **before submission**
5. Any changes to website **after** submission will render the submission as being submitted late
6. **Late submission will be accepted**, but the **grade will be lowered** for every 24 hours it was delivered late
7. **Exceptions**, for documented medical reasons

only, **must be approved by** the **instructor before** the assignment **deadline**.

Part 1

1. From group – COMPLETED
2. Choose UN SDG goal – COMPLETED
3. Invent a solution to the problem. Must: COMPLETED

- Not already exist (may use existing solution in new or different way)
- Doesn't have to be feasible, but should be possible to achieve within three to five years
- Doesn't need to be coded or made, but must be well describable

Part 2

Create website Current

1. Why problem is important from social and/or technological perspective COMPLETED
2. How problem and found solution is tied/related COMPLETED
3. Describe solution Current
    - Doesn't need to be coded or made
    - Recommended to have a lo-fi (low fidelity) prototype to showcase COMPLETED
4. Can include text, images, videos, hyperlinks or any form of web content created by the group or that is cited appropriately
5. Accessibility and usability over functionality i.e. do not design to look "cool", but **effective, efficient and satisfying to use**

Deadlines

1. Self-evaluation form – deadline 24.11.2020
2. Group-evaluation form – deadline 01.12.2020
3. Website submission – deadline 01.12.2020

Technical requirement

- Website must be **uploaded to at least one of the student's web server**
- Website must **contain at minimum one** web page
- No word limit, but **recommended to keep text to minimum**
- Emphasis on quality of information and interaction, not quantity of pages
- **HTML and CSS are required**, and JS is optional, but only to enhance user experience. **Must work in web browsers that doesn't support JS**
- Website can be in **any language, but grammar and punctuation are important**
- Use of framework or libraries is **prohibited**
- Copying code or content created by others is **prohibited and may constitute plagiarism**

Grading Criteria

- At least 95% according to http://checkers.eiii.eu/

- Color contrast minimum of 4,5:1 (WCAG Guideline 1.4.3)
- Independent work and initiative
- Creative and innovative thinking
- Feasibility of solution
- Quality expected of Bachelor level and quantity of work reflective of scope of project
- Clear and logical presentation and layout of web content
- Website and webpages are cohesive in style and presentation
- One consistent theme
- Accessible and usable for all people of any background
- Text is concise and to the point
- Images are clear and understandable
- Full and appropriate referencing (where appropriate)