

Team reflections

Customer Value and Scope

- **the chosen scope of the application under development including the priority of features and for whom you are creating value**

We have prioritised making the user interface more user friendly. We also added mouseover tooltips with explanations for the abbreviations to increase the value for the user.

- **the success criteria for the team in terms of what you want to achieve within the project (this can include the application, but also your learning outcomes, your teamwork, or your effort)**

We wanted to achieve a working and user-friendly (close to our mock-up) website. This includes being able to use it for what we intended at the start, which was to compare different modes of travel, mainly the travel modes emissions.

In terms of teamwork, we had no clear goals or any success criteria other than some points we wrote down in our social contract. Those were to be kind and helpful to each other, to provide constructive criticism and to be respectful to all team members by attending meetings at the decided time and to announce beforehand if one is unable to come to the meeting. Also that everyone has an equal voice and valuable contribution. If all this is done successfully, we think that we have succeeded in terms of working as a team.

We also had individual goals such as each team member learning about PHP and HTML. We reached these goals by watching tutorials and coding together in the beginning. Individual goals also included each team member learning about scrum and fully being able to use and understand the trello board. We also wanted the members to become good at doing effort estimations. We reached these non-technical goals by attending the lectures and helping and teaching each other these skills during our meetings. We all got a chance to practise and understand the agile work method better.

- **your user stories in terms of using a standard pattern, acceptance criteria, task breakdown and effort estimation and how this influenced the way you worked and created value**

We are still a little too generous in estimating effort, to improve this we still want to use half points. We want to achieve this by updating the effort value of cards after beginning work on them and try to give out half points if necessary.

So far our user stories and tasks haven't exceeded the duration of the sprint, which means our user stories and tasks have been of appropriate sizes. We have had more of the issue of overestimating tasks and assigning them too many effort points. This combined with the fact that we have worked a lot in teams have made some user stories go much quicker than estimated, so we could still get better at doing effort estimation. But when it happens we often choose to take on another task so we get to create more value for the end user.

- **your acceptance tests, such as how they were performed, with whom, and which value they provided for you and the other stakeholders**

We have continued to use pull requests where the whole group gets a chance to review and accept or request changes.

Our code reviews have created value for the stakeholders by improving the quality of the program overall. Since most team members get to review the code, it makes it easier to catch bugs and get input from others. It also creates value for us as a team since we can catch bugs and problems faster instead of having to discover these when it will be highly integrated into the program. This means that the team also gets to familiarize themselves a little more with parts of the code base that were written by others.

- **the three KPIs (key performance indicators) you use for monitoring your progress and how you use them to improve your process**

After the first week the amount of effort we have selected each week has been less than we are able to deliver. During the second week (last week) we encountered issues in assigning more tasks which have been resolved this week with better management to great effect. Otherwise we have kept an eye on the flow of our scrum board and added another KPI in order to measure it's flow during the week. Last week we had a lot of individuals who had multiple user stories simultaneously which resulted in some user stories getting stuck until all of them were completed. This was resolved this week with tasks flowing more evenly throughout the week as a cause of this reflection. This week it will be further studied to find potential improvements. We have already found potential issues in our approval process which will be further investigated.

1. The number of effort points selected each week.
2. The number of effort points in each list (each column in the scrum board) during the week

3. The number of effort points completed during the sprint vs how many were selected (committed to), the velocity (sprint burndown)
4. **Number of user stories in each category of our scrum board each day to follow its flow.**

Social Contract and Effort

- **your social contract i.e., the rules that define how you work together as a team, how it influenced your work, and how it evolved during the project (this means, of course, you should create one in the first week and continuously update it when the need arrives)**

We continue to update the social contract as needed while working on the project. We still feel like working with the social contract has been going well and it feels natural. We intend to keep following our social contract and update if needed.

- **the time you have spent on the course and how it relates to what you delivered (so keep track of your hours so you can describe the current situation)**

We each estimated how many hours we could spend on the project in the beginning of the week and divided our tasks accordingly.

Our effort estimation was better for some group members and for some this week's effort estimation was more of a struggle after finding problems we didn't know about when doing the estimation for the task. So it has been mixed this week. We did estimate the group members' own points quite accurately (the time each person had to devote this week to this course).

Next week we hope to be even better at effort estimation so that each team member can take on tasks that truly end up matching their effort points. But it's still hard because unexpected problems may occur.

Design decisions and product structure

- **how your design decisions (e.g., choice of APIs, architecture patterns, behaviour) support customer value**

This week the main focus has been implementing a more beautiful and user-friendly website interface. Now the website looks much better and more like an actual website, instead of just plain white text. We have also implemented hover functions, so that the user can get more information without the website becoming too cluttered. This is something we think increases the customer value a lot.

- **which technical documentation you use and why (e.g. use cases, interaction diagrams, class diagrams, domain models or component diagrams, text documents)**

Two weeks ago we wrote: “We plan on using a sprint burndown chart and we have assigned the scrum master to collect the data for each meeting. The plan is to evaluate how this is going so we can hopefully do this throughout the sprint.”

This week the scrum master did this by collecting screen shots of our Trello board throughout the whole week. By this we can see how things move, or get stuck, in our workflow for all team members.

- **how you use and update your documentation throughout the sprints**

Same as last week. We continuously update the necessary documentation at the weekly meetings. We kept notes of the supervision meeting and his advice.

And as usual we keep the social contract, definitions of done etc. in mind and anyone can look at the social contract when needed or unsure of something.

- **how you ensure code quality and enforce coding standards**

This week work with Git has been a bit slow, all group members haven't approved pull requests so we had a lot of Trello cards still in “waiting for approval” instead of being able to merge with main and get to “Done”. But we still think it is important that everyone has a chance to look at the code before we merge it, partly since it helps with the code quality control.

We have been good at keeping our standards for coding and code quality. For example, we now only use “camel case” for method and variable names. We also decided not to have too long methods and to continuously comment on the code, which we have fixed some this week.

Everyone asks for all group members permission before pushing something to main. We thought this worked well during this sprint, but still hope that the group will find a way to get merges to main approved faster next week without sacrificing code quality.

Application of Scrum

- **the roles you have used within the team and their impact on your work**

We have removed our testing team and now only have a product owner and a Scrum Master. We as a team work a lot together and collectively decide most things, but the roles make sure we are on the right track and always have value in mind. While roles require some more focus and attention that is incorporated as a team decision during the meetings rather than the sole responsibility of any individual.

- **the agile practices you have used and their impact on your work**

We have continued working along with our three meetings per week and use of Github, Trello and Discord to manage our work and cooperate as a team. This week we have paid more attention to the scrum board in keeping it active, moving and getting approvals. We still have a few problems in the approval process where user stories might get stuck but nothing that won't get resolved by the end of the week. We have also partly reduced the notification load on discord but will need to continue to be more active in comments on the Scrum board in trello.

- **the sprint review and how it relates to your scope and customer value (Did you have a PO, if yes, who?, if no, how did you carry out the review? Did the review result in a re-prioritisation of user stories? How did the reviews relate to your DoD? Did the feedback change your way of working?)**

We have a PO, Max Norén. We have decided to only have one PO during the entire project, mostly because we have come up with more role assignments. We did the sprint review for the previous week on Monday and we will do a sprint review for this week next Monday. We talked about what we liked about how the sprint was carried out, what we did not like and wanted to improve. This week we tried to give everyone enough work to do at the beginning of the week to avoid the problem from last week when people had time to work with the project but no assignment to do. We also tried to make sure that our assignments were separate enough from each other so we could avoid everybody working in the same branch, which had been a problem the week before.

- **best practices for learning and using new tools and technologies (IDEs, version control, scrum boards etc.; do not only describe which tools you used but focus on how you developed the expertise to use them)**

Unchanged.

- **relation to literature and guest lectures (how do your reflections relate to what others have to say?)**

Amongst other things, our supervisor mentioned that the flow of user stories in our Trello board had a tendency to come to a halt at the “Waiting for approval” stage. We have taken that feedback into consideration this week and have seen a slight improvement in the flow of user story cards. Our supervisor also mentioned that one good approach towards user stories might be to take them on one by one, which is something that we have considered more this week and have worked out great.