

## **Team reflection week 3 - Punch Card**

Do this survey weekly to contribute to teachers as well as own evaluation:

<https://forms.gle/NP8V6DU8aTofgF7w7>

The following team reflection will regard Customer Value and Scope, Application of Scrum and Design decisions and product structure. Each of the sections will answer all of the bullet points mentioned in the PM for the Team Reflection. The reflection will be made by using Smith's model of A (The current situation), B (The desired situation) and C (Feedback to reduce the gap between A and B).

# Customer Value and Scope

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

- A. Currently, the scope of the project seems reasonable. We made an initial calculation of the possible project time, assuming each project member can contribute to the project 5 hours per week. This made the total scope of the project approximately 192.5 hours. When estimating each of the User Stories, we found that the project is feasible. The priority of features is written down in the product backlog and is prioritized in a way to create value for the customer (Alingsås Vattenskidklubb) by providing functionality for each iteration of the project.
- B. However, the desired outcome is to narrow the scope further, to ensure that the customer's demand is met, nothing more nor less. Additionally, the priority of features needs to be further investigated, as they are currently handpicked by the team based on intuitions.
- C. In order to reach the desired outcome from the current situation, a sprint meeting will be held, which will discuss the problems stated above. Additionally, a meeting with the product owner will be booked, to clarify what features to prioritize, and what details could be compromised in case of a time squeeze.

**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)**

- A. The established success criteria are to create a minimal viable product, with functionality according to the customer's needs. Moreover, the group wants to enhance its knowledge in React and Spring Boot as part of the project.
- B. The success criteria are still very vague, and not very specific. This might harm the project in the future, as there is no consent regarding the minimal viable product. Thus, the desired outcome is to have concrete goals both regarding the final product and the learning.
- C. In order to solve this situation and reach the desired outcome, a meeting will be held to discuss each team member's anticipation of the final product. Additionally, every team member will have the opportunity to reflect on whether they are satisfied with their learning.

**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**

- A. The User Stories have not yet received acceptance criteria, nor effort estimation. This will be conducted at the next sprint meeting as this week's work has focused on setting up the environment and ensuring that Git and Github work for all project members. However, a task breakdown was made on the User Stories for this week's sprint. By not having acceptance criteria, nor effort estimation, it has been hard to estimate how many User Stories can be conducted during a sprint.
- B. Acceptance criteria are critical in assessing whether a User Story is finished or not. Thus, the desired outcome is to have acceptance criteria for all User Stories, in order to assess whether a User Story can be marked as done or not. Additionally, the desired outcome is to be able to predict the workload the team can conduct during one sprint. This can only be achieved by doing effort estimations for all of the User Stories.
- C. In order to reach the desired outcome, acceptance criteria will be established during the upcoming week, for the most critical user stories. Additionally, the team will try to estimate each of the most critical user stories, to be able to predict an adequate workload for the next sprint.

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

- A. The acceptance test for setting up the environment, e.g creating a basic web application with "Hello World" displayed, was making sure that the web application worked for all project members. Thus the product was quality assured by a total of seven. The value of the basic web application was to show the product owner (Alingsås Vattenskidklubb), that a functioning environment was set up.
- B. The desired outcome is to have the product owner partake in the acceptance test. However, this might not always be possible, thus, Gustav will act with that responsibility. Moreover, it is also desired to have a fixed time where the acceptance test should be held.
- C. In order to reach the desired outcome, is to contact the product owner and see whether it is possible to attend the acceptance test. Additionally, Friday's will be used to test the added features from the sprint.

**The three KPIs you use for monitoring your progress and how you use them to improve your process.**

- A. As this is the first spring, we have not yet used the KPIs for monitoring the progress. However, the desired outcome is to be able to use them to improve the process. Thus, this week's KPI will be measured and noted, to serve as a basis for upcoming sprints.
- B. The desired outcome is to have KPIs measured for each sprint to see the progress of the project.
- C. To meet the desired outcome, weight and effort will be put into measuring the KPI.

## **Social contract and Effort**

*As the social contract was not edited this week, we consider this theme less important to reflect on this week.*

# Application of Scrum

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

- A. Regarding roles within the Scrum framework, Gustav was selected to represent the product owner, while the role of scrum master is more fluid.
- B. The desired outcome is to use the scrum master in a way that suits all the team members in order to avoid conflicts.
- C. To reach the desired outcome, continuous dialogue will be made between the team members.

## **The agile practices you have used and their impact on your work**

- A. The project team is constantly updating the Trello board and did a thorough sprint preparation this week. Initially the development of user stories was a bit wage and we received feedback from Martin that they were too big and ambiguous. We used Trello as our scrum board, and utilized it to delegate tasks and stories, as well as keeping track of progress. Another way we act agile is by working in pairs, and utilize the knowledge that the group holds.
- B. Despite our group considering the user stories to be an appropriate size already, the desired situation would be that even our supervisor finds them reasonable.
- C. To achieve appropriate user stories we should ask our supervisor to guide us.

## **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?)**

- A. During our sprint review we did not have the opportunity to engage with the real PO, however we discussed matters with Gustav as a step in. We have iterated reviews on stories and efforts successively through the week, and had a shorter summarizing review on friday. In this review we had a look at the trello board and discussed which stories to prioritise and if any new ones should be added. We have not changed the prioritisation of user stories.
- B. Optimally we should review the sprint with the PO to be sure that the tasks and stories are accepted.

- C. Taking into aspekt that the PO will not have time to participate in all sprint planning/review activities we should make sure that the acceptance criteria are clear after the sprint planning sessions, so that we can accept our stories with confidence ourselves.

**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)**

- A. We use IntelliJ as IDE and GitHub and Git for version control, and team members who did not know how to use these were both guided by other members with more exercise and watched tutorials on YouTube. Regarding Trello the knowledge on how to utilize this tool was derived from lectures and especially the Minetest seminar where we got to experience it in practice. When we developed our user stories we tried to focus on the INVEST criteria and especially the “independent” criteria through “slicing the cake” the right way. This was important for us to be able to work in parallel.
- B. The desired situation would be to have clear user stories that are valid to all aspects of the INVEST criteria. We also seek to have a clear scrum master for shorter periods of time to allow everyone to get this experience if they want to.
- C. To make our stories valid to the INVEST frame we should focus on making clear acceptance criteria, which in turn also will make it easier to estimate the workload of a story. The value criteria should also be validated by the real PO and not only dependent on our own thoughts and speculations on customer value. The latter could be solved through a meeting with the PO.

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

- A. We have tried to apply the theories and frameworks we have been given during lectures which is mirrored in our stories and our reflections.
- B. Apply the tools that are given.
- C. Read through the lecture notes to ensure we utilize relevant tools.

# Design decisions and product structure

## How your design decisions (e.g., choice of APIs, architecture patterns, behaviour) support customer value

A. The framework we are using to develop the frontend is react which is new to everyone in the group. In addition to using react we have chosen to use primeReact as an external library to help development of the frontend part of our project. This makes development faster and usage of a single component library is going to make us have less unnecessary dependencies that can cause problems in the later stages of development. The usage of react has been successful as we have managed to get a lot of work done. The only problems have been with imports of the external libraries sometimes causing issues.

For our backend we are using the Spring Boot framework. This framework is also new to everyone in the group. We are also using several dependencies together with Spring Boot such as Spring Web and Spring Data JPA.

B. We want to have less issues with the frameworks so that we can spend more time actually developing a product and not troubleshooting issues with external libraries and dependency problems.

C. To remedy the problems above we need to educate each other on how to use the frameworks and libraries correctly so that we use them in similar ways.

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

A. For development on the backend spring application, we use a domain model document obtained by the customer to create ER-diagrams and implementation models. Furthermore, we look at online documentation to correctly implement the frameworks used in the restful api, such as java persistence api and spring. The frontend application uses modules, such as calendar framework, to easily create interactive parts on the website. These frameworks have online documentation used to correctly implement it in the code.

B. We want to have clear documentation on frameworks used in the project to be able to effectively implement such features. We also want to have good domain model documentation.

C. We will follow the documentation for the libraries and modules we use in our application to implement them correctly, as well as share good sources with each other in the group.

## How you use and update your documentation throughout the sprints

A. During the first week our documentation of the code has been lacking this is because we are all still learning what the frameworks are actually doing.

B. We want our code to be well commented and documented. This is so everyone in the team will know what the different methods and functions do. As this is a project with a lot of group members we would want to do this as there will be a lot of methods and functions from different authors, so this will help everyone understand the project and code better.

C. We need to get better at documenting every step we take and learn more about the frameworks we are using so that we can explain what the code is actually doing.

### **How you ensure code quality and enforce coding standards**

A. Code quality and coding standards are currently applied and enforced naturally with our knowledge from earlier courses and knowledge of programming. If we see something that is obviously wrong we change it and update the GitHub repo. If we are in a meeting we would notify the author of the code and ask them to change it. There is also a lot of different knowledge in programming between the seven of us in the group so we help, teach and complement each other with how to implement different things so it is done correctly.

B. We would like our code to follow the standards that Spring Boot, JPA and React desire. So for example using primitive data types (for example, Integer instead of int) for our tables in the Java code. For React we want to reduce clutter of code in a single file so we split up different views and elements into their own components.

C. To reach B we will not only look and ensure one's own code is fine we will also check code that others have written. This is to make sure they follow the standards and also to possibly notice somewhere you missed following the standard where they did.