Team reflection week 9 - 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) Last week the group got concerned that the scope was too ambiguous for the small timeframe that was left. However by focusing on what creates the most value to the customer the project could be scaled down and manageable within the time limit. The final scope (listed in order of the features priority) is to create a calendar that enables booking of a variety of activities, it is only reachable for personnel through a log in, calculation of a booking's price and serving the customer with a booking confirmation as well as it keeps track of customers and who has paid or not. We are creating value for the owner of the club through making the process of booking less time consuming and less prone to human errors.

B) The desired outcome is as always to ensure that the customer's requests are met, by completing the corresponding US, and prioritizing the features that creates the most value to the customer.

C) We did prioritize the features that were the most important to the customer. For us to avoid scaling down the project next time, we would have to estimate the scope in an earlier stage, when the new features were proposed, so that we could agree upon a more reasonable amount of work before we start working with it.

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 team's success criteria is to deliver a product that the customer can use for their business. Regarding individual learning outcomes all members strive to utilize this opportunity to learn how to work agile and get experience on how to work on real projects, as well as learning new libraries and APIs. Furthermore, the current situation regarding teamwork is great as the members are glad to help out each other when possible as well as we have understanding for the individual schedule regarding external stress. The team has shown excellent tolerance as well as engagement the last weeks of the project as the bachelor students have been allowed to focus on the thesis in their final week, and will take more responsibility the last week while the other students will get room for focusing on their exam.

B) The desired outcome is to deliver a product which the customer can use. Moreover, the team members should be satisfied with their learnings as well as feel that they are relevant for future work and that they will be able to profit from them. The desired situation, when regarding teamwork, is to have an open environment and good relationships with one another.

C) We do feel that we have learnt a lot during the project, as well as we have had a good group dynamic. For now we believe we are very close to the desired situation and give ourselves a pat on the back.

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) When creating user stories we have developed a standard procedure which we conduct at our sprint planning meeting on mondays. At the meeting acceptance *criterions and effort estimation is conducted* with the usage of scrum poker and following discussions containing motivations for why the effort estimation should be at a certain level and associated acceptance criteria. However, not all User Stories received clear acceptance criteria, same as the previous weeks. Thus, it is still challenging to understand whether a User Story is finished or not. After the User Stories are written and estimated they are broken down to smaller tasks which facilitates the development. This process is a matter that has shown great progress during the project as the increasing amount of knowledge makes it easier to understand what tasks are needed which in turn streamlines the project. Our user stories affects our work with value through focusing on what really gives value to the customer and scaling up or down specific stories that correlates with the

B) The desired outcome is the same previous weeks:
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.

C) We should double check at the end of every sprint planning that all the User Stories we have planned for the sprint have sufficient acceptance criteria.

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

A) There is some inconsistency in how we perform acceptance tests, we do have criterias and individuals follow these and consult with the group during meetings in order to receive guidance and assistance, but there is no formal procedure that we force every task through. The criterias given from our PO are at a high abstraction level which makes it challenging for us to know exactly what the PO wants. To specify the criterias further Gustav has represented the po while we have estimated criterias in plenum during our monday meetings.

B) The desired outcome when regarding acceptance tests, is that no tasks are accepted without qualifying according to the criterias, which in turn should result in a functional application where the newly added code cooperates with already existing code. Our acceptance criteria should be considered as a guarantee that the Product Owner will be given an application that is functional. Thus, the desired outcome is to test as thoroughly as an application needs to function. We should have clear and specific criterias given by our product owner.

C) To control the testing even more we could adapt a more structured procedure where we go through tasks and check if they meet the criterias i plenum. However, this will be very time consuming and we believe that for this project there is no need for such a bureaucratic process, and that it is sufficient with validation done by a fewer number of individuals per task.

the three KPIs you use for monitoring your progress and how you use them to improve your process

A) The KPIs we track are balanced to monitor both productivities, sustainability, and the creation of customer value. Our KPIs were discussed with our supervisor to ensure that they are relevant and sufficiently specific. The KPIs have not changed during the project which we find favorable and desirable because it makes it possible to observe development and changes in them as they are consistent and can be compared. The following sections describe our KPIs and how we evaluate them.

We monitor stress with a baseline of 1 being no stress till 5 being unsustainably much stress. The measures are not related to the stress amount in prior weeks, as the latter alternative might make the scale abstract and the results will be hard to weigh against each other from week to week as they are dependent on the prior week.

Our second KPI is a version of the burndown chart but relates to each sprint and is not measured in absolute terms but in percent of what the customer expected from us and what we planned to do during the sprint. The burndown KPI relates to the last KPI which was suggested by Martin; subjective time assessment.

While the burndown measures how well we meet the customer's expectations on value creation, the latter KPI reveals if the group finds the work pace to be appropriate. The scale goes from “we could not do what we promised the customer” to “we could have done a lot more than what we promised the customer”.

How to handle the stress measure is quite self-spoken; if someone experiences a lot of stress, we will discuss the matter and even out the workload or in other ways take measures to reduce the source of stress. If the burndown is below 100% as well as the time assessment this means we need to lower the customer expectations for the next sprint relative to this. If the burndown is approximately 100% but the group members differ on the subjective time assessment this could be an indicator of uneven workload or miscommunication, and the matter needs to be discussed. If the burndown is high and the time assessment measures high this means that the group is capable of increasing the workload, and we could bring this forward to the customer.

The KPIs are anonymous for everyone but Victoria who owns the google sheet and are therefore able to see who has answered what. This makes it easier to be honest as the greater part of the group will never know your answer unless the matter is brought up for discussion. There has been some differentiation in the results, and it has been brought up on monday meetings if anyone wants to assess this, and a shorter discussion has led to the conclusion that the “high” workload depended on individuals who had stress outside of the project, and also found their task to be more challenging than what they had expected. The problem was handled and we moved on.

This week the KPIs were quite even in stress and burndown measure, but in terms of value we could have presented the PO there were some more differences. This was a result of our decision to not start on any bigger features during the last week, to ensure that we did not spoil our project as it was coming to an end. The focus was rather to refine the features we already had, and finish the most important ones.

B) The desired situation would be that we could take measures as a result of the KPIs and that they would converge towards the golden mean. However we have seen over time that there are external factors that will affect the individuals so that it will be very difficult to achieve a centered mass of KPI values every week. Another desirability would be that all group members experience the KPIs quite equally, which in turn would indicate even workload relative to competence. That all members weigh the numbers in the respective KPI equally, for example that 4 in stress for Adam is the same as 4 in stress for Alice.

C) Our KPIs are good prerequisites to reach the desired situation of B, but it is challenging to ensure that all members weigh the KPIs equally. That would demand through discussions where every person explains and motivates what is needed for a KPI to be at a certain level. We should also evaluate the KPIs in context to prior values to see if any of our measures has had any effect.

Application of Scrum

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

A) We have found a suitable practice for our group where the roles are more or less fluid. This means that all individuals take initiative to follow the scrum framework and work agile. Gustav still has the role as representative of the PO. However we do believe that through giving clear roles the meetings could have been more effective in the startup face as there is some uncertainty on where to start, and unease on appearing dominant.

B) The desired outcome is to apply the Scrum framework in a way that suits all the team members to avoid conflicts. It should also favor an effective workflow and effective meetings.
C) We could test clearer roles. While our experience is that it is beneficial that individuals who feel more energised take the lead this day, then there is a natural distribution of load, and the meeting and members benefit from the energic drive. We believe that for now our best practice is to continue the open dialogue concerning the roles to make sure that everyone is comfortable with the group's practice.

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

A) We use most of the practices we have learnt in the beginning of the course; Sprint planning where we update our Trello board, pair and group programming during the week, and reflection at the end of the week to improve our practices and management. We utilize our Trello board to delegate tasks and stories, as well as keeping track of progress. We make sure to make the stories vertical and after the last reflection on this theme we took measures to make clearer tasks and whether it is taken or not which has made it much easier to take on tasks if you have time over . This way we avoid conflicting code and merges. By working in pairs we utilize the knowledge that the group holds. We also encourage logging in to Discord and increase overall learning and effectiveness by consulting each other.
B) We feel quite satisfied with our practices. We could have had clearer assessments of acceptance criterias on the user stories, and make sure that every story has clear criterias.
C) We write coresponding criterias on the user stories in our Trello board, and we could make sure that every story has unambiguous criterias.

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 the whole project Gustav has been representing the PO during our sprint review, as we did not have the opportunity to engage with the real PO. This was naturally the case this week as well. Additionally to letting Gustav speak up consearing if we have met the customers expectations, we also discussed the matter in plenum and what to prioritize forward. We iterated reviews on stories and tasks successively through the week and had a shorter summarizing review on Friday in combination with the preparation of our presentation. ones should be added. We did not end any priorities this meeting as the project came to an end and we had made the most vital features and cleared them of with our DoD:
"*Definition of Done, is when the acceptance criterion for a User Story is fulfilled, both from the project team's view and the product owner. Additionally, the User Story must be integrated with the rest of the application, and function accordingly.* " and the belonging checklist : Application is runnable, All tests complete successfully, Code is

documented, Gustav is happy, Peer reviewed. There may have been some slack in the documentation.

B) Optimally we should review the sprint with the PO to be sure that the tasks and stories are accepted. We should also make sure that all code is documented.

C) We should make sure to document our code as we write it.

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

A) This matter has not changed much since last reflection : To develop competencies within new technologies the group is continuously sharing tips on sites and tutorials to watch on discord as well as more competent group members guide less knowledgeable ones. However we have now gained basic knowledge within at least some areas and are therefore sharing less of the introduction videos. We still use IntelliJ as IDE and GitHub and Git for version control. The usage of these has been incorporated by all group members. This week we did not develop any new user stories but made sure that the remaining ones followed the INVEST criteria and especially the "independent" criteria through "slicing the cake" vertically. The INVEST criteria was learnt during lectures while the IDE and version control was suggested by group members as well as they were acknowledged and recommended in the tutorials we watched in the beginning of the project.

B) The desired outcome is the same as the last week's:
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 to allow everyone to get this experience if they want to

C) To reach the desired outcome we will continue to learn by doing as the learning curve has flattened out and there is little effect by watching tutorials anymore. Thus, we will focus on enhancing our knowledge by exposing ourselves by continuing working and encountering mistakes by searching the internet for answers. We also believe that by changing the work environment and collaborating with new programmers we will be exposed to new methods for version control, IDEs and technologies which will broaden our competences further.

Design decisions and product structure

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

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

A) We use the technical documentation for the libraries we use. An example of this is primereact, reactjs and the spring framework. We have not created a lot of technical documents ourselves this is because of the inexperience we had with spring and react at the start of the project. We noticed at the beginning of the project that even a very general and roughly sketched plan was not very useful because we did not know how all the parts would fit together at the beginning. We now see that lack of technical documentation caused some design flaws but this might have been hard to avoid as we did not have any prior experience with the frameworks.

B) Ideally we would have planned out and created more technical documentation of our own at the start of the project. This would streamline the process and would make it easier for all members of the team to contribute value. It would also make it faster for members to get proficient in the different parts of the project and remove barriers of understanding between the frontend and backend. Now that we have more experience we could create more plans at the start of the project as we have the technical understanding of the tools we have used. Creating technical documentation would've made it easier for us to deliver value.

C) As of now we have much more experience with the tools we've used which makes it possible for us to create technical documents and this would remove a lot of obstacles and make us more effective at delivering value.

how you use and update your documentation throughout the sprints

A) We constantly keep our scrum board updated throughout the different sprints, as well as creating team and individual reflections every week. Our main focus has been on programming, and therefore it's very little, or none, documentation in the code.

B) In an ideal world, we would like our code to be fully documented and explained. Without this documentation, it might be hard for future programmers to read and understand the code.

C) To reach the desired goal, we would have to imply in one of our meetings that documented code is important, and decide to start writing documentation.

how you ensure code quality and enforce coding standards

A) None of us had any substantial prior knowledge of the frameworks. Because of this we had to learn about the different frameworks as we completed our user stories. Due to this we had several issues with the code in the beginning that we later had to rewrite when we understood the frameworks better.

B) Ideally we should have read more of the documentations before starting to code. This would have led to less time spent fixing different issues.

C) Next time we will read more documentation before so that we can set up more clear rules for how we should structure the code.