Customer Value and Scope

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

In this sprint the goal was to make the user design better so the user can interact with the application in an easy way. Another goal was to make the application work on mobile devices, so needed to make everything responsive so it works on all units. These were goals directly taken by the POs wishes, and the groups' wish to wrap the whole project up for the final demo/presentation.

- 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)

The success criteria for the product is to look good so the PO likes it and in terms of learning outcome we wanted the group members to develop their design and user interaction knowledge so everyone becomes better at designing nice looking GUI.

- 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

In this sprint we had only one user story that is divided into small tasks and every group member worked on a specific task. The user story was about the overall design of the application and every task was about designing a specific page in the application. The user story is done when all the tasks are done in it and this breakdown was clear and helped us divide the work equally between the team members. However the acceptance criterias of the main user story could have been better since some confusion regarding colours and designs arose.

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

It was like last week we demo first the results to each other and then merge them together to show the PO the overall result and to get feedback so we know if we need to change things if the result is not like what the PO expected.

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

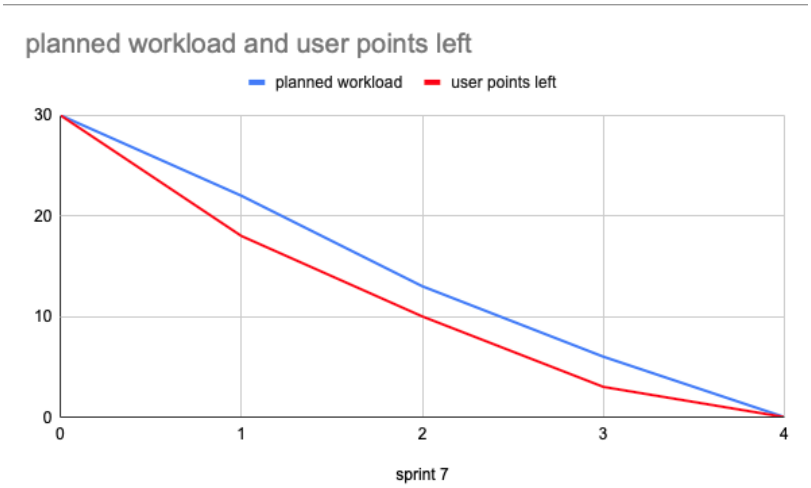
The KPIs have not been changed this sprint.

The average time: 5 **.** (1-10) (10 being 20 hours *and more* of efficient work—the % lowered based on the work time available in the week — with regards to holidays or sickness) (last week:8) **///Explanation: We did not have much work this week, only to wrap up the project, which turned out to go quite quickly.**

The average stress level: 2. (1-10) (1 being so relaxed we are bored, 10 so stressed we are reaching levels where we are having serious physical symptoms or feel unable to work because of panic) (last week 4)

Velocity: **4** (this is the sum of the weight of all user stories.) (last week: 8)

burndown chart sprint 7



comments on burndown chart:
The chart resonates with our perceived stress level. We were able to get the user stories done in time without too much stress and time.

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)

Right now the social contract puts a lot of weight on communication as the most important thing. This has become more and more important over the weeks. It also focuses on attending meetings and taking responsibility for both attending meetings and working on the project. It has been very open for attending meetings over discord which has been good, but maybe isn't perfect when a majority of the group is meeting in school, because it's hard to hear everyone.

Over time it has become clear that communication is key and we could become even better at it. Attendance at meetings is also very important to keep everyone up to date and so they don't miss anything that's not written in the notes for the meeting. It can also become tedious to have to ask all the time what you're supposed to do. One communication that has increased is if people miss a meeting they are now better at communicating, both before and after, what they need from the rest of the group to understand and work well with the group.

Still, to reach better communication, the social contract could emphasize it even more, maybe if you miss a meeting, instead of writing and asking, call someone that was there and talk to them so you get more information. Or we could take better notes at the meeting. The social contract and how it has influenced our work could also be discussed in the sprint retrospective as a point there.

- 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)

The time spent on the course this week was low (almost half of what it had been the week before), the lowest so far—but as stated in the above KPI question—We did not have much work this week, only to wrap up the project, which turned out to go quite quickly. Therefore, despite the low hours, we are still happy with both the effort and the work this week. We still got what we needed done and we felt it would be ridiculous to add unnecessary or unwanted work simply to work more (not to mention risky should it not get done in time at this final sprint). In conclusion: we are happy with the time and the deliverables this week, despite how that might look on the surface with the KPIs.

Design decisions and product structure

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

A lot of design decisions have been taken to create a MVP. They might not always be the most thought out decisions, but they're quick and easy so they create value.There have also been some minor refactoring of old code from the beginning of the project to allow for easier extensibility, readability and to make the code more uniform.

Design decisions should create value, not only for the customer but for us as developers as well. It can make a big difference on how easy it is to add new features later on in the project. We don't want technical debt that we have to pay off later. But we have to create value for the customer, which is more important

To make better design decisions we always have to be ready for change, by being more agile and having a certain technical agility. First creating an MVP and then focus on having a good architecture, while also creating value for the customer so it’s easy to add new features.

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

Ali was responsible for creating a system architecture diagram (SAD) this week, the supervisor suggested we implement this sort of diagram. No one in the group had worked with SAD before, so Ali got to do his own research to get some inspiration regarding how it works. Three abstraction levels were implemented, one that described the data-level of the system, a logical-level and the third was for the GUI. The User was placed in the middle and the aim was to show how the user interacted with the different levels of the system. The SAD gives a general overview of how the application is designed. The “three-level separation” makes it clear to understand the architecture, the group is satisfied with the SAD.

- how you use and update your documentation throughout the sprints

This sprint the major update to our documentation was the one concerning the ReadMe file. Since the project is coming to an end it was vital to make sure the readme was finalised and contain all the relevant and updated information. In addition to this update, documents such as DoD, coding style has been used in the same fashion as previous sprints.

- how you ensure code quality and enforce coding standards

No major changes since last week. The document for code style still ensures that every member use the same “coding standards” and when a developer pushes his/hers code to github another team member reviews the code to make sure it looks good

Application of Scrum

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

This week the scrum master was Hedda. As usual it was decided to not have any daily stand up meeting but rather be available on discord and focus on one stand up meeting on Wednesday. The impact of having a check-in meeting mid-way through

the sprint was similar to previous sprints where it made sure the sprint was moving along smoothly and everyone was doing ok.

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

At the Wednesday meeting one member finished his user story and suggested an add on feature that could be implemented. Since no other member was in need of help he could do this. Having clear communication has allowed us to create more value for the stakeholder. We want to keep working this way.

- 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?)

During the sprint review the finished user stories were shown and some remarks concerning design could be voiced by the group. When these were fixed the PO was demonstrated the progress made during this sprint. The PO was happy with how things had turned out and only gave a minor opinion about colour choice. This was then fixed by the group. Having the PO present was useful as it gave a stamp of approval of the user stories, as well as a final approval of the project itself. We, the group, and the PO, all felt happy in the end to how everything had turned out, and to the high level of success and completion the project had reached. Relating to DoD, the review was an opportunity to get approval from other members before committing and merging to main.

- 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)

Not relevant for the sprint.

- relation to literature and guest lectures (how do your reflections relate to what others have to say?)
    - Do we enjoy the focus on “creating customer value”?

We enjoyed the focus on “creating customer value”, as was mentioned in the (source, see week 6). It gave an easy answer to design decisions, where the answer was always simply--let’s ask the PO, if we were stuck or unsure. But more importantly it allowed a greater sense of completion, value, and simply *purpose* in the working of the project. There was a clear goal. And it felt valuable in a real way that other course goals rarely manage. Therefore our conclusion is that we did really enjoy creating customer value.

    - “In their study, a number of student teams ended up focusing more on technical aspects and developed their ideas according to their own views, rather than really taking into consideration

> the views of potential customers, even though externals were invited to regularly provide feedback on student projects.” — is this an issue for us? according to supervisor, no.

While we are sure there were times where we were stuck or forgot to consider the customer and POs wishes and value to them--we also believe we managed to, in the end, find a good balance. Two/three weeks before the projects finished we did discuss this topic with our supervisor, and she, unprompted, said she believed we were working well on this topic. She said we were *not* simply working on the technical, forgetting the management and agile aspects of the course. And we believe because we (quite late in the project) managed to add in a wanted PO feature (the login/account system) we also showed a willingness to adhere to the POs wishes. We also tried to make the POs wishes the main goals of the sprint, as often as we could.

WE DO still have a similar problem in that some do a lot more of the heavy lifting with regards to the programming, as mentioned in the paper. Some members do more of the complex coding, simply because of their previous knowledge and expertise. Still, no one member has not still tried and worked hard each week. Everyone shows up and does the work to the best of their abilities. So while the work might differ, the effort remains equal in the whole group.