

Team Reflection: Week 4

Team Ginger

Customer Value and Scope

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

This sprint we kept developing the UI and core functionality. The achievement-page has been put in order with a few dummy-achievements with highlights when they have been achieved. An idle animation for the trashcan has been created and implemented and the initial components of the UI have been put together. A system for leveling has both been created, implemented and displayed in the UI. All of these implementations have created immediate value for the client. They are able to use the app for its intended purpose, even though it is rudimentary at the moment. The scope for this sprint was appropriate and we were able to finish all features on time.

Next sprint our scope will expand slightly as we plan to make the home-page a lot more useful and visually pleasing. We are also going to add to the functionality of the “trash-collection“ regarding how it is stored locally on the device. These two points are of high priority and we will be working together to achieve them in time.

- *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)*

Right now we want to learn about what we have not worked on so far e.g. if we worked on the GUI last time, we learn more about functionality and backend this sprint. We want to have as many learning opportunities as we can and also try to find a balance between quality learning and in learning each part of the project. Because we do not want to divide it too much and be good at a lot of things, but instead be better at just a few topics. How we find this balance is to continue what we are working on but we should also not be afraid of taking on a challenge.

- *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 have now established this sprint's user stories. The goal is to have generated user value whilst also providing us developers with an adequate foundation in which to build things on top whilst also generating user value. Our acceptance criterias usually go hand in hand with the tasks. Some user stories will only have acceptance criteria whilst more complex user stories will have tasks that describe

more in depth how the feature should be built and operate.

Our estimation remains the same, but we encountered a problem where we had a tiny user story and did not know what to do with it. We debated whether it should be made a part of another user story but it did not quite fit. So we left it like it was and assigned it the size XS. If a team member is assigned an M-sized user story they can be assigned one or a few smaller user stories if they feel that they have the time. By working on a few key larger ones but also being able to finish smaller ones we generate value but are also able to maintain the structure of the project (as a small user story can be to move a few buttons and this could be a nuisance to try and work around).

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

As we decided on last week, there are some user stories that we are not going to test as the test itself would take up too much time/exceed the scope of the current sprint. But the general acceptance tests are reviewed by everyone during the sprint review and everyone gets a say in whether they have been fulfilled or not. The majority of our acceptance tests were accepted this sprint and there were only two stragglers, which will be reviewed during our next sprint review.

The acceptance tests provide value in the form of nearly all new implemented features being visible for the user. They clearly show in what direction the design for the app is heading and it also lets the user interact with the core functionality, which is picking trash, leveling up and receiving achievements.

We would like to continue in this spirit, with us continuing to deliver content and having a meeting where all finished user stories are reviewed. Now, if we do run into issues with this kind of structure we will have to change, but at the current moment it is hard to try and predict what might happen or not.

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

After evaluating this week's KPIs we got the following result:

- Developed features per sprint/Planned features per sprint = $\frac{5}{6}$
- Satisfaction level with project progress per team member 1-5: average: 4, median: 4
- Difference in time spent per sprint compared to target time: average -4.3 hours per team member, meaning we spent 4.3 hours less than the target time.

We can see from the satisfaction level that the team thinks this sprint went well. We could potentially have gotten more work in by assigning more work to those who had a lot of time left. Next sprint we will attempt to optimize the workload better so we can get more progress by spending more time working.

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)*

Our social contract remains unchanged and we have not had to consult or change it.

- *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)*

This sprint we spent less time than we did the last sprint even though it feels like we created more value this sprint. Looking at our satisfaction KPI we have a median satisfaction level of %, which is better than last week's %. Obviously the amount of work does not directly correlate with how much we deliver but it is an interesting observation. We would like to get a few more hours in per team member. We can get more work in by creating a better plan for the next sprint with appropriate task sizes for every team member.

Design decisions and product structure

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

Right now we have structured our codes into a complete prototype and tried to apply the same theme color and design to each screen that is available to navigate to. The navigation is made with a bottom bar with similar style. We want to continue to make the application have a good flow and hopefully our new features will follow the same structure. During the weekly Friday sprint review, we have been discussing new functionalities and enhancements of already defined features. We want to expand on our code values of being able to register collected trash, getting rewards for the collected trash and also being able to share your accomplishments.

We will make this happen by prioritizing a better experience in registering collected trash by adding the ability to register different types of trash which the collector gets different amounts of points for. Having this feature means users are not discouraged from collecting trash that is smaller than a whole trash bag. We

will also continue on the achievements system to allow for receiving rewards beyond levels to give the users even more incentive to collect trash.

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

User stories contain a function specification with an extensive description of tasks and criteria and used as a base for further development. Apart from the documents related to the application we have very extensive Minutes of meeting (MoM) documents there we address different topics we have discussed. Each Friday MoM contains information and tracking of KPIs, review of what we have achieved and completed as well as a plan for the next sprint. What we want to happen: We want to continue to create and maintain the documentation on the same level that we have today since we think that we are covering topics that are crucial for the execution of the project. No change is required as long as all team members are dedicated and keep commitments on the execution of the project.

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

The documentation we currently have in place, i.e. meeting minutes (which many times prove to be very useful), guides and reflections, both individual and team, are updated in real time. This is working really well at the moment and we wish for it to continue that way.

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

We review and test our code by following our acceptance criteria and DoDs. The decision to use an extension to handle code style was a good one, as we do not have to spend time on checking indentations and “” vs. ‘’. We wish to continue to use these principles in future sprints.

Application of Scrum

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

We still have no roles in the team. We distribute tasks mainly based on what the team members want to do. We have no cause to change this structure as it works well for the team.

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

We are having meetings regularly. We have our “daily” scrums and at the end of the sprint we get together and have a sprint review. This is where we demo what we have made during the sprint, explain issues we have had and also explain our code. Something that was kind of new this week, and which felt like a natural development of our process was that we reviewed the acceptance criterias together and then merged the branches we had worked on with master.

Besides our normal scheduled meetings we have also had an “extra” meeting where we discussed issues we needed help with (this particular one where we needed clarification from our supervisor). Another addition is that we have a Discord server set up. This is a bit like our “virtual office” because you can use one of the rooms to voice chat and share screen, this makes pair programming easier. Another benefit to this is that you are able to drop by another room and ask for help should you need it.

A team member suggested that maybe we should have some set times where everyone that can, should try to be available on Discord at one or two times during the sprint so that we can work together (this will have the added benefit of increased team spirit). So this is something that we will try to do.

- *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 are deciding everything together during the sprint review and planning meeting. When we are selecting the new user stories we decide based on what is priority with regard to user value, dependencies and suitable workload for all members. What we want to happen: This way of working is working really well at the moment and we would like to continue it. How we are going to make it happen:

- *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)*

This week some of us used new plugins and also found APIs that matched parts of our user stories. This made our work smoother and we did not have to build some features from scratch. We are looking forward to using new plugins and libraries in order to facilitate our workflow. Some of us are still either reading documentations or watching tutorials. As during the previous weeks we share useful resources with each other, mainly in our Discord server, while working.

We use information that we have received during the lectures and we discuss in the group if we have some obstacles. We have created documentation “Useful links”, “Guide to start” and even “List of the ideas” that team members can use and facilitate the working progress. We would like to continue to share information between the team members and support during the whole project life cycle.

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

No guest lectures have been given and we have not used any literature besides documentation.