Team Reflection Course Week 3 (v17)

Customer Value and Scope

Scope & stakeholder

The scope of the project is to develop an mobile Android application where people can plan and create leisure time activities and also join in on other people's activities.

The stakeholders for the project are potential users (activity seekers).

Priority of features

Right now we have started on creating the general features and layouts of the activity feed, creating activity page, activity description, a login function and a firebase to store data. The application still lacks the ability to add activities to the list and integration of the firebase with activities in the layout. We have been able to accomplish account creation so that feature is almost done at this point which we regard as a big milestone even though there still remains to implement quick access login with google/facebook.

The features that we are currently striving towards having completed at the end of the project are:

- Be able to see, join and record activities in a database.
- Be able to create activities that are stored in the database.
- Be able to create an account for the application.
- Be able to plan and coordinate an activity amongst users inside the application.
- Implement a map so users can easily see activities near them.

The upcoming sprint is set to fix some of the functions that are still lacking. We decided on prioritizing the activity feed where an activity should be properly displayed according to the users input. The plan is to have the create activity function pretty much done along with the database integration. An activity should also be displayed on "cards" in the activity feed along with some basic communication between users. As a team we have decided to prioritizing function over design where design will be addressed later on. The goal is to basically have the top two features done in a rudimentary state. In the next sprint we will try to polish up these functions some more and fix the basic navigation inside the app.

Success criteria

- We as a team want to have fun while doing the project.
- We as a team want to create a functioning application that matches our scope and holds all of the priority features.

- We as a team want the learning outcome to be how to apply scrum and other agile frameworks into programming projects. We also want to be able to better estimate the workload for each task.
- We as a team want to see a substantial improvement in efficiency and teamwork, from the first sprint compared to the last sprint in the project.

User stories

We as a team have tried to create user stories that follow a basic pattern. As: A, I want to: B, Because: C. The stories were created with the product owner's specifications in mind. Every user story is then sorted after priority and broken down into tasks where acceptance criteria is discussed with the whole team. The effort estimation for the whole project functions as a point system where each team member gives a rough estimate of the effort involved in a task.

We have so far noticed that the point system does not work well as a sole indicator of a team members effort. Hopefully this will change when the team improves on estimating the effort involved in a task.

Acceptance tests

An acceptance test for us is to have recurring calls with our stakeholders. This will provide us with helpful information and feedback about what changes we have made since the last time we spoke. Furthermore, the stakeholders will hopefully give us ideas on what to improve upon and change until next time. The acceptance tests are made because we want to make sure that the work we do provides value for our future customers.

KPI

KPI:s are monitored to determine how well the project is going and to be able to improve our process more easily. We use the following KPI:s in our project:

1. Sum of points from every task that you completed
2. Questions after every sprint that you rate 1-10.
   The questions are as following:
   1. How did you experience the workload during the sprint? 1 way too low, 5 good, 10 way too high.
   2. How did you experience the collaboration in the team during the sprint? 1 bad, 10 excellent
   3. Are you satisfied with the work you have done during the sprint? 1 not satisfied, 5 neutral, 10 very satisfied.
3. Project burndown. This allows us to see how much work is left until the application is done.

The goal is that everyone has a reasonable and fairly equal workload, where good teamwork is stressed upon. This includes the first KPI, but we also want to evaluate it from the answers

of the second KPI. The last KPI gives us a fairly good view of an equal workload during the whole lifecycle of the project.

Social Contract and Effort

The group wrote the social contract in the beginning of the project, that is the first week of the project. Initially, the contract included the primary roles of the team members and what steps to take during an ongoing conflict. The whole group contributed to writing this contract, and everyone's opinion and preference was taken into account when for example the team were writing the steps to take if a conflict began in the team.

The roles that were needed in the team were inspired from the lecturers examples of roles that are usually needed in a team that applies Scrum. When delegating the roles, it was open to choose any role for each member. At the end of the delegation of roles, every team member had chosen a role and it was clear what duties everyone had.

The social contract was used as a guidance for the team members how to work, how to communicate and what the project objectives are in terms of a team result. With this contract, the group established ground rules that are supposed to be used during the project and how to behave and what work mood to create. It was clear that every team member should contribute with writing code, help with the implementation of Scrum etc.

Initially, the social contract was written to establish ground rules for work. But, every group member agreed that the social contract can come to be re-written during the project. The reason behind this was that some roles may change, some rules may change, because the group can redefine some roles or rules to better suit the project's development. So far, some new roles have been added to the role list.

This social contract has benefited the team in many ways. First of all, not all members of the team knew each other since before. Second, it was clear that some members have more knowledge and experience with programming than others. The social contract is a tool, to be used to delegate the workload equally between the members, even though the knowledge differs between the team members. Also, because some team members did not know each other since before, the social contract is a rule book for which the members of the team should behave towards each other. Thanks to this social contract, the progress has been so far good, the weekly sprints have delivered material.

The time spent on the course has mainly consisted of group meetings and individual programming sessions. Most of the planning has been conducted in the group between all the group members, and most of the programming has been individual. The team has weekly sprints, where the deliveries are presented during a meeting. So far, the team's deliveries have been satisfactory and the consensus is that the project is taking a correct trajectory. There have not been any complaints that the time spent on the projects is too much or too little, so the team's perception of the time spent on this project is positive.

Design decisions and product structure

We use *Firebase* in order to ensure our customers high security of sensitive information that is required to authenticate the user in the login and registration process. Beyond the security of user data, *Firebase* also provides us with a fast and stable database solution that will reduce if not eliminate the possibility of long load times and unfortunate data loss for the end user. Lastly *Firebase* allows us to use *Google* and *Facebook* login features which allows our users a simple and efficient way to access our application. We are currently only using the standard login features and the database in our application, in future sprints we are planning to also use the *Google* and *Facebook* integration to login and register users.

The technical documentation that we use for our mockup is Miro, which we will continuously update throughout the project. We have the UML diagram and other text documents in Google Drive that we find have the suitable tools for editing, these will also be updated during the process. GitHub is used to handle version control of our code. By updating the workflow with these documentation tools we hope to maintain both quality and structure throughout the project.

We use Trello for both sprint planning and review, whereas we choose those user stories that we want to focus on from our product backlog and move them to the sprint backlog, which we in turn split into tasks. Furthermore, we value the different tasks and divide them in the group.

In order to hopefully ensure our code quality and enforce coding standards we have written a definition of done:

- All code should meet the acceptance criteria defined for each task.
- All code should have appropriate JavaDoc and comments explaining its purpose and give basic information like who wrote it, what it uses and who uses it.
- All of the code must be tested.
- Trello system must be followed. I.e. move the card to “done” last!
- All code should follow MVVM design patterns.
- All code and comments must be written in english.
- All code should follow basic java best practices.
- We use Git to handle version control of our code
- All commits should be in english.
- Own branch should be created.
- When a feature is about to be merged with master it should be done using a pull request instead of a standard merge.

Application of Scrum

Roles

We currently have a Scrum master, meeting booker, secretary, deadline responsible, GitHub responsible, contact responsible, product owner and consultant. At the moment some work is not specified to the specific role, for example contact with our stakeholder.

We want our roles to be further defined so that everybody feels that they know what responsibility is expected from them.

To achieve this we need to bring up every time we feel that a task a specific role should be responsible for. For now on, contact with the stakeholder should the contact responsible have.

Agile practices

We are in the middle of the third sprint and trying to follow the scrum practices. This includes having a short daily meeting where we try to answer all questions, as well as two days of scheduled meetings during the week where we work on the individual reflection and see that the workflow is going well for each member.

Sprint reviews

Currently the sprint reviews only involves a review of how we have done our tasks and if we had trouble with anything.

We would like our sprint reviews to contain more reflection of how each team member feels about the workload and the team cooperation.

We achieve a better sprint review by discussing more thoroughly the KPI we have set up and the grades during our sprint review meetings.

Best practices for learning and using new tools and technologies

The best way to practice new tools and technologies is for everyone to first and foremost try and find information on their own. If we get stuck and cannot proceed, then we can always ask other group members for help. By combining what we all know and what we have learned from the course lectures or from our own experiences, we can create discussions within the group and try to help one another. These are our best practices for now, although we will in the future try to find better practises and tools to work with.

Relation to course material

We have tried to apply the taught Scrum workflow that was during the lectures of the first two weeks in our workflow.

We want to know more about the Scrum workflow.

We achieve a better understanding of Scrum by analyzing the parts we have trouble with each week, for example dividing each task for the specific role and trying to improve on this front each week.