

Team Reflection

Week 38

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Customer Value and Scope

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

The application is supposed to give points for the number of passengers in a car. The points can be accumulated in order to earn rewards such as coffee or snacks at gas stations. The idea is to encourage carpooling in order to reduce air pollution and traffic congestion. The priority of features: identify the number of people in the car, award points, create a shop where rewards can be redeemed. Value created for: end consumers (drivers), Volvo Car Corporation, the society (less pollution, less congestion)

- the success criteria for the team in terms of what you want to achieve with your application

A user-friendly and intuitive application that gets many active users who carpool often, thus earning a lot of points and redeeming a lot of rewards. A cleaner environment and less congested roads.

- your user stories in terms of using a standard pattern, acceptance criteria, task breakdown and effort estimation

- As an environmentalist driver, I want to be rewarded for driving with several people in the car and possibly for e.g. driving with low RPM where possible (high gears).
- As a car driver I want to see my awarded points on the board that shows the number of points awarded for the current trip and in total.
- As a Volvo driver I want to be able to visit the store page quickly, since I want to spend my points for rewards, and view my inventory (what I have spent my points on).
- As a team we want to learn about Android API since we need this information to complete this project
- As a team we need a version control system git repository so we can communicate and work with the tasks
- As a team we need to setup the Android CAR project in Android Studio and create the car simulator virtual device as well as familiarise with the Semcon python scripts for simulating car signals to simulator, in order to test/develop anything.

- your acceptance tests, such as how they were performed and with whom

Acceptance tests for:

- Version Control System (Git repository): each team member being able to push/pull their code into the project. Acceptance test passed. Performed by the whole team.
- Setting up AndroidCAR: each team member having a working AndroidCAR virtual device in Android Studio. Acceptance test passed. Performed by each member individually.
- the three KPIs you use for monitoring your progress and how you use them
 Since we are still at a very early stage of development, our main KPIs are team velocity and effort estimation. We want to keep a reasonable pace and complete the tasks assigned for the current sprint.
 Other KPIs we intend to use for measuring our work is customer satisfaction with our work (features, etc.) and the quality of the software (no obvious bugs). This is where we are right now, and since we have not gone through a sprint yet, we can't say if something needs to be changed and hence neither what needs to be done to make that change.

Social Contract and Effort

- your social contract, i.e., the rules that define how you work together as a team (this means, of course, you should create one in the first week)
 Our social contract hasn't changed since formulated the last week (once again). We still strive to help each other out when there's a need as well as divide the work equally between all team members. We will try to follow this contract as far as possible. If we'd discover further ahead that something isn't working with respect to this contract, then we'll have to tackle that problem appropriately when (if) it does happen, and perhaps modify the contract.
- the time you have spent on the course (so keep track of your hours so you can describe the current situation)
 Like previous weeks we define the hours spent on the course as the hours spend strictly on the project (including exercises with the team). With this definition we have probably spent around 8 hours this week, so in total $8 + 13 = 21$ hours (as previous weeks' work was estimated to about 13 hours). Among these hours, 1 hour was spent on the week's meeting, and the rest on same type of things as last week (more features, tasks, discussing who wants to do what, setting up things like project template, emulators, getting to know the car signal emulating python scripts, getting to know Android APIs (including Android CAR), etc.). (The time for writing these reflections is excluded in this time estimate.) We estimate that the next week's hours spent might exceed this week's; when we need to start working off the tasks.. If more hours is demanded from us in order to finish our features for this sprint then we will have to try put in more hours.

Design decisions and product structure

- how your design decisions (e.g., choice of APIs, architecture patterns, behaviour) support customer value
 As previous week's we're still phase where we have focused on setting architecture up for us to be efficient in developing anything; so it's hard to answer that question

as of now. As stated in the last weeks' reflections though, we will strive to use good architectural patterns and appropriate APIs where applicable to solve the problems at hand; with "good" defined as what will grant the customer greatest value in terms of what he/she had in mind and from our experience with developing software. If we find out that something isn't working in our implementations/decisions; we will have to refactor our app to tackle this problem.

- What you document and why, by using e.g. use cases, interaction diagrams, class diagrams, domain models or component diagrams, text documents etc.

Right now in our project as far as we have come we mostly use text documents to document. This because we reflect on what we have achieved each week based on our work. But we also use an online tool as trello which is a scrum board to set up plans. The board visually represents the progress of the team and includes three columns with notes in respective column(To do, doing, done). The reason why we use this tool is partly to keep track of the progress and illustrate each stage of work in the project. But also visualize what to complete in each iteration. In short the tool is used to visually represent the progress of the team.

Eventually, we will continue to work on our documents with reflections and also add documentation (user stories, tasks) to our online tool, trello (visual whiteboard online). But we also want to eventually create a class chart to keep track of the structure of our application. That is, which classes we should have and what methods should be included, etc.

And with this to get there we must continue to document what we accomplished each week, and use more of the trello tool to keep track of the progress, for example, what do we do now, what task should we solve, what's done etc. And further when we start coding we should use UML-diagram to have an overview of the class to make it easier for others to read.

- how you use and update your documentation throughout the sprints

In order to update the Teams Reflections, we have been used google drive, where the team has been able to add reflections and weekly reports to put updates throughout the sprint, this week the Team have used Trello as mentioned above, Trello provides the ability to write and update user stories , Tasks etc. in an efficient way. From next week, when the team will start to code, the plane is to be able to update the code using the Github that the team has created //Nur

- how you ensure code quality, enforce coding standards.

At the current moment we have not started coding, but have instead focused on planning. We aim to have adequate code quality and we have agreed to enforce a light coding standard so that we easily can review each others code and see what is going on at a glance. We will ensure code quality by reviewing the updates and voicing our concerns and opinions, and the

enforcement of coding standards is handled individually, any discrepancies will be caught by the team and fixed. Github will be used for version control, allowing for easy back-tracking and review of additions. This is the system we have planned to use in the future of the project, but of course the plan can be adjusted if we notice that the system is inadequate.

Application of Scrum

- the roles you have used within the team

As mentioned last week the roles we have used in the team so far is that we have appointed a scrum master who negotiate with other teams and communicate with the product owner. The remaining five members is ordinary developers and every member contributes with something that give the team everything that needs to complete the task. The scrum master also helps to develop the product. And for this week scenario the scrum master made sure that everyone had installed the emulator by communicating in our chat for the group. The developers have thus worked to get the emulator to work by running commands in the terminal and configure other stuff that allow the emulator to run.

Further we should continue to develop and contribute with all that is required to deliver an application. So far, we have mostly installed and configured programs to eventually start encode. Finally to get there, the developers need to continue to contribute being involved in communication over chat and conversation and also continue to perform the work that is relevant, specific, for every week. **//Daniel**

- the agile practices you have used for the current sprint

The process in scrum is that we have used user stories, we have had stand-up meetings, we have tested our progress continuously, and we try to keep a sustainable pace in our work.

Further we might work with user stories that include tasks which include work on coding. With this we have to continue having stand-up meetings online or physically and include more testing in our progress.

To get there we have to work efficiently, divide code into small portions, test often and set up more meetings to achieve the best performance for the sprint.

- the sprint review (either in terms of outcome of the current week's exercise or meeting the product owner)

We met with a representative from Volvo and discussed our idea for an application, and received some valuable feedback. All of our ideas were accepted and we received some ideas for how our program could be expanded for further functionality (though a few of them were beyond our current scope). Our planning from the prior

weeks has been successful and if we continue in the same way we shouldn't have any major issues.

- [best practices for using new tools and technologies \(IDEs, version control, scrum boards etc.\)](#)

Right now like last time the best practices is to get used with the tools that is needed for our project. Until now we have already get used abit with the tools, android studio, github(version control), scrum board. But for this week the best practise was to use the emulator in the android studio. This helps us visually see how our app looks like when we run the code.

Further we want to continue use this emulator (tool in android studio) in our project because it helps alot to visualizing. Also it helps alot when we write some code then run it to visually see what it looks like in reality. But we should also get more comfortable with our tools so that we learn how to use them fully because it's quite new to most of us.

To get where we are now to where we want to be, then we should continue use and practise with the tools we currently use, android studio to develop our code, github to upload our work and get access to uploaded files from other members in our team and also the scrum board tool trello where we can keep track of the progress in our work by visualize a board online. Finally we should continue use the new tool(emulator) that we got used with this week and run it often to visualize how our application looks like.

- [relation to literature and guest lectures \(how do your reflections relate to what others have to say?\)](#)

n/a