

Erik Blomberg's Reflections

Table of Contents

What have I learned during this project?	2
What can I improve to the next project and how can I do it?	3
Weekly reflections	4
Week 1	4
Week 2	5
Week 3	6
Week 4	7
Week 5	9
Week 6	11
Week 7	13
Week 8	15
Week 9	17

What have I learned during this project?

- Learned how to use Flutter and Dart to fast and easily build up good looking applications.
 - Learned more about MVC and state management and the power of using a central model and letting it transcend the individual components.
 - How to parse and structure JSON documents and then loading them on a background thread using Futures.
 - How URL are structured and some of the annoying quirks of web development
 - Caching can greatly speed up load times.
-
- Always remember to focus on what brings value to the application. What will improve it?
 - Work in quick iterations by breaking down User Stories, so you can get quick feedback and abort doomed attempts.
 - Build a minimum viable product, implement just enough features, and then work on from there.
 - Dare to say no to product owner, be realistic and negotiate with your current resources.
 - Remember to specify the value part of a User Story!
-
- Define a social contract the first thing you do, then you always have something to fall back upon.
 - Remember to be open and listen your other team members.
 - Role switching can be highly effective, rather than locking into one specific role. However, make sure the roles are clearly defined.

What can I improve to the next project and how can I do it?

- I want to start trying to execute code reviews.
 - I will start by clearly defining a code review check list, mentioning structure, name conventions and documentation.
 - Then I will write a small list of constructive criticisms based on what I could find.
- Make a habit of using Test Driven Development. Making the application more testable, thus making refactoring easier.
 - I will start by writing tests, rather than the other way around, write the code then test. Clearly defining what the code should be able to do.
 - It is important to remember that the code should not be perfect from the start, but gradually refactoring it and improving it.
- Having a dedicated role to manage the scrum board.
 - The role should have responsibility of making sure User Stories are understandable and relevant.
 - Also having the responsibility of moving the Stories between the different columns.
- I want to be better with visualizing what I should do, intuitively understanding the problem.
 - When I am confronted with a problem, I will first make an initial sketch with pen and paper rather than starting to code immediately.

Weekly reflections

Week 1

This course I am overly excited to get started because I know this is how many teams operate. So, my goals for the course are to understand how scrum works, why it so effective, and apply it to my working method. The question is how will achieve this? Here are some things I will try to do.

- Trial by error. Just keep at it, write user stories, communicate like it is a real company and apply it to the programming project.
- Read some books or just search the web on how scrum works. This is such a well-researched subject; information will not be a problem.
- Ask questions, both at lectures and supervisor meetings. This is the perfect scenario to learn, no need to stress about grades or producing something where stakeholders have invested millions.

Another goal for this course is just to practice pure communication a social situation, become more comfortable taking initiative and learning to describe the ideas in my head to another person. Thus, I will participate in meetings to the best of abilities, giving my feedback to others and hopefully theirs to me. Try to work two-and-two or three-and-tree, so I can learn to explain my reasoning and just practice communication. And finally, try to encourage the team's ideas and develop them further, and make the best possible product.

Week 2

Have I learned something more about Scrum?

Yes, I have. Going to the MineTest exercise help to understand that small User Stories are key, and you must be comfortable saying no to the product owner and realize your own limits. Compromising and discussing is important and sometimes the developing teams' interests can cause a conflict with investors. It was also helpful to understand that User Stories need to contain **value**, do not just write who and what, but also why you want it!

How has the communication bit been going?

I have seen some improvements compared to last week. I think my team has done an excellent job in presenting ideas and communicating with outside sources, but I have not been especially strong in that department. But still, I try to give my input and feedback on the ideas and encourage the good ideas. But I can do better, and hopefully when we start programming, I could offer even more communication and help.

What are the goals for next week?

I will keep going with “understand how scrum works, why it so effective, and apply it to my working method”. To achieve this, I will practice writing some User Stories and trying to break them down into small parts and perhaps make some own research on why makes scrum so effective.

I will also keep practicing with social communication skills. I must be better with communicating my thoughts and feedback. And next week we will meet the project owner, which is a perfect way for me to practice communication and social situations.

Week 3

After a brief discussion with Jan-Philipp I will now try a different format with my reflections. This week will be little bit weird, but the next will be better!

What do I want to learn or understand better?

Currently I am not so familiar with writing User Stories but that is something I must get better at, the goal for this week is to learn how to write User Stories. And, not making them too large, try to break them down into manageable chunks.

This went well, we had a group session where we created a couple of User Stories. We found that some of them were a little big to ambitious, so we broke them down. Instead of creating page, adding the features and then navigation. We broke it down into Creating and adding features and then adding navigation.

What is my contribution towards the team's use of Scrum?

My contribution right now has not been substantial, I have tried to offer my advice on somethings we learned in a previous course using Scrum. Like, how the scrum board could look like, what a good user story has for components.

But what I hope to achieve trying to try new things, reflect and the adjust. Quick iterations on new things we could add to our process.

Week 4

What do I want to learn or understand better?

The current situation

- I am still very unsure of how to create manageable and good User Stories, so we can create a climate with fast validation and iteration.
- We will also start coding this week using Dart and flutter, which I am still very unsure of it works.

My goals

- This week I want to be able to write User Stories that are manageable but still adds value.
- At the end of the week, I want to be able to define classes and make some small changes to an app.

What should I do?

- Create User Stories with other people and making the read through it. Also, analyze if can be broken down into smaller pieces.
- Do a Google code lab explaining the essentials of Dart. Try some pair programming so I can learn with someone in my group.

Outcome

We were able to create manageable User Stories, every group (we used pair programming) managed to complete their task before the weekend and now we have a small application ready to show to the investor. However, the User Stories were not clearly specified which led to every group making their own assumptions. This will be addressed next week

This week I did however managed to get a good grip of the possibility of Dart and Flutter. We created a simple starting page where we had to dig deeper into how to place components and navigate between screens.

How can I help someone else?

The current situation

I am still unsure where people are at with their technical level using OO-programming and creating apps in general. But I hope I can contribute with some of my knowledge on design patterns and principles.

My goals

I have learned where another person is at regarding their technical level and that I hopefully thought them something new regarding OO-programming.

What should I do?

Utilize pair programming and be the observer rather than writing the code itself.

Outcome

This I managed to do. I let me partner screenshare and I tried to explain my reasoning behind me decisions as best I could. The outcome was a good first landing page.

What is my contribution towards the team's use of Scrum?

The current situation

This week I am the secretary, meaning I will document meetings within the group and HAST.

My goals

Get a better sense of what to note and what is unnecessary. I also hope I make the team feel organized by making a back-up of each meeting.

What should I do?

Attend each meeting! Write down what I think is important and evaluated after

Outcome

I managed to attend each meeting! I wrote down everything I felt was important, however somethings were debatable. I could be a little bit more conservative with what I wrote down. But the important thing is that the meetings were documented.

What is my contribution towards the team's deliveries?

The current situation

This week we will start programming, so I have yet to deliver anything yet.

My goals

I have delivered something that adds value to the project, and I have learned something new.

What should I do?

Pick a User Story which can be completed a shown to HAST and that contains something I have not done before.

Outcome

This is managed to do; I picked a reasonable User Story that got completed within the time frame. The User Story challenged me to dive deeper into how components and layouts are structured in Flutter.

Week 5

The current situation

We have now started with the programming and currently we have created a remarkably simple application which can now navigate between the 3 main screens (Main Page, Question Page and Result Page).

Flutter has some learning curve, both a new language and a new way to think about layouts, components, and states. But still, the experience has been straight forward, and I think there lies some big potential here.

Scrum has worked well; we have actively tried to create small but reasonable User Stories. We have managed to complete in the time frame given. However, some of these have now become too vague and a lot is up for interpretation.

What do I want to learn this week?

My goal

To explore and become more comfortable using Google Material Design.

How will I do it?

I will use the site <https://material.io/>, which has complete code examples with components and dos and don'ts for everything design.

Can I help/teach someone else?

My goal

I want to continue to help my team mates to get more comfortable using Git / GitHub. Currently, some have worked with GitHub in previous course, while others have not used so my goal will be to keep helping!

How will I do it?

Let the other person code (pair programming) and then go through step by step examples of commits, pull and branches.

What is my contribution towards Scrum?

My goal

This week, my role and my goal are to keep Scrum meeting's conversation on topic and keep the meeting within our given time frame.

How will I do it?

Ask what given time frame is before the meeting and what exactly should we discuss.

What is my contribution towards deliveries?

My goal

A pressing issue is how we are supposed to solve the storing of forms and questions. My goal is that I can help the project by doing a little bit of research regarding on what Flutter has to offer regarding storage.

How will I do it?

I will look through the Flutter documentation and see what their recommended storage solutions are.

Outcome

This week have shown major progress. My goal this week was to learn more about Material Design, which I can with great confidence say that I have. Me and my group have implemented different design patterns like Tabs or a Navigation Menu. And thanks to Flutter that is amazingly easy and straight forwards.

My goal of being a helping hand regarding Github has worked perfectly. I have been a spectator and letting the other person have the reins. And regarding my role with Scrum, I tried to set up a time frame before each meeting, and that went well! But it was hard to determine if something was on/off topic, because sometimes these conversations can also lead to great ideas.

And lastly, I have had some progress regarding different storage solutions. Flutter and Dart have great support for JSON serialization so storing questions in a JSON file can absolutely be achieved. But the thing I am most excited about was something called Firestore which is a cloud service made by Google that can easily be integrated into our app.

Week 6

This week I will group together the questions.

What do I want to learn this week? & Can I help/teach someone else something?

The current situation

We have up to this point been focused on developing the UI (the frontend), so we have something to show up but now it is time to attack the backend.

My goal

My goals this week will be to understand how state management works in Flutter. How the app can “send” states to different modules and how we can follow MVC. But also, help my fellow group mates understand states and models. I have some experience with Androids ViewModels which will probably be quite like Flutter’s way of handling it.

How will I do it?

First off, I will read how state management works in Flutter. And hopefully combining my previous knowledge and this new I can explain it in a good way. I will also try to let my teammates screen share so they can some experience using MVC (I will also try to draw to visualize)

What is my contribution towards Scrum? & What is my contribution towards deliveries?

The current situation

This week I will be the Scrum Master / Project Leader.

My goals

This week I will try to give my group a steady leadership, asking for opinions and encouraging criticism. I will also make sure that every meeting has a clear purpose and that I come prepared with some discussion topics. I will also make sure that the team reflection comes in time and that we have everything merged by the end of the week.

How will I do it?

Always after presenting an idea, I will ask my teammates for opinions and comments and try to come to common ground, encouraging discussions. I will also do a quick summary of how the meeting will be laid out before we start. And I will dedicate enough time for the team reflection and merging the code on Friday.

Outcome

When it comes to learning about state management that goal has been fulfilled. Implementing and understanding state management has been a true pleasure because it has allowed the code to be more modular. We can divide the code into different parts, but everything works against a central model. This is what I have been trying to advocate and show my teammates, by visualizing and letting them experience the power of models on their own. I have been trying as much as I can to divide the programming time equally between my group.

Regarding my role as scrum master, I am incredibly pleased. Meeting with the stakeholders or our weekly scrum meeting, I always set up an agenda: "Today we will talk about this and this is the time frame we will aim for". I tried to present ideas or opinions, but I always asked for other group members' opinions, trying to get discussion going so we could produce our best work possible. The team reflection came in before 15:00, well before the deadline and we had a working master branch by the end of Friday, ready to be shown to our stakeholders.

Week 7

What do I want to learn this week? & Can I help/teach someone else something?

The current situation

This week, I together with my teammate will work on importing questions through an external medium, in this case, JSON files.

My goals

My goals will be to understand more of the notation of JSON and how we parse it effectively. I have some previous experience with using JSON in another course and some ideas of how to go about importing questions. So, another goal of mine is to help my teammate understand JSON better.

How will I do it?

First off, I will read the Flutter documentation regarding JSON and serialization to learn more about how what libraries Dart has to offer. Secondly, I will advocate that me and my teammate discuss or visualize how we want this to work and not starting to program directly. Have clear vision before implementing.

What is my contribution towards Scrum?

The current situation

This week I will take the role as product owner.

My goals

My goals this week is to understand the stakeholder's point of view, what do they value, what would be most beneficial. We are approaching the end, so we must be better to prioritize what they want the product to have.

How will I do it?

I will be more active during the talks with the stakeholder. Asking relevant question and follow up questions regarding topics such as, User Interface, storage solutions, customizability. What is their priority regarding these different areas?

What is my contribution towards deliveries?

The current situation?

In our project we have been lacking with documentation. Perhaps because the application has not been particularly complex, but that is no good excuse.

My goals

This week I will try to more actively document the code that I write. I want the comments and documentation to be understood by an outsider, just about to start working with the code.

How will I do it?

In each file I work with I will try to give an overview description at the top, just a sentence or two. I will carefully pick out methods, especially public methods, that can be a bit more complex and give an overview. It is important not to over-comment, but I will try to keep at a reasonable level.

Outcome

Importing Questions through JSON has been a success! I have learned more about how Flutter and Dart parses JSON, which can be easily serialized and deserialized on a class level. I waged my idea of visualizing how we would structure the data; we simplified the process when we realized what we needed to store. So, I learned something, and I hopefully taught my teammate something as well.

As my role as Product Owner, I have tried to understand what our stakeholders will value. They seem to have shifted their focus to put more emphasize on a mobile version and exporting results. What I learned is that we as a team might have one path where we would like the project to go, but we must listen to stakeholders.

Regarding comments I have tried my best to document our code. In each class/file me and my teammate provided a quick overview, to get sense of its responsibility. I have also started working on technical documentation, explaining how our central model works on a high level.

Week 8

The current situation

Our stakeholders have requested that why can have multiple question forms. Currently we only have support for a single question form. However, since we are developing a web site, we cannot use normal IO functionality.

What do I want to learn this week?

My goal

I want to learn more about how URLs are structured and how the http package works in Dart.

How will I do it?

The Flutter website seems to have great information about Networking and how we build web application, so that will be main source. Since this is a well-researched and used topic, I will try and find information in books that I own and information on the web if Flutter seems lacking in information.

Can I help/ teach someone else something?

My goal

Last week I learned a lot of how we can import and then deserialize JSON files in class objects, my goal is that I can help my new teammates understand this better. How a JSON file is structured and how we serializing process works.

How will I do it?

I will try to utilize as much visual components as possible, so before we even begin to program, we will sketch out how this works and how we will adapt it. I will also let my teammates screenshare and try this out for themselves.

What is my contribution towards Scrum?

The current situation

This week I have no role, I am just an ordinary worker.

My goal?

I will try to improve a User Story or alternatively write a new User Story.

How will I do it?

First off, I will give it a descriptive name and try to estimate a difficulty level. I will then write according to the formula: "As a X I want Y because Z". I must the better on the value

part, *why* do is the User Story important. Next, I will write some acceptance criteria, clearly defined on when the User Story is done.

What is my contribution towards deliveries?

The current situation

This week I will try to do a proper code review in accordance with our outlined code review guidelines. Currently we have only done test runs, but I have not actually looked though other people's code.

My goal?

I will have executed a proper code review and provided reasonable feedback to the code owner.

How will I do it?

I will volunteer to code review another pairs code, then I will go through our code review guidelines. I will provide a small list with positives and negatives.

Outcome

This week I have learned a lot of new things. First off, I have learned more about URL structure. To load in a new Quizzes, we utilize the query parameter in the URL to specify the quiz, like (?q=Reflection). We also had to keep working on JSON which I tried to showcase before we start, trying to visually how it works and let my teammates try out and modify the code.

I have had a crack at writing better User Stories. Following the "As a X I want Y because Z", and trying to justify the value, why do we want to do this User Story. Moreover, I tried to make compact a precise acceptance criterion, clearly outlining the scope of the User Story.

Regarding the code review, sadly I could not pull it off this week... But will try my hardest to make it work the next week.

Week 9

What do I want to learn this week?

The current situation

Since this is the last week of the project a lot of my attention will be put towards making the code organized, documented and ready to be handed off.

My goal

My goal is to make the code follow a coherent style, break down large methods and that we have meaningful comments.

How will I do it?

I will look through the code and encapsulate as much I possible, eliminating a lot of forward-facing code by making it private. I will go through methods and break them down if they have become large. Adding Overviews in each class explaining it is responsibility. Follow the recommended Dart guidelines for naming files and classes.

What is my contribution towards Scrum?

The current situation

I tend to go beyond the current User Story.

My goal

I will only focus on what is described in the User Story, no more and no less.

How will I do it?

First off, I will read through the User Story, make sure it has a clear outline of what is expected. If not, I will compliment with the help of my teammates. Next up, I will regularly check back to the User Story to make sure that the acceptance criteria are being fulfilled.

What is my contribution towards deliveries? & Can I help/teach someone else something?

The current situation

Last week I did not manage to do a Code review, so I will do it this week in accordance with our outlined code review guidelines. Currently we have only done test runs, but I have not actually looked though other people's code.

My goal?

I will have executed a proper code review and provide constructive feedback so hopefully my teammates can learn more about code structure and improving readability.

How will I do it?

I will volunteer to code review another pairs code, then I will go through our code review guidelines. I will provide a small list with positives and negatives.

Outcome

I feel like this week I strayed away from my goals and did not achieve what I wanted. The promised code review was hard to pull off this week, since everyone was working on small fixes. I tried to keep myself inside the scope of User Story, but I feel like I did not read through it carefully. However, I feel like I contributed a lot to making the code more understandable and checking that everything is up to standard.