

# Individual reflection PRJ2: Jan Pinto Strohhausl

## Introduction

This individual report marks the end of PRJ2, a project about creating a functioning java application for an airline. The application should be capable of registering flights and updating or cancel these, creating bookings and looking up statistics for a specific flight/route. All these requirements should be analyzed, designed and implemented by our group. Now, that the project is over, I am going to evaluate my opinion about the work and atmosphere in the group, and I am going to explain what I learned, how my performance in the group was, what I should improve and what I would do again. At the end there will be a short summary.

## My group

I was one in a group of six: Mirelle Bogdanski, Flemming Habets, Julian Köser, Leon Wellmanns, Nicoleta Cazac and me. I was very lucky with my group, because everyone was open to meet each other, and we had from the very beginning a nice atmosphere. This is the reason why we worked really well together. Of course, we had discussions, but at the end we always came to a point where everyone agreed that this would be the best for our group. Nobody was left behind, and I think everyone was enjoying the time we worked, because I was.

## My performance within the group

Generally, I would say that I worked well with and in the group, with some starting difficulties. During the analysis phase, I did not very well during work, because analysis is a weak point of me, and it takes a while for me to get to know the people I have never met before. That did not hinder me to learn from them. I tried to be involved in the work of my group, but it was difficult, because every time the group discussed something, it took me a while to come up with a solution, but the group already found a solution and moved on. In the analysis phase, I spend most of the time listening and learning.

During the design phase, I helped create various diagrams, especially the domain model. From what I have learned in the analysis phase, it was easier to be involved in the group work this time. I have also gained knowledge from AADE lessons that helped me create diagrams or use cases with my group.

I would say that the implementation phase was where I helped the most. First, we needed to create the basic structure of the application based on a GitHub document. It was hard, because we only received this document and no further instructions. We then asked Mr. van den Ham, if he could explain to us the structure in more detail, which he did. This helped us more to create the base structure of the application, and it would be more helpful if we had this explanation during the coaching hour. After creating the base structure, we then started working on our first use case, which was "looking up flight". We struggled a bit at the beginning with the tools we received, and it took a while to finish this use case. After three weeks the use case was still not finished, so I sat down at home and worked on that use case, and then it did work. I showed it to my group, and they approved it. After that, we created the database connection, which was hard again, but after getting help from student coaches and our tutor it worked. Then, we split up in two groups: one group started working on the

database and the other group started working on the next use case, which was “register an upcoming flight”. I was in the group which was working on the use case. We used the concept of “pair programming”, so one opened the IDE and would share their screen and the others said what to do. We first created together the scene in SceneBuilder and then started working on the controller. After creating the scene, I was the one who shared their IDE. We worked together on the controller, but we did not fully finish the controller. After the database was created, we all then worked together, but then we split up and everyone chose their individual use case for their presentation. I chose “register an upcoming flight”, because I was the one who worked most of the time on that use case, even at home. I also was the one who understood the most of that use case. After I finished the use case and applied all the improvement suggestions from the coaching hours, I was done with the use case and helped others with their use case. At that point I was the one who everyone asked in the group when they had questions about programming or creating tests, because without bragging, I was the one in the group who knew the most about Java programming, so it was easy for me to work with my group and help them. I helped especially Nicoleta with her use case “save personal info of passenger”, because for that use case, we first needed to create the “create booking” use case, and she said that she needed my help. So, we created the base of “create booking”, then her use case, and then we finished “create booking”.

To sum this chapter up, analysis was my weakest phase, design was the phase where I worked like everyone else and implementation was my strongest phase, so I think that my work in implementation can balance out my work in analysis.

### What I learned

I have learned a lot new in this semester, especially about project management. I have learned about scrum and the agile approach of a project. Our group implemented scrum in our workflow, and it worked really well. Our meetings were consistent and after every sprint we decided what to do next based on how well the sprint before was. I personally think this was one of the key factors in how well our project turned out in the end.

What I also learned, more in the context of implementation, was Test-Driven Development. In the PRC2 lectures, we discussed what TDD was and how to apply it, but it was very theoretical. In the project, we tried to test-driven develop our code. It was hard, because even though everyone got the concept of TDD, some of us, me included, were questioning the efficiency of TDD. This does not mean that we did not implement any tests, but we only implemented tests to make sure every time we change our implementation, that the basic functionality and the results of that functionality are the same. This helped us to keep the implementation in line with our analysis-/design-artifacts.

### What I would improve when doing such a project again

When doing such a project again, I would definitely improve my work in the analysis phase. This phase is kind of a weakness of me, because it is very theoretical, and it is hard for me to really imagine such theoretical things and doing a good work with it. I need something where I can work, and I see the result of it directly. This is why design and especially implementation worked so well for me. I hope, that I can learn more on how I can help in the analysis phase. The other reason why I worked not that much during the analysis phase was that it takes a while for me to get to know people I have never

met before. This is a thing that I need to improve regardless of the work I am doing, because that is something that is relevant in every aspect of my future working life.

### What I would do again in a similar project

What I would do again is the amount of work I put in the design and implementation phases, because it helped to compensate my lack of work from the analysis phase. It was also a lot of fun to design and implement the requirements we discussed during the analysis phase. What I also would do again is being involved in everything. This helped me a lot, because even though I did not work much in the analysis phase, I learned a lot there, and it helped me to create the design artifacts and at the end the implementation.

### Conclusion

To sum up, I was really enjoying this project. I was very lucky with my group, and it was a lot of fun creating with them an application that works fine. Honestly, it is kind of a shame that the project is now over, but I hope I will work with them in the future again. I also learned a lot during this project: I learned how to apply Test-Driven Development outside the tasks from PRC2, I learned how to apply all the learned theory from AADE to an actual project. I have also learned how agile working with scrum influences the workflow of a group. Even though I have learned many positive things, I have also learned that I need to focus more on how I can contribute more in the analysis phase, and I need to improve how fast I get to know with people I have never met before.