

▲ My feedback

Group feedback

Peer feedback

# Ehv-S-A-RB03-Group1 Enhanced Code Generation





Students in this group

Search students...

Doychev, Viktor V.S. Krasteva, Aleksandra A.G. Laar, Erik E.J.J. Van de Preslavski, Kaloyan K.S. Stoyanova, Emilia E.P.

## Checkpoint 8 Delivery sprint 4 10-06-2024



Stoyanova, Emilia E.P. 11 days ago

### Meeting started on: Mon Jun 10 11:00:00 AM CEST 2024

### Meeting ended on: Mon Jun 10 11:35:21 AM CEST 2024

### Participants: Erik, Alexandra, Victor, Kaloyan, Emilia

### Agenda: Sprint 1 Delivery Meeting

### Setting: TQ5-2.523

### Meeting Leader: Kaloyan Preslavski ### Minutes Keeper: Emilia P. Stoyanova

### Stakeholders: Jasper Hasenoot, Erik van den Nouweland & Juan Villa Calle

### Tutors: Nicole Zuurbier-Munneke

- 01. We entered the room at around 10:48 to prepare for the meeting
- 02. Each of us sat down and Erik prepared his laptop for the presentation
- 03. Kaloyan set up his presentation as well and we had everything ready by 10:53
- 04. Nicole joined us at 10:54 and sat next to us on the table
- 05. Jasper also quickly joined after at 10:55 and notified us that Erik would also be coming; however, that he would probably be available starting from 11
- 06. Erik joined precisely at 11:01 and we exchanged pleasantries
- 07. Kaloyan prompted everyone if we can start and as such he commenced
- 08. He moved onto the different optimisation slides and passed the baton to Erik
- 09. Erik mentioned his changes to the TemplateUtility class and furthermore talked about how some tests, unrelated to TemplateUtilityTest.xtend failed in turn, which shows some incosistencies in the testing
- 10. He then went through the other few slides of his and then he gave the word

to Alexandra

- 11. Alexandra explained the issues she had when trying to benchmark the new code
- 12. Kaloyan picked up from then on again
- 13. Jasper had a question about the axes of the graph and Erik responded:
- a. The Y axis represents the second of runtime for the microbenchmark
- b. The X axis represents the sprint of our agile workflow.
- 14. Kaloyan moved onto our Jira Backlog and together with Erik showcased the

tasks we have left, which were mostly to do with documentation

- 15. A conversation spurred regarding the codebase benchmarking issue:
- a. Mr. Nouweland chimed in and mentioned it looks like the problem is being

caused because Alexandra was trying it on Linux

- b. Jasper then mentioned that he knows how to fix this and that he had put a fix in the previous project version he had sent us. He said that we should have just pinged him for a fix.
- c. Alexandra responded that she had sent a message through teams, which is in fact true and happened on: 6/3 9:26 AM
- d. Jasper mentioned that he had not received a notification about it
- e. Erik followed up on that by saying we should have probably @'d him
- 16. Juan then took the baton and asked if there was a goal or a target
- 17. Erik responded to his question with our goals and our achievements
- 18. Juan then directed his question towards Mr. Nouweland
- 19. He responded by mentioning that the original goal was around 50%
- 20. Then an open discussion followed where we agreed that a major design change

might be needed if any further optimisations are desired

- 21. Erik then asked the following questions to our guests:
- a. Given that the innovations insight meeting is coming up, would the ASML representatives like to attend as well?
- b. Jasper responded that he was on the other side of the world, so he will not join; Erik said he is not sured but that he would like a reply
- c. Given that we are not sure if a new group might follow up on our work, does ASML want both a transfer and a recommendations document, or a recommendations document only?
- d. Mr. Nouweland responded that that decision had not yet been made, and that it would need to be discussed internally. Nicole chimed and mentioned that we should work on it nevertheless, so we are ready in case they do in fact want and need it in the end.
- e. Since the original dipgen image was missing when it was supposed to be in Git LFS, is it desireable if we put it back in there?

  f.
- 22. Finally, before the end Juan talked to us about internship opportunities at ASML for our graduation semester.
- 23. A few of us expressed interest and Juan told us to contact him by email and

to stay in touch if a possibility opens.

- 24. After all questions had been exhausted we concluded the meeting. 25. Fin.
- 27. After that we had a brief chat with Nicole both regarding the meeting that had just passed and our individual work as well.



Write a summary of what you discussed with your teacher...

Post feedback

## Checkpoint 7 Weekly update week 10 (Nicole) 25-04-2024



Stoyanova, Emilia E.P. 11 days ago

Unfortunately, we do not have any minutes for this meeting, so only a few brief notes will be mentioned:

- \* This happened to be our semester coach meeting after our in-person meeting with the ASML representatives
- \* The sprint delivery meeting went quite well and the ASML representatives were quite happy with our results thus far.
- \* They gave us a nice tour of the ASML campus and even walked us through a guided tour of their museum.
- \* We made sure to ask many questions so that we show interest in their processes.
- \* We had already developed a plan for the following sprint.



Write a summary of what you discussed with your teacher...

Post feedback

## Checkpoint 6 Group meeting (Marcel) 03-04-2024



# Stoyanova, Emilia E.P. 3 months ago

### Meeting started on: Wed Apr 3 11:00:00 AM CEST 2024

### Meeting ended on: Wed Apr 3 11:38:13 AM CEST 2024

### Participants: Erik, Alexandra, Victor, Kaloyan, Emilia

### Agenda: Sprint 1 Delivery Meeting

### Setting: TQ5-2.523

### Meeting Leader: Erik van de Laar & Alexandra Krăsteva

### Minutes Keeper: Emilia P. Stoyanova

### Stakeholders: Jasper Hasenoot & Juan Villa Calle

### Tutors: Marcel Boelaars

1. Our group was a little early to the meeting room (10:46), as Alexandra had reserved a few minutes before in advance.

2. We sat down and prepared our meeting enviorment: namely Erik and Alexandra

set up the monitor and audio situation and we were done by 10:56.

- 3. Everyone sat down and we awaiting our tutor and ASML representitives.
- 4. Jasper joined the meeting at 11:02 and after some "room" issues was ready to

proceed with the meeting

- 5. That is also when Marcel Boelaars joined us in the meeting room at 11:03
- 6. Alexandra officially announced the beginning of the meeting and introduced

our team members.

- 7. She then smoothly went through the first few slides: including the landing slide; the table of contents; and the Jira board overview, carefully explaining the individual user stories.
- 8. Alexandra also mentioned that two research subquestions were still yet to be

completed and were moved to the following sprint.

- 9. She then moved onto the complexity estimates in the next slides
- 10. Erik chimmed in to note that our camera had frozen and apologised to our shareholders; he mentioned it might happen from time to time.
- 11. Alexandra continued shortly but then passed the word onto Erik again when it

came to the next slides, relating to StringBuilder optimisations and JMH.

- 12. Erik showed and explained the flamegraphs we had gotten from our profilings.
- 13. Erik underlined that the header file generation was one of the bigger

offenders and showed the example optimisation work he had done on it.

- 14. He explained in fine detail the way StringBuilder was causing issues.
- 15. The ASML representitives were quite pleased with the results and request even more information from Erik.
- 16. After that ended Erik passed the baton onto Alexandra and she gave a few words to our research into different data structures and our upcoming sprint 2 planning arrangements in Jira.
- 17. Alexandra finished the presentation and we moved towards a more free-flowing

form with a questions and answer segment.

- 18. Jasper's first question concerned what exactly our two upcoming research subquestions would be about and Erik responded appropriately.
- 19. Jasper's second question concerned our sprint responsibilities and whether everyone will have enough stories to work on during the next sprint.
- 20. Jasper's third question was not a question but rather proposed to us that we

visit the ASML campus during our next sprint delivery meeting. That would be during the week of the 22nd of April (Monday). He asked us to send him the time-frame which would be appropriate for us, so that he can schedule it and also asked us to send him some further personal information.

21. Erik asked what that personal information might be and Jasper noted that he

would send us the requirements later.

- 21. Juan's first question tackled our presentation. He mentioned that he was a little dissatisfied with our slides. He took a looking glass and zoomed in mainly on the sprint 2 planning, mentioning that the lack of specificity, overall goal, delegation and prioritasation was a downside.
- 22. Marcel also chimmed in after that and seconded Juan's concern.
- 23. Juan also mentioned he wanted to see a wrap up of the profiling-complexities
- saga where we did not see if the time complexity estimates align together with the profiling data we got.
- 24. Juan's second question was about troubles and other hurdles we had gone through during the sprint. He underlined that this is a retrospective, therefore these recollections are important.
- 25. Marcel also chimmed in and mentioned why these things are important: noting

that product managers need to know these things so they better their estimates and avoid delay in the bigger picture.

26. Erik took the word from there and mentioned that we had not really run into

any such roadblocks and mentioned that we had even pulled a few stories planned from the future sprints onto this one.

27. Juan mentioned in response that he'd also like to see the sprint report Jira

auto-generates for us, as that would provide more visual feedback.

28. Juan, however, mentioned that other than that we had done a good job and

told us we had done a good job.

29. Erik was ready to close the presentation; however, Emilia interrupted him to

make sure we ask a question we had been meaning to for a while.

- 30. Jasper did not hear the question, so Erik rephrased it: can we take liberties with the whitespace generation in the final C++ files?
- 31. Jasper seconded something he had originally: namely that the user tests should be our guide. He said that they use example files and that if we can rework those and still have them work everything should be fine.
- 32. Erik specifically asked if human-readability is important for the generated
- C++ files in the end, and Jasper responded in the affirmative.
- 33. Erik ended the meeting and we all exchanged pleasantries.
- 34. Fin.
- 35. Marcel then gave us a few feedback suggestions offline, mainly revolving around distributing responsibilities during our sprint presentations.

# Checkpoint 5 group meeting (Nicole) 28-03-2024

△ You didn't submit feedback for this checkpoint.

### Checkpoint 4 Weekly update (Nicole) 14-03-2024





# Stoyanova, Emilia E.P. 3 months ago

### Meeting started on: Mon Mar 14 14:02:06 AM CET 2024

### Meeting ended on: Mon Mar 14 14:26:55 AM CET 2024

### Participants: Erik, Emilia, Victor, Kaloyan, Alexandra

### Agenda: Weekly check-up meeting

### Setting: TQ5-2

### Meeting Leader: Erik

### Minutes Keeper: Emilia

### Tutors: Nicole

- 1. After a fruitful morning where we had conversation with technical teachers and a lunch break we got back to work at our table
- 2. Nicole joined us for a brief check-up and sat next to us
- 3. Erik began introducing her to what we had been doing since last time she had

seen us

- 4. He told her how we had subdivided our and showed us our Jira board
- 5. We also talked briefly about our individual work: namely documentation
- 6. Nicole then asked us if we had considered doing stand-ups
- 7. We said we had; although, we had not really put it into practice
- 8. Nicole asked us if we could guess why stand-ups are so important
- 9. We tried to guess, and although she was satisfied with our answers, they were

not the ones she was looking for.

10. She explained to us that sometimes a problem that might take us around two

hours, could take somoene a few minutes due to familiarity

- 11. Thus sharing ones goals, and current work with others can briefly open windows for others to chime in and such hasten work immensely
- 12. We agreed to look into it and implement if possible.
- 13. We were pondering wether daily or workdaily stand-ups would be best
- 14. After all questions had been exhausted, Nicole left us and we continued working on our own tasks.

16. Fin.

### Checkpoint 3 Delivery sprint 0 (ASML/Nicole) 11-03-2024







## Krasteva, Aleksandra A.G. 3 months ago

Below you can find the meeting notes from our Sprint 0 delivery meeting:

- 1. At 10.54 we entered the room, set up the presentation and started the meeting. Emilia and Viktor will be presenting and Aleksandra will be taking notes.
- 2. At 10.56 Nikole joined the meeting in person.
- 3. At 11.01 Jasper and Erik joined the Teams meeting.
- 4. Emilia started the presentation by introducing everyone and mentioning their roles for this meeting.
- 5. She then proceeded with the presentation:
- a. project introduction
- b. possible performance enhancements which we are considering
- c. jira board for sprint 0
- d. profiler results filtered on the dipfac project
- e. sprint 1 planning including jira board
- 6. Emilia then asked the two questions that we had:
- a. Is there a concrete performance goal that we are to achieve? Jasper told us that the previous group had a goal of 50% improvement and that goal applies to us as well. In the case where we are not able to improve a certain method, we are to document why and where it is located.
- b. Why are there java files in xtend folders and xtend files in java folders? -Jasper told us that is the way it is and we should not be bothered by it and focus on the xtend files only
- 7. Next Jasper asked about what we plan to do next sprint in more detail.
- a. Emilia responded that we will be looking into the documents that the previous group had, compare them with our findings and go from there.
- b. Jasper told us to not focus on multithreading and when implementing our improvements to do so in a branch that does not have it.
- 8. Erik introduced himself, as this was the first time we were meeting him. He is the architect for the code generators and he will be joining out meetings when available.
- 9. Overall, Jasper said that he is impressed and there were no further questions.
- 10. Erik and Jasper left the meeting at 11:12.
- 11. We then discussed our planning for the next Sprint with Nikole and she approved it.
- 12. Some additional things that were discussed are:
- a. It is good that Jasper was impressed and Erik not confused by the presentation.

b. There are two workshops on Wednesday about research and graduation that will only be in person.

- c. We can ask Marcel to join our next sprint delivery, as Nikol will not be available.
- d. We should take into account the upcoming holidays when planning our next sprints.

# Checkpoint 2 Update (Nicole) 07-03-2024





# Krasteva, Aleksandra A.G. 3 months ago

During this short update meeting we discussed:

- Having two repositories for the group project one created by Qin and the repository of the previous group that worked on the ASML project. We were told to speak to Qin about possibly removing the repository that she created, which we did and will take care of it.
- We briefly gave an update of our group work running the profiler and preparing for the sprint 0 delivery.
- We asked for advice about some of the slides for the presentation for Sprint 0, as we were unsure whether to include them or not.
- Nikole gave us feedback on our project plan and based on that we improved:
- formating the second research question, so it can't be answered "with research"
- update the scrum section by adding information about scrum meetings (daily, retrospective, sprint planning etc.)
- adding additional stakeholders with whom we have no direct contact, but are still considered as stakeholders such as the developers of the generators.

## Checkpoint 1 HackIT delivery (Nicole) 22-02-2024





## Krasteva, Aleksandra A.G. 4 months ago

During this meeting, we presented our hackit presentation which contained the context of our project and the issues and findings that we encountered during this week.

The issues that we had are:

- 1. the lack of files originally in the repository (missing docker image)
- 2. the trouble with building the different projects
- 3. the differences between the source files given to us by ASML and the ones in the git repository

The ideas that we currently have about how we can start the project are:

- 1. using better data structures
- 2. bettering algorithms by lowering the time complexity
- 3. flattening out nested loops
- 4. bettering memory usage

We were informed about some issues that the previous group had:

- 1. it took them about 2 sprints to get started
- 2. they had many errors and most of them were different
- 3. they put quite a bit of effort into writing the transfer document
- 4. were we told us to contact them directly for further explanation

We also received some advice and information about what to expect and how to work:

- 1. if we finish our preparations by sprint 0, we should be on the right track, as the onboarding process in companies, such as ASML is at least a month.
- 2. the previous group would not receive answers from ASML swiftly, but had to wait, so we need to plan that accordingly
- 3. if we get stuck, we should quickly turn to mentors: either fontys or ASML, or do work on our individual projects.
- 4. we were told that there is a very small chance of personal meetings happening with the company, but we can try to get to their location
- 5. we were reminded to start working on our project plan

Finally, we were told that in the upcoming weeks, we will have individual meetings to discuss the following:

1. personal learning goals for this semester

- 2. our strong points
- 3. our weak points