Progress Document

Individual Project: FestivalConnect

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Introduction

This document will cover the retrospective of each sprint. Each sprint I will look at what I did, what can be better for the next sprint, and what went well. So the following is important to note and identify

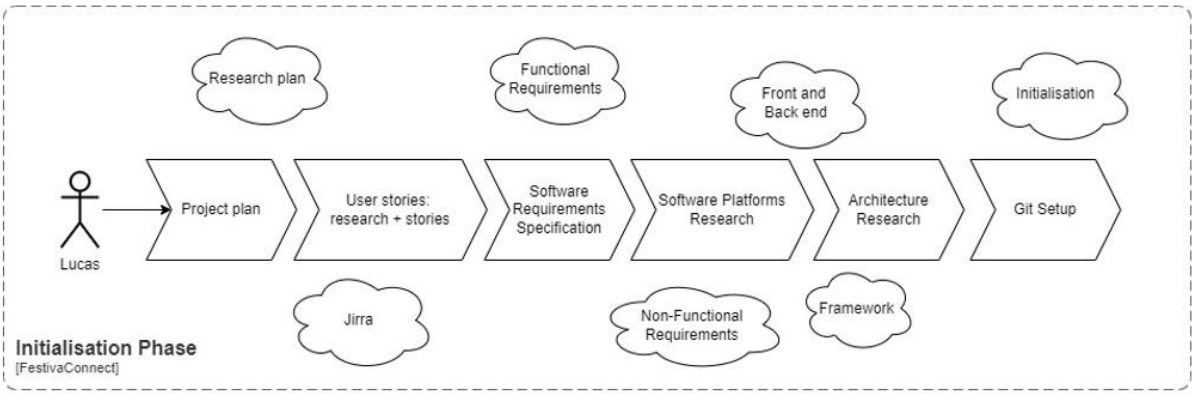
- What goals have been set and achieved?
- What challenges did I come across?
- Evaluate the behaviors I had during the period, and what kind of recurring patterns occur.
- What went well and what did not.
- Write down the feedback that I got from stakeholders.
- Plan for improvement.
- Set goals for the next sprint, making sure they are SMART.

Sprint 1

Goals Set and Achievements

The first sprint was for me an initialization phase, this meant that I had to get used to the environment and set initial goals, what research I was going to conduct through this project, and start gaining knowledge around certain topics.

The goals for this sprint were mostly achieved, which were:



What wasn't complete were the test plan acceptance criteria for the user stories, to define a 'done'. Also, due to lack of time, I couldn't quite start on a proper setup for git. Also, the C4 diagram is not completely done, since there needs to be more time spent on really understanding microservices in my context.

Challenges

The challenge that I came across was defining a good research question. At the beginning of making a research plan, I wanted to do it around a specific topic that I was interested in, but this did not fit with the learning outcomes and would cost me just more time. Therefore, the research will be around my project, with some feedback gathered from some students and the semester coach, I managed to make a proper research question, that can be used throughout this project.

Evaluation on Behavior

I identified in the last week of the sprint, that I was not too active in finding the teachers to seek feedback. This can be a lot better because in previous weeks I did seek for questions when needed. Nevertheless, I also realized that my pro-active drive has risen, so trying to ask meaningful questions, and interacting with both the group project as well as to the teachers.

What Went Well And What Did Not

Overall the sprint felt a bit short, the time flew away but I managed to complete every aspect that I wanted to finish. I think the setup of the whole standard project settings went pretty well. This means setting up user stories that are created with research I did, research on software platforms and architecture went smoothly, and the approach of how I did it, and the rest regarding the SRS, Project plan, and some visualizations on how the application should look like.

What could have gone better is the planning, since I wanted to do a lot this sprint, it exceeded the story points that I envisioned doing. In total, I planned sixteen story points (72 hours), but this sprint had eighteen (80 hours), so I had to optimize my overall schedule, which increased my stress a bit. Also another thing, I got a bit of a delay during this sprint. I wanted to sync my documents with one drive, but this caused a file to be corrupt, so I had to start over with the research.

Stakeholder feedback

For this sprint, for leadership you have a good overview of the documentation with reflection, the only thing is that you missed the section on what went wrong. The portfolio is structured well. I have to include more feedback from the stakeholders with the teacher's feedback. Also great that the group project products are included. The planning is good for the next sprint and weeks and also focuses on planning around the learning outcomes.

Plan for improvement
So for future sprints, I can optimize my schedule, by using for example time blocking, so that I have specific time slots to do different tasks. To acquire this, the first week of the next sprint, analyze what I do in a week, where I am distracted, have a lack of prioritization, and where I spend too much time. This will be for my whole life, so then in the next week, I can optimize my schedule, which will benefit both my overall life health and reduce my stress level.
Furthermore, based on the feedback from the teachers, I will give a clearer explanation of how I will reach the learning outcomes and what did not go well during the progress of the semester.

Goals for Next Sprint
First, have an optimized schedule to have a great approach to the project. Therefore, when story points exceed, it will be better to maximize the goals for the sprint. Furthermore, I want to finish the research sub-questions 1 to 4 and start on 6, 8, and 9, which can be found in (Jacobs, 2024, Project Plan, §1.7). This also means that the architecture is properly set, with a basic CI/CD pipeline. This planning needs to be finished before the 14th of April (sprint 2 delivery).

Sprint 2

Goals Set and Achievements

In this sprint, I mainly focused on trying to set up the git with a proper architecture. This had some struggles, but with the right way of doing research by looking at communities, and best practices I managed to successfully implement my first structure for my project. I mainly managed to successfully finish this sprint, but due to some things I had to catch up on from the previous sprint, I managed to spend a bit less time on security and messaging.

Challenges

The main challenge was properly defining the configurations so that the requests could be managed by the API gateway. Another thing was regarding the choices of git and how I wanted to approach it. This eventually came to a correct conclusion.

Evaluation on Behavior

During this sprint I managed to ask my needed questions to my stakeholders, to verify that some work I made was correct. Also, my behavior and habits changed a bit around the reschedule I made based on the things I set that I wanted to improve on. It changed in a good way since I now have more clear mind with my schedule which leads to better choices that will keep me organized.

What Went Well And What Did Not

This sprint went by pretty fast, there was easter which made me schedule the sprint in a more compact time spend. This went well since I kept a clear mind due to the improved schedule. The schedule approach was done by analyzing the first week of the sprint, where I looked at my behavior for example productivity, telephone usage, and working out. Eventually, this would let me make a schedule, with at least 15-minute intervals, so that there is enough time to adapt the schedule, and this resulted in a properly structured schedule to work with, which improved my overall productivity. What could have gone better was the precision in defining a gateway, pipeline, etc. Working on the structure and punctuated error-prone files, which is where I can be more precise.

Stakeholder feedback

From the stakeholders, the progress is going fine. Make sure, that you ask for feedback and show the progression.

Plan for improvement

To improve the preciseness of me defining settings or writing code can be improved in multiple ways, which will ultimately lead to faster development. First, I need to further dive into the industry standards and best practices to clearly understand the definition of what I am writing, which also leads to better-remembering things when doing it the next time. Furthermore, trying to further explain to my team members can also help me reduce errors. Also, clear documentation of what rules to keep in mind when defining something will properly help me with this.

Goals for Next Sprint

I want to finish the research questions 6, 8, and 9 specified in (Jacobs, 2024, Project Plan). Also, I want to improve my preciseness in the project, aiming especially at error-prone files. Furthermore, I want to start on making progress towards the questions 5 and 7. This needs to be achieved by the end of the 12th of May (Sprint 3 delivery).

Sprint 3

Goals Set and Achievements

For research, the questions 6, 8, and 9 were specified to be finished. Question 6 is not done yet, it needs to have separate documents with the specified tests for FestivalConnect and why they are useful. Furthermore, from the feedback given that you need to focus on multiple learning outcomes, questions 5 and 7 are almost done as well. Furthermore, that application has started to get structured with

- Basic UI for front end: login and register, with setup of handling authentication and authorization.
- Back-end setup with database on cloud running and key vault to store secrets.
- Setup of security measurements taken.

These are the main results of this sprint.

Challenges

The first thing was properly setting up the usage of the key vault in code, such that the secrets could be provided. Another thing was the message broker logic with handling the subscribe methods. This still needs to be further looked, at in order to handle this properly.

Evaluation on Behavior

For myself, the focus is laid too much on documentation and showing that I am doing something correctly. Instead, I should be more focused on the implementation of the application itself. The organization is going well but the main focus needs to change to implementation rather than documentation.

What Went Well And What Did Not

This sprint was mainly focused on finishing and adding some documents to then implement the necessary things. Moreover, this included mainly cloud and GDPR, with measurements set for security. This went pretty fluently, what did not went pretty good was the message broker approach of implementing a notification alert when a post has been made. For the most part, this went well, but one thing was not clear which led to some delay and focus on something small. Furthermore, the precision in error-prone files has been improved by looking more critically at what I am exactly writing.

Stakeholder feedback

From the feedback from this sprint, have a concrete implementation of two services. Also, focus on having a fully automated ci/cd pipeline with the needed stages. Implement authentication and authorization.

Plan for improvement

I have concrete tasks set for myself to finish all the implementation left to do. Also, I need to focus on the implementation of two services and make them fully complete. Also, lower the workload on documentation and balance it out with more implementation.

Goals for Next Sprint

For research, have the research finished and start on the research report that contains the concrete answers with references to the needed documents. Furthermore, a fully finished pipeline and automatic deployment needs to be done. Furthermore, the authentication and authorization needs to be fully implemented (full communication with the front- and back end). This all needs to be then tested using several testing methods. This needs to be achieved before the end of the 2nd of June (Sprint 4 delivery).

Sprint 4

Goals Set and Achievements

The research is done by finishing the last research question regarding testing. The research report has been made and the first two learning outcomes are on proficiency. The technical learning outcomes are currently at the beginning. Furthermore, the following things are done this sprint for the technical aspects:

- CI/CD is almost done having a building, testing, security checks, audit, and deployment.
- Deployment in Azure using Kubernetes services.
- Setup of monitoring.
- Start looking into how to load the test properly.
- Implemented the update and deletion of a user (GDRP).

Challenges

The main challenge of this sprint was the GitLab environment of the school. This is because this environment blocks all the links to third-party environments. Therefore, code quality checks are becoming difficult to implement into the CI pipeline.

Evaluation on Behavior

The focus is more on implementing the remaining parts of the application, which is good. The teachers told me that I was back on track, giving me a more calm feeling.

What Went Well And What Did Not

Finalizing the research went well and the implementation of updating and deleting a user. Deploying was a bit of a struggle but eventually, it succeeded. Furthermore, the talks with the teachers are going well, I can explain properly what my decisions were to the things I integrated.

Stakeholder feedback

The semester coach is pleased with my progress and he is pleased with the progress and results. The technical teachers say I am back on track but there are still some things to implement to gain proficiency on the learning outcomes.

Plan for improvement

I fully focus on implementation by requesting feedback weekly on my progress and showing what I have done. Also, ask what the next steps are in order to gain the proficiency levels.

Goals for Next Sprint

Updating some of my documents based on my implementation, with also finishing my portfolio descriptions (retrospective and retrospective on delivery). To finish:

- Pipeline.
- Add security measurements to the secrets used in k8s.
- Monitoring with load testing.
- Finalizing the portfolio.

Sprint 5

Goals Set and Achievements

For the pipeline, I finished implementing all the stages, and the security measurements that I wanted to take are done. For monitoring, I used Grafana and the default monitoring tools provided by Azure. Furthermore, I did several load tests with different functions, which were done using Jmeter and Postman. Also, I looked into Azure load testing, but due to the high costs, this was not an option. Finally, I did some front end with implementing the update and delete of a user, and finalized my portfolio with a finished reading guide.

Challenges

The main challenge that came in this final sprint was the load testing. I wanted to do a test but this constantly crashed in the Jmeter testing environment. Therefore, I had to found a solution and this took quite some time.

Evaluation on Behavior

The behavior I have shown during this last sprint was pro-active towards the teacher. I constantly updated them on my progress and explained the reasonings behind it.

What Went Well And What Did Not

All the parts went smoothly, such as front-end implementation, adding evidence to my portfolio, and finalizing all the implementation. What did not go great, was the implementation of load testing on my application. Since I am using a student account, I am limited to my resources which may also cause some problems during deployment.

Stakeholder feedback

During the last sprint, I gained some positive feedback, I know what to constantly do by showing them my progress and telling them what I am going to do next. This was a good approach since they could then fill in some other things where I need to think about or implement as well.

Plan for improvement

Coming to the end of the semester, I could take some valuable lessons from the approach that I took during the semester. First of all my professional attitude improved in my opinion since I had to be more responsible for what I was doing, why am I doing it, and what is needed to be done. Therefore, I not only grew in terms of new knowledge but also improved my planning, problem-solving, and communication skills.