

Individual Report on your experience in the CS7CS3 Group Project

Group: 5

Udita Retharekar

THIS REPORT IS ENTIRELY CONFIDENTIAL.

This report is intended for you to:

- provide a personal reflection on the overall success (or otherwise) of the group project
- evaluate your own contribution within the team
- evaluate the contribution of your team-mates
- indicate what you have learned from the experience

1. Personal Reflection

How successful do you think your project was?

The project was successful in meeting all the requirements. It implemented refactoring, TDD, distributed architecture and addressed the security considerations. The project also handled heterogenous sources of data with an exhaustive UI. However, we ended up using many technologies which made it difficult to maintain a uniform standard of coding. A standard was followed for each of these technologies individually, but not as a whole.

Are there any changes your team could have made to improve the chances for success?

Better time management could have allowed us to spend more time to test the UI functionality using Selenium or other test automation tools. This would have ensured the front end code was also tested using automation and hence reduce manual testing effort. We successfully managed to handle the CI using git branches, and some automated scripts for pull requests. However, this also could have been automated further using CI/CD tools such as dockers.

Are there any changes the CS7049 lecturer could have made to improve the chances for success?

The requirements for the project were very broad. This led to us concentrating more on the functional aspects of the project. Perhaps a more detailed feedback in the earlier stages would have helped us emphasize more on the overall software process rather than achieving each functional aspect.

In hindsight, would a different software process have suited your team better? If so, why?

Having worked in Waterfall and Agile methodologies, the advantages of Agile outnumbered traditional waterfall models. However, XP or Pair Programming was a new way of working in Agile teams. This ensured that there was collective code ownership and also encouraged team work and team collaboration. It also ensured that each pair had good working knowledge of all components unlike Agile, where each member only works on his/her own task.

Any other comments

This module helped me understand the importance of good software practices and principles. For example, Refactoring and TDD ensured that the code written was tested well and there was no duplicate code. This made it easier when we(in a pair) had to implement a similar task. Refactoring code every few weeks saved a lot of effort in the end. The integration was always smooth and there were hardly any conflicts.

2. Evaluation of Your Contribution

Technical

As an experienced software engineer, I am mostly skilled in front end and back end technologies. Therefore, my expertise in building the UI components was beneficial (when assigned to me while working in a pair). Along with this, the knowledge I gathered studying data science, helped in working on the analytics and zoning of data. I also contributed in designing the servers which I had not done previously.

Management/Process

Along with the technical aspects, I also contributed to planning and organizing the team meetings, booking discussion rooms and managing the sprint Kanban board (We used a tool called YouTrack).

Morale

I rarely procrastinate and have an optimistic outlook. Therefore I would also boost my team members morale if any team member felt burdened or disheartened with the

progress of our project. I am also good with managing my time which let me help other team members when I had the time.

Any other comments

Due to the XP, I also got to work in areas that aren't necessarily my forte. For example, I gained knowledge of middleware and server implementation while working in this project.

3. Peer Review of your Team-Mates' Contributions

Ashutosh Sharma

Technical

Contributed in all technical aspects. His strongest skills were SQL and analytics which really helped when working in a pair with him. He contributed to data modelling for weather predictions. However, he successfully completed any other task that was assigned to him while working in a pair with ease.

Management/Process

He has a good sense of management and leadership and hence would highly contribute to the overall process.

Morale

Is very enthusiastic which made sure that the team kept going at their respective tasks.

Any other comments

Romaan Shaikh

Technical

Contributed highly to the technical aspects. He is skilled in many technologies and frameworks and hence is able to solve problems very quickly and with ease. His experience as a software engineer was helpful in understanding many aspects of a software lifecycle

Management/ Process

He has a good sense of project planning and enhancing existing processes. He contributed to refactoring the code.

Morale

Has a very calm and composed demeanour. Therefore, he always had a good clarity of thought.

Any other comments**Bhavesh Mayekar****Technical**

Was the most flexible and worked with ease in all technologies. He contributed in designing the dashboards and analysing the data and modelling the data in zones. Along with this he also contributed highly in writing test cases and any other task that was assigned to him in a pair.

Management/ Process

Contributed highly to the process documents and planning and organizing meetings.

Morale

Bhavesh is very optimistic and handles pressure very well. He would meet all deadlines and also contributed in all group discussions.

Any other comments**Aman Ray****Technical**

Just like me, Aman also has strong skills in front end technologies such as Javascript and jQuery which were quite helpful. When working as a pair, we would get a lot of work done on the front end part. He also contributed in designing the dashboard for bus. His idea of using leaflet to visualize bus stop data was well appreciated by the team.

Management/ Process

He would participate in all team meetings and would suggest new methods to test the framework and other models.

Morale

Aman is a quick thinker and gets tasks done very quickly.

Any other comments**Lal Singh Dhaila****Technical**

He has very strong analytical and data modelling skills. Therefore, he highly contributed to the analytics and data handling part of the project. Along with this, he contributed to the other UI components such as bus and traffic.

Management/ Process

He contributed in planning and organizing the sprints as he as previously worked in Agile environment. Along with this, he has some experience in TDD

Morale

Was very enthusiastic and would take up any task assigned to him even if it was out of his comfort zone.

Any other comments**4. Lessons Learned**

The XP Agile process turned out to be much more relaxing and enjoyable. It also helped me gain knowledge of all aspects of a software development lifecycle or process. Pair programming does promote a sense of trust and collective responsibility for the work done. It encouraged communication between team members and also opened doors for new ideas and solutions that I wouldn't have thought of by myself.