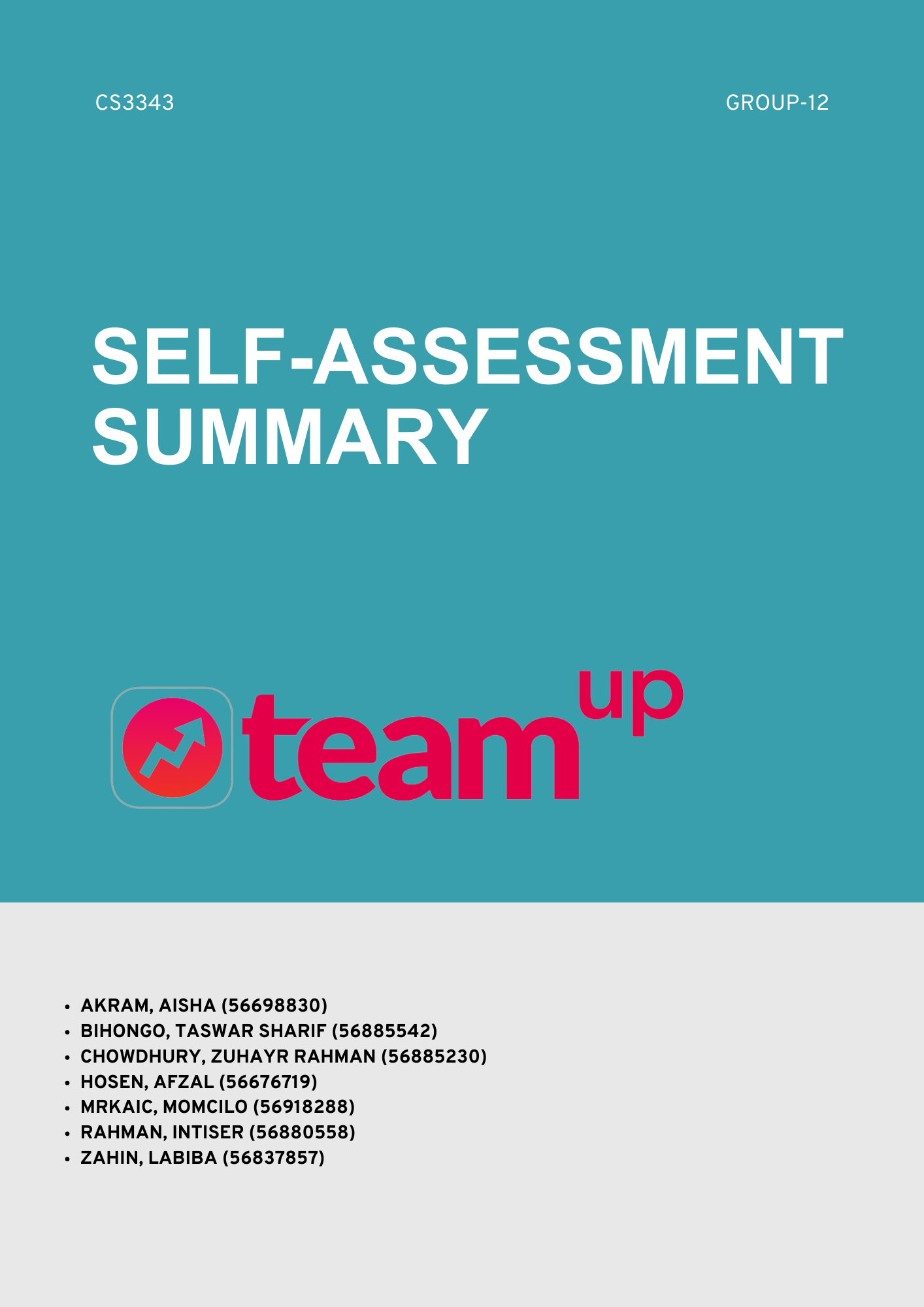
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| **Member** | **Role** | **Work Description** |
| --- | --- | --- |
| * **Mrkaic, Momcilo** | **Project Manager** | Oversees project progress, coordinates teams, and timelines. |
| * **Hosen, Afzal** | **Scrum Master** | Facilitates Agile processes, organizes meetings, and supports the development team. |
| * **Rahman, Intiser** | **Programmer** | Develops and maintains software functionalities for the booking system. |
| * **Zahin, Labiba** | **Programmer** | Codes and tests new features, collaborates in software development. |
| * **BIHONGO, Taswar Sharif** | **Assistant PM** | Assists in project management tasks, coordinates with teams and stakeholders. |
| * **Chowdhury, Zuhayr Rahman** | **Quality Assurance Engineer** | Ensures software quality, conducts tests, and identifies bugs. |
| * **Akram, Aisha** | **Programmer** | Works on software development, writes and debugs code. |

**Momcilo’s Self Reflection**

When we started our project, the first decision we had to make is how to separate the roles. I had high inclination for the project manager role since I already had experience in coding and I wanted to learn about software engineering from a completely different perspective. Now that the project is finished, I am delighted to say that we grew as a team in all aspects of software development. In this self assessment I will go through each dimension of project management, examining the obstacles we encountered and how we managed to overcome them.

First, our team was not small. It included seven people, and I had to learn how to manage such a big project. Every person is different, coming from a different background and having a different skillset. We immediately decided on roles to accommodate this. My job as a project manager was to be aware of each person’s strengths and weaknesses and accordingly assign tasks. Our biggest challenge in this dimension was the different availability of each member, making it difficult to have in person meetings. We tried to have hybrid meetings at first; however, we changed to purely online and fixed a time for weekly meetings.

My main obligation was to schedule and decide on a software process. I was tracking the progress of each task weekly. At one point during the semester, I noticed that my initial schedule was too optimistic, and I immediately rescheduled our project. In the end, we had to work faster on the second version of our application, but we managed to finish everything in time.

When it comes to product related problems, we were guilty of adding an excessive number of requirements. My duty as a project manager was to stay realistic. My solution was to make the software process iterative, thus we had two versions. The first one only included the core functionalities of our app, and the second added a waitlist feature and enabled admin to add new facilities later. This way, we made sure to have a working product until the end of the semester.

Finally, the technology dimension came naturally to our team since all of us are experienced coders. However, even here, we had to solve some challenges. Everybody was working on their part of the UML class diagram, and when we wanted to merge it into one, we noticed that everybody had been using a different version of Visual Paradigm. In the future, I will be more careful to make sure that everybody is working with the same version of the technology.

All in all, I am overjoyed with the opportunity that this course gave me. I worked on a software project in a relatively large group. I feel that we finished this project effortlessly, owing to the abilities and enthusiasm of each team member, combined with thoughtful planning and division of workload.

**Afzal’s Self Reflection**

As the project was initiated, my primary responsibility was to implement Agile practices effectively. Proudly, I can say that our team's efficiency and adaptability significantly improved due to the structured and productive nature of our daily updates, reports, and work ethic. Moreover, one of my key accomplishments was creating an environment where team members could function coherently. This approach boosted team motivation and created a collaborative spirit, essential for any successful project.

However, this journey was not without its challenges. In the initial phases, I found myself constantly overstepping boundaries. My programming loving personality sometimes created conflict between my role and that of the development team. This experience taught me an important lesson about the balance a Scrum Master must maintain, providing support and guidance while respecting the team's ideas and expertise.

Another significant challenge was communication. On a few occasions, miscommunications led to delays in project goals. These instances highlighted the vital role of a Scrum Master in ensuring clear and effective communication among team members. It became apparent that lowering these communication gaps was an important part to keep the project progress in check.

Reflecting on these challenges, I recognized the areas requiring improvement. Time management during work and classes emerged as a critical skill that I needed to enhance. I learned the importance of better accommodating to challenges when we are behind schedule, thus ensuring smoother project flow. Additionally, the value of actively seeking and asking for feedback and updates became evident. In future projects, I aim to make this a significant point in my approach to continuous improvement and team engagement.

To sum up, this project was really important for my growth as a Scrum Master. The difficulties I faced helped me learn and grow a lot. They showed me how important it is to be flexible, communicate clearly, and learn from my mistakes. As I go ahead in my career, I'll remember these lessons and keep trying to learn and get better. Being a Scrum Master means always changing and growing, and I'm excited to face whatever comes next.

**Labiba’s Self Reflection**

As my role of a programmer in the project, I was primarily responsible for coding and testing the different features of our system. Throughout the semester, I have gained a deeper understanding and appreciation of the software engineering principles we were taught in class and their practical application in a project. I got hands-on exposure to topics such as project planning, code maintainability, and efficient testing strategies.

I have actively participated in our team meetings held in person or via Zoom. I am proud to affirm that these discussions were key to the success of our project. We offered and exchanged insights and suggestions to improve the development, design, and testing process. I frequently communicated with my team members, actively listened to their perspectives, and collaborated towards our shared goals.

Just like any other group software project, we faced our own share of challenges. In the early stages of our project, we prepared a project schedule that was not very realistic with respect to the actual time that would be needed to complete the tasks outlined. As a result, we encountered some unexpected delays in the schedule. We resolved this issue by preparing another schedule and tracking everybody’s progress in regular team meetings to ensure that we were on schedule.

During the course of the project, I have identified several key areas that are crucial for success in the role of a programmer. Merging code written by the other programmers in the team was an important element in ensuring that the system was well-integrated and had no design conflicts. The usage of a version control system was an indispensable tool in the development of our project.

Personally, some of the most valuable takeaways from this project are the significance of a comprehensive project plan and effective task allocation. I realized how important it is to ensure that the task allocation is properly communicated between the team members for the project to be completed on schedule. In addition, I have gained valuable experience in working with different software releases, fixing bugs, and refining existing features.

Reflecting on my experience working on this project, I am satisfied with my contribution and efforts to the project’s success. Moving forward, I aim to become a more well-rounded and skillful programmer. I will focus on continuous growth, apply the lessons I have learned in this project to my future projects, and achieve even better outcomes. Overall, I believe that this project has been instrumental in my growth as a programmer and as a team player by providing me a practical experience in collaborative software development, allowing me to enhance my skills in real-world scenarios.

**Aisha’s Self Reflection**

As a programmer, I was able to participate in different segments of the project, which enabled me to assume different roles. For the whole period of thirteen weeks, we maintained an organized environment conducive to cooperation towards achieving our goal as a group. This was made possible because everyone worked according to their area of strength. Our project was successful due to this collective effort.

In my project, I concentrated majorly on project coding itself. In addition, I got to code several classes for each release, mainly taking part in the authentication portion of the project, and assisted with designing a class diagram prior to implementation phase. I had also devoted much of my time to documenting the project.

This was a great lesson for me and gave me a very useful experience while participating in this project. I have enhanced both my programming skills and understanding of various software development methodologies during this project. Also, I gained experience working with other people as a team player.

Therefore, my target will be perfecting my coding skills as well deepening my understanding on software development. Also, I will search for new technologies and frameworks that will improve efficiency and code quality. Further, I will work on my project management and documentation skills so that proper communication and organizing of future projects is put in place.

Overall, I am happy with the success my input brought to the software project and the personal development I have achieved. I look forward to employing what I have learnt from this experience on other new projects, expanding my software development abilities even further.

**Zuhayr’s Self Reflection**

In this CS3343 project, I believe that I have acquired a significant amount of knowledge about software development projects, and I have been able to effectively apply that knowledge throughout the course of this project.

As a quality assurance engineer, I have gained a deeper understanding of working on a large-scale project like this and have experienced personal growth along the way. My teamwork and coding skills have improved, as my role required me to collaborate with team members to ensure comprehensive test coverage without duplication. Additionally, I have learned how to delegate tasks efficiently and allocate work among team members to increase productivity.

In addition to improving my teamwork and delegation skills, my role as a quality assurance engineer in this CS3343 project has significantly enhanced my coding, testing, and report preparation abilities. I learned to design and execute comprehensive test cases. Moreover, I honed my skills in preparing detailed and concise reports, documenting test results, and providing actionable feedback to improve the overall software quality. These experiences have not only strengthened my technical proficiency but also equipped me with valuable communication and documentation skills essential for successful software development projects.

Furthermore, I have developed proficiency in writing effective JUnit test cases and utilizing GitHub for version control, even though I had no prior experience with either of them.

This project has also taught me the importance of pacing myself and breaking down complex tasks into smaller, more manageable components that can be completed swiftly and easily, ultimately leading to the successful completion of the entire project. Overall, I have gained valuable knowledge and had an enjoyable experience throughout this project.

**Taswar’s Self Reflection**

Throughout the CS3343 project, I had a strong desire to be actively involved in the design process and ensure the seamless integration of the entire software. As the Assistant Project Manager, I eagerly embraced the opportunity to manage the collaboration within the team and address any conflicts of interest that arose among the developers. It was my first time holding a managerial role in a software development project and was a valuable learning experience for me to navigate different perspectives and guide the team towards a consensus that best utilized their individual potentials.

One of the most significant lessons I learned during this project was the importance of striking a balance between my role as a developer and the responsibilities of a manager. I realized that effective communication and understanding each team member's strengths and weaknesses were crucial in fostering a harmonious and productive work environment.

I must confess that this project highlighted the need for improvement in my time management skills. Through the course of the project, I recognized the significance of setting realistic expectations and allocating sufficient time to different tasks. This experience was definitely another important lesson for me and has motivated me to work on refining my ability to create well-structured schedules and meet deadlines more effectively.

Being actively involved in the design process allowed me to deepen my understanding of code architecture. I was humbled by the opportunity to make informed decisions regarding code structure, modularity, and scalability, whenever there was a need to enhance the functionalities of the software or fix existing bugs. This experience emphasized the importance of creating a solid foundation for the software, ensuring its long-term success and maintainability.

Lastly, I express my genuine gratitude for the valuable experiences and lessons learned throughout this project. It has not only enhanced my technical skills as a developer but has also provided me with valuable insights into playing a managerial role within a team. Moving forward, I am eager to continue honing my time management skills and further developing my expertise as a code architect. I look forward to applying these learnings to future projects, contributing to their success, and continually growing as a humble professional in the field of software engineering.

**Intiser’s Self Reflection**

It is the first experience for almost all of the programmers on our team, including myself, to be working on such a large scale software with multiple people involved. I, like the rest, was also responsible for coding and testing the program and its different features, primarily focusing on integrating all the different modules written by the other programmers and ensuring they work coherently.

This project gave me an opportunity to put all the software engineering and design principles I learned into practice in a real project setting. Working in a large team environment provided both challenges and opportunities for learning. One of the most difficult challenges was ensuring effective communication and coordination among team members, especially when integrating multiple modules. This experience taught me the importance of good communication with your teammates, the necessity of a detailed documentation, and the essentiality of regular meetings with your teammates.

I learned why version control of your software is important. During the coding phase, there have been many instances where adding a new functionality resulted in our software having bugs and errors. Without a version control technology like Git, it would have been very difficult to revert back to the last working version and then refactoring the new module being added.

One key skill that I gained from this project is software integration. To create a fully integrated software, a very deep understanding of the system architecture was required. I had to pay close attention to how different pieces of code interact with each other. The hardest part was to identify the cause of any conflicts and resolve them. It was a difficult yet a rewarding experience as it taught me the complexity in building a large-scale software from disparate modules.

Overall, I believe this project truly helped me grow as a software engineer. Not only did I learn valuable lessons needed for a software engineer, but this project also honed my problem-solving and critical thinking capabilities. I will carry the lessons and skills gained from this project with me as I move forward in my career.