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| Title Internship Assignment  Reflection | |
| **Salih Ekici** | Bachelor’s degree in computer science |
|  |
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# Introduction

## Purpose of the Document

This document provides a comprehensive reflection on my internship experience, encompassing both a substantive analysis of the project undertaken and a personal reflection on my growth and learning. The internship project, carried out at Mediaan Conclusion, involved creating a system to streamline matching employees to projects, and this document aims to offer insights into what was accomplished, the impact on the organization and its users, and future recommendations. Additionally, it delves into my personal journey throughout the internship, highlighting the skills developed, challenges faced, and overall significance of the experience.

## Structure of the Document

The reflection is structured into two main sections. The first section, Substantive Reflection on the Internship Project, discusses the specific achievements, the current status of the project, its implementation and usage, and provides advice for future improvements. The second section, Personal Reflection, explores what the internship meant to me personally, the competencies I developed, areas where I grew, and the challenges I encountered along with the strategies I used to overcome them.

By distinguishing between these two aspects, this document aims to provide a holistic view of the internship experience, offering valuable insights for both the client organization and future interns.

# ****Substantive Reflection****

## Accomplishments

During my internship at Mediaan Conclusion, I worked on the backend and frontend of an application designed to match employees to projects based on their skill sets.

* Backend Development: I was responsible for developing most of the backend, including implementing a matching algorithm that pairs employees with projects based on their skills. This algorithm is essential for optimizing resource allocation within the organization, ensuring that the right people are assigned to the right projects.
* Frontend Development: I also contributed to the frontend development, creating a user-friendly interface that allows managers and employees to interact with the system easily.
* Graph Databases: Gained knowledge about graph databases, which were integral to managing and querying complex relationships between employees and skills.
* Microsoft Azure: Learned about various aspects of Microsoft Azure, which was used to enhance the scalability and reliability of the application.

### Current Status and Future Work

The main functionality of the project is finished; however it is not ready for production.

The functionalities which remain are:

* Integration of Azure AD: We have not been able to integrate Mediaan’s Active directory into the application. Due to this, we do not have an account readily available for each employee.
* Authentication/Authorization: In the deployed version of the application, we do not have Keycloak(technology used for authentication/authorization). Our client mentioned to not focus too much on the deployed version and to work on integrating interesting features for local use.
* Proper skill matrix: Although we have a semi-complete skill matrix, it is not suitable for production. Researching of a way to generate proper similarity percentages based on the skills’ functionalities would be necessary

### Implementation and Usage

Although the application will not be used in the company, after seeing the implementation we came up with has pushed Mediaan to find a similar tool. They have seen the importance of the matching system and how much time it would potentially save during project assignment.

### Advice for the Future

* Continuous Improvement: Regular updates to the application based on user feedback and evolving organizational needs.
* Training and Support: Providing training sessions for managers and employees and establishing a support system to assist users.
* Scalability and Flexibility: Ensuring the application can handle an increasing number of users and projects and adding features for more flexible matching criteria.
* Azure AD implementation: Implementing Azure AD to generate logins for each employee for the application.

## Personal Reflection

### Personal Significance

This internship has been a pivotal experience in my career, providing a real-world context to apply my academic knowledge and skills. It allowed me to see the direct impact of my work on an organization and its employees.

### Skills and Competencies Developed

* Technical Skills: Enhanced my backend and frontend development skills, gained knowledge about graph databases, and learned various aspects of Microsoft Azure.
* Problem-Solving: Developed strong problem-solving skills through debugging and optimizing the application.
* Project Management: Improved my ability to manage a project from conception to implementation, balancing various tasks and deadlines.
* Scrum master: Although I didn’t particularly take on the role of a scrum master, I was constantly trying to push the team towards working in an agile way. This would help us to easily identify what each teammate was working on at a given point.

### Growth and Learning

I have grown significantly in my ability to handle complex technical challenges and work as part of a team. I have learned the importance of communication and collaboration in a professional setting and have become more confident in my technical abilities.

### Challenges and Solutions

* Communication: At the start of the project, we encountered some communication problems regarding the requirements of the application. One of our teammates was only focusing on deployment while the customer had emphasized that deployment is of least concern. After talking with the teammate and our mentor, we were able to get back on track to deliver a product the client would be happy of.
* Time Management: Balancing multiple tasks and deadlines was challenging. I overcame this by developing a detailed project plan and regularly reviewing and adjusting my schedule.
* Transparancy: The team had significant problems in utilizing the boards for the project. This would hinder our teamwork because we didn’t have a way to track what each intern was doing. I overcame this problem by communicating with my team regarding the importance of the board.

# Conclusion

Mediaan has been a wonderful place to intern. The supportive environment and the collaborative culture have significantly contributed to my professional and personal growth. The team at Mediaan encouraged me to take responsibility and be proactive, which boosted my confidence in working within a team and communicating effectively. I was able to hone my skills in talking to customers and understanding their requirements, which is a vital competency in any professional setting. The mentorship and guidance provided by my colleagues were instrumental in my development.

This internship has been a valuable learning experience, providing me with practical knowledge and skills in both backend and frontend development, as well as exposure to cloud computing with Microsoft Azure. However, not only my technical skills but also my soft skills have improved. Now, I am more confident in working within a team. I can take responsibility and I am not afraid to ask questions. Talking to customers and understanding their requirements is also a skill Mediaan has instilled in me. I was able to hone these skills thanks to my team and my mentors. Mediaan has been a wonderful place to intern at, and I thank them for the opportunity.