A logo of a koala bear

Description automatically generated **Process Report**

**Group 3**: **Tutor**:

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Murat Zünbül **Client**:

Uraela Mamu Sachin Bhardwaj

**Introduction**

We are the group number 3 formed by Uraela, Murat and Cătălin. In the span of the past six weeks our team focused on finding solutions on the problems that the Jupiter company, our client which owns Media Bazaar, came up with.

We created a prototype of what our client asked of, implementing some of the requirements that were given to us. We have also created documentation (project plan, URS, Test Plan, prototypes) in order to deliver the best solutions for Media Bazaar.

**Problem statement**

Media Bazaar is a new hardware store, opened in Eindhoven. They are just opening up, and they intend to start as well-prepared as possible.

One of the biggest challenges that they are expecting is managing employees and products. They wish to have an administrative system that allows its users to keep track of employees and products. They asked for a website and an app. The website will be meant for the employees, where they can see their shifts and manage stock in the shop. The app will be meant for the administrators and managers to manage shifts, to keep track of statistics about the shops and to manage employees.

**Work division**

Throughout the 18-week duration of our group project, we had a balanced distribution of tasks among team members. However, when two of our teammates left the project, Leon Pișta and Valentina Nogales, we encountered some difficulties in task allocation. Despite this setback, we actively worked together to address the issue and establish a stable workflow.

Each of the three members contributed equally to the development of both the Windows Forms app and web app. We maintained a collaborative environment, offering support and assistance to one another whenever needed, ensuring the project's successful completion.

**Waterfall and Iterative Approaches**

Applying the iterative approach in our project with Media Bazaar allowed us to create the best solution for the client by continuously refining and enhancing our app and website.

This approach brought several strengths and weaknesses to light.

**Strengths of the Iterative Approach:**

**Flexibility:**

Iterative development provided the flexibility to adapt and evolve our project based on changing requirements and feedback from stakeholders.

**Continuous Improvement:**

The iterative process allowed us to incrementally enhance our app and website, incorporating new features and refining existing ones over time.

**Stakeholder Collaboration:**

Regular feedback loops and close collaboration with stakeholders enabled us to align our work with their expectations and address any concerns promptly.

**Early Value Delivery:**

By focusing on developing high-value features early, we were able to deliver functional components to the client sooner, providing tangible value early on.

**Weaknesses of the Iterative Approach:**

Scope Management: Without careful oversight, the iterative approach can lead to scope creep, potentially expanding the project beyond its original boundaries.

**Increased Complexity:**

As new features are added iteratively, the complexity of the project can increase, requiring careful coordination and planning to maintain overall coherence. Potential for Misalignment: Frequent changes and iterations can sometimes result in misalignment with the initial project vision, necessitating effective communication and documentation.

**Comparison between Waterfall and Iterative Approaches:**

The waterfall approach, with its sequential and linear structure, excels in projects with well-defined requirements and limited changes. It ensures thorough planning, documentation, and efficient resource allocation. However, it may struggle to accommodate evolving needs and adapt to feedback.

On the other hand, the iterative approach, as demonstrated in our project, offers flexibility, adaptability, and early value delivery. It embraces changing requirements and encourages stakeholder collaboration. It allows for continuous improvement and incremental enhancements. However, it requires careful scope management and coordination to prevent potential complexities and misalignment. In conclusion, while the waterfall approach provides structure and clarity, the iterative approach proved effective in our project by enabling flexibility, stakeholder collaboration, and continuous improvement. By understanding the strengths and weaknesses of both approaches, we can choose the most suitable methodology based on the project's specific requirements and constraints.

**Result**

At this stage of the project, our team has these features:

- Object Oriented Model of classes that is designed with consideration for the application to grow in size with more functions

- A website using Razor Pages that is designed with consideration for the website to grow in size with more functions

- An Authentication system that works, both for the website and the app, using the database.

- An Employee Management feature that allows an admin to check an employee’s details

- Multiple pages on the website where the employee can see it’s shifts, it’s profile, announcements.

- A database which stocks all of the data for the shifts, employees and login details.

**Conclusion and Recommendations**

This project fixed the initial requirements of the client.

To summarize, the project can be considered a success, due to meeting the requirements that we received six weeks ago. Additionally, all the team members gained experience with Object Oriented Programing and Razor Pages, as well as collaborating and working on the same project.

During this assignment, the team came up with a list of recommendations to make sure that the work for the project is going to be more efficient:

1. During this group project, the team members had to also work on the individual assignment, and this turned out to be a bit of a problem for some of us, as the time management was difficult and we had a lot to do for both projects. In the future, it would be better to spend equal time working on both projects.

2. Another detail that needs to be taken into consideration is the project report. We have been focusing on the coding part that some weeks we forgot to report our work.

**Evaluation & Reflection**

**Personal reflection Cătălin:**

I think that this group project really helped me develop both my programming skills and my professional skills. Having to overcome unforeseen problems and having to come up with solutions for them helped me improve what I know. Also, working together with my group helped improve my communication skills and I would like to believe that I worked on my leadership skills as well, as I try to keep track of everybody and everything, so I know that the project is going as intended.

**Personal reflection Uraela:**

**Personal reflection Murat:**

**Team reflection**

The group project taught us even more how to manage our time, work with deadlines, improve our communication, receive and give feedback to each other. Furthermore, each member of the group improved their skills in Object Oriented Programming, Razor Pages, as well as collaborating on GIT.