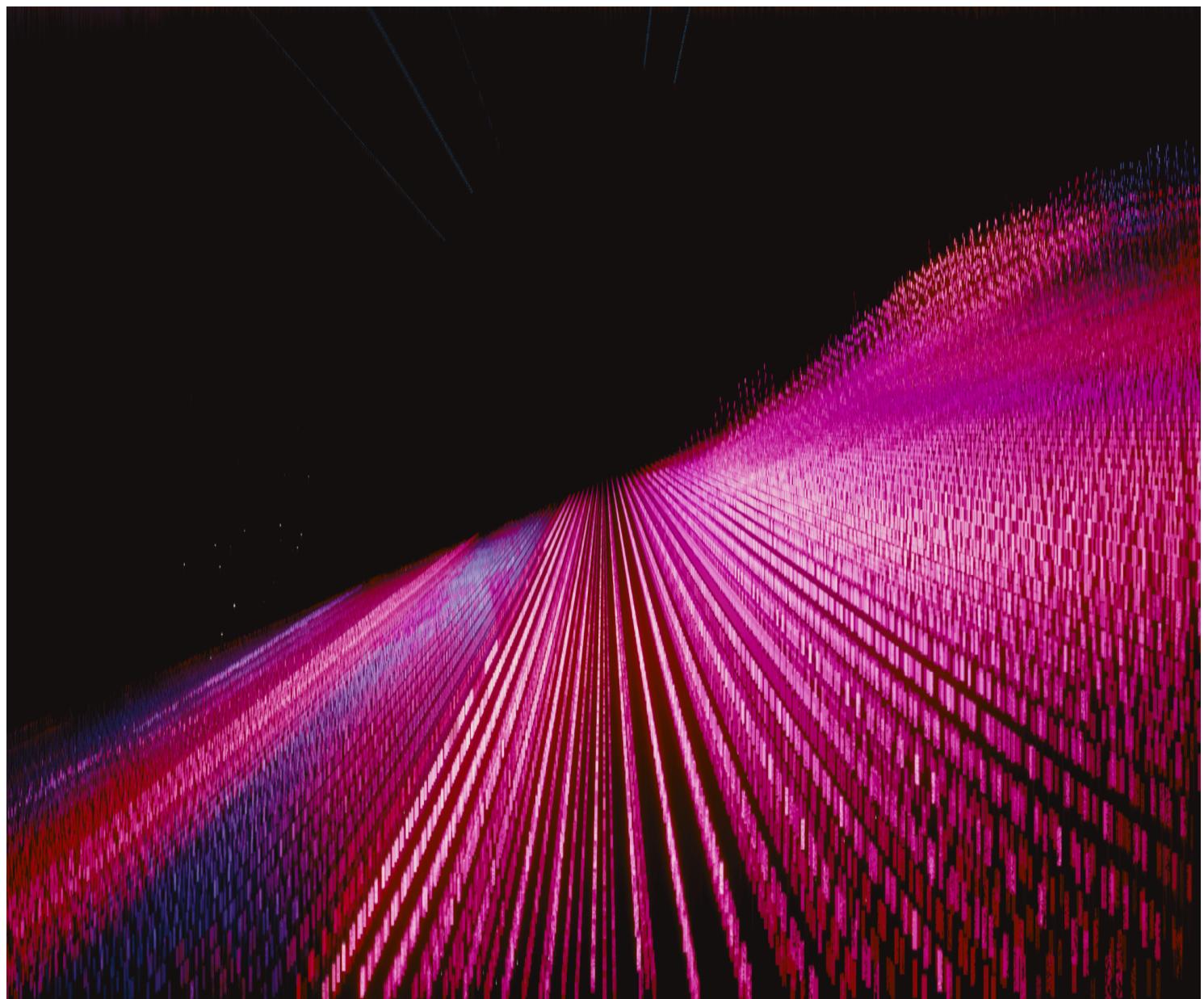


# **Process Report**

## **Media Bazaar**



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# 1. Introduction

The Media Bazaar project aims to develop a comprehensive software solution for employee and stock management for Media Bazaar's new store in Eindhoven. This report outlines the process followed in accordance with the provided Project Plan and User Requirement Specifications (URS).

# 2. Project Team and Roles

**Client:** Media Bazaar (Eindhoven branch)

**Contact:** Tülin Erçelebi Ayyıldız ([t.ercelebiayyildiz@fontys.nl](mailto:t.ercelebiayyildiz@fontys.nl))

**Company:** Jupiter ™

**Team:** The Clubhouse ™

**Contact:** Georgi Tinchev (Manager) ([g.tinchev@student.fontys.nl](mailto:g.tinchev@student.fontys.nl))

- **Project Lead:** Georgi Tinchev
- **Team Members:**
  - **Georgi Ivanov:** Front-end development
  - **Boris Petrov:** Front-end development
  - **Matei Copeoru:** Back-end development
  - **Georgi Tinchev:** Back-end development

### 3. Current Situation and Problem Description

Media Bazaar is opening a new store in Eindhoven and needs a system to manage employees and stock.

Media Bazaar's existing methods for employee and stock management were identified as inefficient (online calendars, spreadsheets) and needing more centralisation. This led to the formulation of project goals to streamline operations and enhance efficiency.

### 4. Project Goal and Deliverables

1. **The why:** This project aims to streamline operations at Media Bazaar's new store in Eindhoven, enhancing efficiency and accuracy.
2. **New preferred situation:** Media Bazaar will have a centralized software system managing employee information, work schedules, and stock levels, facilitating seamless communication and informed decision-making.
3. **Advantages of this project:** The project offers several advantages to Media Bazaar, including:
  - Increased efficiency in managing employee information and work schedules.
  - Improved accuracy in tracking stock levels and re-shelving requests.
  - Enhanced communication and coordination between departments.
  - Streamlined decision-making processes.
  - Better utilization of resources and reduction in manual errors.
4. **Value addition:** Media Bazaar demonstrates innovation, ensuring a competitive edge and delivering exceptional customer experiences.
5. **Possibilities:** The ICT product offers efficient management, real-time visibility, customizable reporting and integration enhancing overall operations.

## 5. Work Division

**Boris Petrov:**

**Georgi Ivanov:**

I mainly worked on the front end of the project, making sure everything looked good and worked well together with the backend. In the second phase, I focused on the calendar and scheduling features, ensuring they were integrated with the rest of the application. Additionally, I helped with the project documentation, making sure that all aspects of the project were well-documented.

Throughout the project, I tried to collaborate with other team members, especially in integrating the front-end design with the backend functionality. I also participated in team meetings and some brainstorming sessions.

**Matei Copeoru:**

For the first phase I worked with Georgi T. on the UML diagram, gant chart, created the database and connected it with the app. For the second phase, I was in charge of the availability, general UI idea of the website and the statistics. For the last phase I took care of department management (Creating departments and roles). Over the course of the project, I was the main person in charge of the database and the things related to it (Data Access Layer, connecting it to the Business Logic) and debugging.

**Georgi Tinchev:**

In the initial phase, I collaborated with Matei on the UML diagram and Gantt chart and assisted in database creation and integration with the app. During the second phase, I took

over front-end design tasks related to object creation forms after Boris ceased working on them. I also focused on developing business logic layer classes and linking them to the forms, ensuring smooth functionality. Additionally, I worked on debugging and optimizing the Data Access Layer (DAL) classes created by Matei to ensure they served their purpose effectively.

In the final phase, I was responsible for:

- Product management in the desktop application.
- Product restock functionality in the web application.
- Credentials update in the web application.
- Authentication in the web application.
- Worksheets and employee management forms and logic debugging.
- Half of the statistics page logic related to the employee list.
- Desktop application authentication.
- Modern and responsive design for the desktop application.
- Implementing metrics for all required fields and validation.
- Modifying the database as necessary to ensure proper functionality and coherence.
- Extensive debugging throughout the project.

## 6. Personal Reflections

### **Boris Petrov:**

### **Georgi Ivanov:**

The project started well with the waterfall method. We communicated effectively and got the app to a good state. In the second phase, using Agile, things got harder as Boris was less involved and harder to reach. Despite these challenges, we met the client's requirements. In the third phase, communication issues worsened, and only two people were actively working on the project. We couldn't meet all the client's requirements, but we still managed to deliver a functional app. Overall, it was challenging but also a learning experience.

### **Matei Copeoru:**

I think we started the project well in the waterfall method phase. Our communication was on point and we got the app into a decent state for that point in time which showed that we worked well as a team. It was generally a pleasant experience working like that.

Starting with the second phase and Agile things took a turn for the worse, with some members being hard to reach and not really being present for meetings with the client or just simply with the group. Even though we faced these challenges we

still managed to finish the 2nd phase meeting the requirements set by the client even if it was extra challenging due to the current situation and only 3 people really working.

In the 3rd phase, the issues we had in the 2nd phase became a bit worse as we went from not really being able to communicate with a member to not hearing anything from them and only 2 people working on the project. Paired with the fact that the individual project was coming to an end and we already overachieved in the 2nd phase, in which we decided to focus less on the individual to compensate for the group project, we ended up not being able to fulfil all of the client's requirements.

Overall I think it's a shame that we didn't manage to keep our good start or even ok middle point as I think if we all worked, communicated and acted as a team this group would've been very successful!

### **Georgi Tinchev:**

The project began on a solid note with the waterfall method, where clear communication and a structured approach helped us set a strong foundation. My role evolved significantly throughout the project, especially when some team members became less consistent in their contributions. In the second phase, I stepped in to handle front-end design tasks for object creation forms when Boris ceased working on them. I also took on the development of business logic layer classes and ensured their integration with the forms.

Despite the challenges faced with inconsistent team member involvement, I tried my best to keep the project on track. I focused on debugging and ensuring the DAL classes created by Matei were effective for their intended purposes. I also worked on metrics for all required fields and validation, modifying the database as necessary to ensure proper functionality and coherence. In the final phase, I managed product management in the desktop app, implemented product restock functionality, updated credentials, and handled authentication in the web app. Additionally, I contributed to the worksheets and employee management forms and logic debugging, half of the statistics page logic related to the employee list, desktop application authentication, and the modern, responsive design of the desktop application.

On a personal note, I did procrastinate at times and what I achieved is not my full potential. I could have done more if I were more organised earlier on and **did not hold a part-time job that had me tired at times during the end of week Friday/Saturday/Sunday**. The team dynamic also had a demotivating effect on me in both the personal and group project contexts. Overall, while the inconsistent participation from some members was a setback, I believe we still managed to deliver a functional project by adapting to the challenges and dividing the workload effectively among the active members.

## **7. Reflections on applying Waterfall:**

### **Strength:**

The strength of the waterfall method was that we completed tasks without needing to revisit them extensively, or at least not too much, thereby saving time. It enhanced the clarity and structure of our workflow. It was advantageous for documentation since it was completed, allowing us to concentrate on implementation. Additionally, it provided a clear indication of the project's progress.

### **Weakness:**

Weaknesses of the Waterfall method included its inflexibility; if we encountered obstacles, we had to wait to progress to other tasks, potentially slowing us down. However, we addressed these issues by seeking assistance from one another or consulting teachers promptly. Additionally, in this type of project, it is preferable to work simultaneously on different tasks to save time and preempt certain issues. Furthermore, if we had to modify requirements, it could have slowed us down because we would be unable to proceed.

## **8. Reflections on applying Agile**

### **Strength:**

The agile method gave us general tasks that could be completed without having to be hung up on other things to be done first. This gave us the advantage that we could freely work on any part of the project at any time, as we weren't being held back by certain progress points. This made for a much easier work distribution, and it felt lighter in comparison to the waterfall methodology.

### **Weakness:**

The agile method does have its downside in that it relies on frequent meetings, and the schedules did not line up to accommodate for that due to holidays being on the designated project days. It also feels a bit less structured than the waterfall method, so if team communication and expectations are vague this could pose a bigger problem than it already is.