

2021

# Process Report

The word "RASH" is rendered in a bold, purple, serif font. The letters are filled with a pattern of small, dark purple dots, giving it a textured appearance. The text is centered within a light gray rectangular box.

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## Contents

Work Division .....	3
Phase 1 – Waterfall .....	3
Phase 2 – Iterative .....	3
Phase 3 - Iterative .....	3
Personal Reflection – Waterfall .....	3
1. Rawan Alhabsi .....	3
2. Stefan Popescu .....	4
3. Hristo Tanchev .....	4
4. Anna Kowalewska .....	4
Personal Reflection – Iterative .....	5
1. Rawan Alhabsi .....	5
2. Stefan Popescu .....	5
4. Hristo Tanchev .....	5
5. Anna Kowalewska .....	6
Reflection About Applying Waterfall .....	6
Reflection About Applying Iterative .....	7
The Differences Between Waterfall and Iterative .....	7

## REVISION HISTORY

Version	Changes
0.1	- Initial version

## Work Division

### Phase 1 – Waterfall

During the first phase of the project, team RASH focused on delivering an employee administration system, products management system, as well as departments management each with their own requirements. On the way our team encountered some challenges such as editing of the employee profile, or the connection between shelves and products, by id or category, but managed to overcome them in the end with guidance from the tutor.

### Phase 2 – Iterative

During the second phase of the project, team RASH focused on delivering a stock management system and a schedule system. The stock side was a bit tricky as connection between forms needed to be done for the request and accept functions. On the schedule side the bigger challenge was automatically creating a full month calendar and connecting it to the entities. In the end the team was able to deliver.

### Phase 3 - Iterative

During the third phase of the project, team RASH set target on delivering an auto scheduler, statistics as well as a web application. The scheduler got through some refinement processes by the help of the tutor starting from an execution time of 20 minutes and reaching 10 to 30 seconds. The statistics gave the team a headache at the beginning until the tutor helped by providing a better tool for working with them. In the end all requirements were in place.

## Personal Reflection – Waterfall

### 1. Rawan Alhabsi

- The project is going well as our communication is excellent, we used to work together during the breaks and classes, which ease our project. However, some members of the group are slow with their work.
- Moving on, my role in the project was to implement department management, scheduler that works manually, frontend of website, login for the application and

the website. Adding to that, creating the table of work shifts in the website. I feel proud of the work that I've done and being helpful and pro-active.

- The thing that I would like to keep it till the future are : working on time, keep developing my knowledge that can help me in my studies, being helpful as I'm working in a group, and I will try to work more in documentation.
- I'm grateful of having this great team.

## 2. Stefan Popescu

- The project started very well. The communication was good, working together was good and happily I can say that it stayed that way. We started by meeting from time to time to work together face to face but also by using Microsoft Teams. The deadlines were clear and everybody met them. I cannot really say I have a certain role in this. All of us contributed together to the project and took the leader position in succession. When somebody needed help the others supplied support immediately making us bond even better. The most important part was that everybody was involved into making this project a great success.

## 3. Hristo Tanchev

- I would say that the project went relatively good due to my great groupmates and our dedication to the completion of the project. It took us a while to get along with the communication but when we got along the work over the project began to be simpler to understand what was needed to be done. Unfortunately, I found my part of the project a little confusing, so it took me a while to get it working and I feel that the deadline was too soon for a big project like this one.

## 4. Anna Kowalewska

- The first phase went by quickly, but I think our team succeeded in fulfilling the initial requirements. There was no problem with communication. Everyone was helping each other with understanding the MediaBazaar problem better.
- Personally, I didn't struggle with the employees' management part too much, but when I wasn't sure about something or needed some guidance in implementation, I could always ask the other team members.

## Personal Reflection – Iterative

### 1. Rawan Alhabsi

- The project was little bit tough, but we managed to cover all the requirements at the end. We managed to contribute with each other and implement what we suppose to work on. In my role of the project, I implemented several parts such as: the department management, scheduler and design of the website. It took us a whole semester to finish it and make it done and work perfectly.
- Furthermore, the work went badly in the first phase, but afterword me and my teammates managed to improve our skills in coding and the group collaboration, where everyone started being active and know what to work on. Our group communication has become much better than before, and we also used to help each other in case someone needs help.
- The good things that I would like to keep them for the future are professional skills in a documentation, technical skills, work as a group and what I've learnt during this semester. Moreover, I would like to improve my skills in coding more, where I can cover all exceptions that might occur.
- Overall, I feel satisfied towards our project as we really worked hard and did our best for it. I'm happy to be part of this project and sharing this experience with my group members.

### 2. Stefan Popescu

- The project started very well. The communication was good, working together was good and happily I can say that it stayed that way. We started by meeting from time to time to work together face to face but also by using Microsoft Teams. The deadlines were clear and everybody met them. I cannot really say I have a certain role in this. All of us contributed together to the project and took the leader position in succession. When somebody needed help the others supplied support immediately making us bond even better. The most important part was that everybody was involved into making this project a great success.

### 3. Hristo Tanchev

I believe we started excellent with the project but unfortunately that wasn't for long. As soon as the second phase begun, I started to have some big issues with time managing and unfortunately, I haven't contributed a lot to the project. Good side is that me and my

team keep strong communication and at least everybody knows the situations of the others. But overall am happy working with my team and I am optimistic that we will catch up and manage to satisfy our client.

#### 4. Anna Kowalewska

- As soon as the iterative phase began, I started to experience time management issues. I have to say that I also neglected the use of git. The changes in my application were not up to date with the branch. However, the part that I was assigned to do has been successfully implemented.
- The biggest challenge was to include statistics in the application, but with our tutor's guidance it was eventually possible.
- Our team started using scrum management tool (ClickUp) to keep track of progress. The use of this tool still has to be improved but we are getting better at it every week.

### Reflection About Applying Waterfall

#### Strengths:

- The benefits that RASH got from the waterfall phase are:
  - o Gained the ability to manage the time and knowledge from a member to another. This increased the communication between members
  - o Learned how to develop each member's idea based on the feedback received from the tutor as well as the client.
  - o Based on the above point we also improved our writing skills when it comes to documentation related to the project.
  - o Team collaboration has increased and built a great synergy between members which helped moving on with the project.

## Reflection About Applying Iterative

**Strengths:** The iterative way of working allows maintainers to update the application constantly and the feedback from the users is based on a working product, not on use cases for example. With each iteration it's also easy to measure the progress made and set milestones for the next one.

**Weaknesses:** A major drawback to the iterative approach is that in most cases the user-requirements are updated constantly. This requires a lot of updates regarding documentation and restructuring of the application itself, which can cause a lot of troubles/risks and workload for the developers.

**Conclusion:** This way of working can be very useful, but only in certain scenarios. For example, your client is not sure what he wants his final product to look like, so when you develop it in iterations, he can get a better idea of what he wants. Overall, in order to successfully execute a project iteratively you need a team of skilled developers, so this approach is not recommended for everyone.

## The Differences Between Waterfall and Iterative

The main difference between a waterfall and an iterative approach is that on the one hand, when using the waterfall approach the project is executed in a linear fashion: you come up with a plan, implement it and then test it. On the other hand, when using an iterative approach, you go through the same steps but multiple times, that's why the iterative approach allows for a lot more flexibility and change of plans.

With the waterfall approach the testing is done at the very end, whereas with iterative the project is tested a lot more often, which can definitely help any team find potential risks much earlier on and prevent them from blowing out of proportion.

With the waterfall methodology, the goals and deadlines are set in stone, which you must follow, whereas when a project is executed iteratively goals change constantly and most of the time the final deadline for the project is unclear.

In conclusion, both of these approaches can be very useful, but the project case should be suitable for such an approach. Iterative is better for smaller-scale projects, whereas waterfall is better for big projects, where the goals are clearly outlined.