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# Process Report

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## REVISION HISTORY

Version	Changes
0.1	- Initial version

## Work Division

### Phase 1 – Waterfall

During the first phase of the project, Group 4 focused on delivering an employee administration system, products management system, as well as department 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, Group 4 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 Group 4 set a 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. Hristo Tanchev

Waterfall went great for me and I believe for the team because we knew what was the objective at the first moment we had our client meeting. After the meeting we quick started to brainstorm and execute tasks as we promised him and kept that flow for a while.

### 2. Alexander Petrov

This phase allowed us a good introduction on the workflow for the project. We could start the project with solid structure, but later on we experienced troubles trying to update some features. Still we achieved to work that way as a group and to start the project as it's supposed to.

Overall it was fine, a good introduction and learning experience for beginners.

### 3. Anton Yordanov

The waterfall phase was a good way to introduce us to the group workflow and give us an idea of how everything has to be, but it was rigid and once we decided on something we could not easily change it when we faced hardships. Overall it is a good introduction to the workflow of group work and structuring a project.

### 4. Erenmemisoglu,Kaan

During waterfall we learned a lot of its advantages for creating a solution like strict boundaries on implementation and goals set in stone. We also experienced a lot of its shortcomings like not being able to change our plan as we learned new things in our studies.

## Personal Reflection – Iterative

### 1. Hristo Tanchev

I believe we started excellent with the project but unfortunately that wasn't for long. As soon as the second phase began, I started to have some big issues with time managing and unfortunately, I haven't contributed a lot to the project as I wished. I believe I could've bring much more than I have and I wanted to implement so many more feature to the application. Good side is that me and my team keep strong communication and at least everybody knows the situations of the others. But overall I am happy working with my team and I am optimistic that we will catch up and manage to satisfy our client.

## 2. Alexander Petrov

In this phase we could update/ edit our work much easier. We just had shorter sprints in which we could work more efficiently and overall to do more work with better quality. As we already were introduced to the project and already had experience with it we just improved it and added more functionality which helped us to finish the project as good as we could make it.

## 3. Anton Yordanov

During the iterative phase we had more freedom on implementation because once we saw something is not going as planned we could work around it. The iteration approach lead us to create a better solution in the end because of the short sprints where we had freedom on implementation

## 4. Erenmemisoglu,Kaan

Iterative introduced us to a different approach to developing. in this phase we had short sprints where we could implement what we needed and if we found a better solution down the line we could adapt more easily. Thanks to that we could discuss more with our client to better suit his needs.

## Reflection About Applying Waterfall

Strengths:

- The benefits that Group 4 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.