**Process report sep2**

**Students**

Balkis Ibrahim 260092

Dziugas Austys 280144

Przemyslaw Regulski 280196

Ronald Johnson 279987

**Supervisor**

Troels Mortensen

**ICT ENGINEERING**

**SECOND SEMESTER 2019**

**Table of content-**

[1 Introduction 1](#_Toc16115388)

[2 Group Description 2](#_Toc16115389)

[3 Project Initiation 3](#_Toc16115390)

[4 Project Description 5](#_Toc16115391)

[5 Project Execution 6](#_Toc16115392)

[5.1 Version Control 7](#_Toc16115393)

[6 Personal Reflections 8](#_Toc16115394)

[7 Supervision 9](#_Toc16115395)

[8 Conclusions 10](#_Toc16115396)

Appendices

# Introduction

The current document is meant to inform both the team and the reader about how the planned activities worked out and how the collaboration and workflow went in our group. For this project, there was no mandatory given topic, but instead, we had the possibility of choosing the methodology, we want to use. The chosen working methodology for this project was SCRUM since it was the ideal way of managing the team in an agile way. The group’s activities for this assignment were organized in sprints. There was a total of 5 sprints for the given project and each of them was held weekly one for each sprint. Our group scheduled the weekly sprints to take part every Friday at 10.00 AM either on Discord or at school. The meetings were scheduled to last around 8 hours per meeting. Each sprint had its own sets of requirements all having a grade of importance and a workload estimate. Some tasks took more time to complete than originally estimated and at some point, we fell behind of schedule because of this. A time schedule in form of a Gantt chart was made for this project and this helped in keeping track of the given tasks and helped in organizing our group work. At a certain point in the project, we stumbled with certain tasks and had difficulties in advancing further. As a result, we find our way to complete the project. The workflow went smoothly in most cases since we had a well-organized team prior to starting the work. Each member did his tasks and did not hesitate to ask for help when problems started appearing.

# Group Description

**Our group is made of 4 members, Balkis, Dziugas, Przemyslaw and Ronald**

**Balkis Ibrahim**

I am 22 years old from Syria, I came to Denmark 3 years ago. I like being here studying at Via, and I have the pleasure to develop a project with my colleagues.

I had a passion for programming and computers. I like to try new things and be a part of every part of the project. As my Belbin role is a specialist, I truly get irritated when the time is being filled with nonsense or otherwise being wasted.

# Project Initiation

In this chapter we will discuss on how the topic for this project was received by our group. The topic for the current project was chosen from a list of available cases given to us by the school.

Our topic of Employees management systemhas been chosen since it posed a challenge being very similar to a real-world topic and we would gain a significant amount of knowledge by completing this task. This would not only test our skills gained from our first semester but also from the second semester and would reflect what we have learned so far.

The group was formed free of choice and not imposed by our supervisors. All of us decided to work together since some of us collaborated with each other in the previous semester and knew of each other’s personality and working ethics.

Our planning for this project went well, since we implemented an agile method called SCRUM for the give assignment. This helped us to break down the time allocated in multiple sprints which were held weekly and each of them had a set of assigned mandatory tasks which had to be completed before the next sprint started.

The project was organized in such a way that each sprint would be considered a milestone, given that all the required tasks in that sprint would be completed before the next one started.

However, since this happened in real world and not in theory that was not always the case for our situation. Sometimes we fell behind schedule due to certain tasks being more complicated than others and could not always follow the planned schedule.

These issues fortunately have been resolved and we were able to get back on track by allocating more time to catch up with tasks that we fell behind on and were able to get back on track.

This has been accomplished since we used several project planning tools which helped the group in organizing and keeping track of the whole project.

These include the use of Gantt chart which has been used to monitor the activities and the sprints allocated for this assignment. Based on the kept log book, we were able to document how each sprint went and what has been accomplished during that meeting. Estimated hours have been given for each tasks of the respected sprint and at the end actual hours could be subtracted for each task.

This helped in the creation and implementation of a burndown chart which helped us in keeping track of our progress and kept the group informed if it was falling behind or was ahead with certain tasks.

Another tool used for this assignment was in the form of a risk assessment table which served as a reminder of what risks this project would pose and what would happen if some rules would be broken.

# Project Execution

In this chapter we will discuss how the execution for this project went in our group and what methods were used to meet the deadline.

The agile method called SCRUM was used for managing this project since it gave flexibility and the possibility of turning back and reviewing a certain step in the report if needed. Since we defined all the task relevant to this project, we were able to divide them into sprints with each sprint being one week long. While using the Unified process methodology we followed the 4 steps, inception, elaboration, construction and testing. We separated the work between us everyone was still knowing what the other people were doing in order to understand the code as best as possible.

In the inception face, we discussed and developed user stories that were made for this project managed all the requirements and scenarios.

In the elaboration face we spent time creating all our relevant diagrams such as Activity, class, sequence and use case diagrams. All of this helped us visualize the concept and gives us a better understanding of how the system should respond and act.

In the construction face, we started coding our system on the base we created in the elaboration face. Considering all the previously made diagrams for understanding the needed methods.

In the testing face, we tested our application in such detail as we deemed necessary. Just to see if everything works as intended and if any exceptions happened correct them.

There where, at points, moments where we hit a wall and didn’t know how to fix a problem and had to seek help from others. Other times we just debated the topic and discussed it between our own.

As for assistance materials, we used mostly online materials, tutorials and instructive videos all of which helped us reach the desired end-point of our project.

## Version Control

GitHub has been used for version control. As we are a group of 4 members so all 4 are the

contributors for push and pull requests. For more information repository is provided.

<https://github.com/Balqies/SEP2_RE>

## Scrum

During the development of the system an agile framework has been used which is SCRUM.

Roles were assigned to our group members so that each one of us will know what his task

during the Scrum is and how he should prepare for the next meeting.

Our roles were:

**Product owner:**

The whole group members were presenting the product owner of our system. The purpose was

to create a vision of what he wishes to build and convey that vision to the scrum team.

**Scrum master:** Balkis

Balkis was the Scrum master in our group. her purpose was to maintain a good and calm

environment. Also, she was the one who planned out the Scrum meetings. During the meetings

she was the one to set up who is responsible for certain tasks. There were some obstacles that

our team encountered but not for a long time because Balkis was trying hard to find a solution

for the problem.

**Development team:** Balkis, Ronald,Dziugas, Przemyslaw

They work on creating and improving the system. The main goal of the development team

was to implement the tasks which can be found in the sprints also to deliver the requested

and committed product increments. During this project, our development team worked hard

in order to achieve the set-up goals.

## Burndown chart Diagram

A picture containing sky

Description automatically generated

From the diagram above we can clearly see that at some point we were falling back especially in the second sprint but we as a group did our best to face the problem and meeting the deadline of the project.

|  |  |  |
| --- | --- | --- |
| **Sprint ID** | **User Story** | **Priority** |
| 2 | As an admin, I want to add employees to the system so that all the employees will have access to the system. | High |
| 2 | As an admin, I want to delete employees from the system so that all employees can no longer access the system. | High |
| 2 | As an admin, I want to edit employee’s information in the system, so that all employee’s data can be modified. | High |
| 3 | As an admin, I want to be able to assign shifts to employees, so that employees can view their work plan. | High |
| 3 | As an admin, I want to be able to view employee’s data, so that I have access to pertinent information regarding employees. | High |
| 3 | As an admin, I edit and remove shifts from employees work plan, so that employees can view their work plan. | High |
| 4 | As a user, I want to be able to view my work schedule so that the schedule can be adhered to. | High |
| 4 | As a user, I want to be able to modify my data, so that I can update my data with any future changes. | Medium |
| 4 | As a user, I want to be able to specify whether I want to work or not on a specific date so that admins can assign my shifts accordingly. | Medium |
| 5 | As a user, I want to able to denote my time of arrival and departure from work, so that my working hours can be recorded. | Low |
| 5 | As a user, I want to be able to check my work-related statistics, so that I can calculate my income. | Low |

## Sprint backlog

# Personal Reflections

For content see Appendix 2 “Process Report – VIA Engineering Guidelines”.

# Supervision

For content see Appendix 2 “Process Report – VIA Engineering Guidelines”.

# Conclusions

For content see Appendix 2 “Process Report – VIA Engineering Guidelines”.

**Appendices**

For content see Appendix 2 “Process Report – VIA Engineering Guidelines”.