**ANDROID APPLICATION**

**SOCIAL INTERACTIVE APP**



**PATRIK IHNAT(260010),**

**PATRIK KUCERKA(260026),**

**ANDREW FARID NGWIRA(260008).**

**Supervisor: KASPER KNOP RASMUSSEN**

**VIA UNIVERSITY COLLEGE**

# TABLE OF CONTENT

[TABLE OF CONTENT 2](#_Toc532213567)

[GROUP POLICY 3](#_Toc532213568)

[TERMS AND CONDITIONS 3](#_Toc532213569)

[INTRODUCTION 4](#_Toc532213570)

[THE UP PHASES 4](#_Toc532213571)

[INCEPTION 4](#_Toc532213572)

[ELABORATION 4](#_Toc532213573)

[CONSTRUCTION 5](#_Toc532213574)

[TRANSITION 5](#_Toc532213575)

[SCRUM DOCUMENTATION 5](#_Toc532213576)

[SPRINT 1 5](#_Toc532213577)

[Sprint Planning. 5](#_Toc532213578)

[SPRINT 2 6](#_Toc532213579)

[Sprint Planning. 6](#_Toc532213580)

[SPRINT 3 6](#_Toc532213581)

[Sprint Planning. 6](#_Toc532213582)

[SPRINT 4 7](#_Toc532213583)

[Sprint Planning. 7](#_Toc532213584)

[SPRINT 5 7](#_Toc532213585)

[Sprint Planning. 7](#_Toc532213586)

[SPRINT 6 7](#_Toc532213587)

[Sprint Planning. 8](#_Toc532213588)

[SPRINT 7 8](#_Toc532213589)

[Sprint Planning. 8](#_Toc532213590)

[MEETINGS WITH THE SUPERVISOR 9](#_Toc532213591)

[Data retrieval 9](#_Toc532213592)

[REFLECTIONS 9](#_Toc532213593)

[Team reflections 9](#_Toc532213594)

[Patrik Ihnat 9](#_Toc532213595)

[Group reflection on SCRUM 9](#_Toc532213596)

[Self-assessments 10](#_Toc532213597)

[Patrik Ihnat 10](#_Toc532213598)

# GROUP POLICY

Each member read and agreed to the policy to be counted as part of the

SEP4 group.

Purpose of the SEP4 group is to achieve the set task together as a functional team with each member contributing to the best of his abilities to get the task completed in time.

We expect total co-operation, professionalism and honesty, as well as dedication.

## TERMS AND CONDITIONS

1. The group is to have scheduled meetings every morning where scrum will be carried out for about 10-15. From Mon- Thursday 09:00 – 09:15 after this we work until 15:00 and on Fridays 09– 12:00.
2. You must prepare beforehand and not during the meeting or work sessions.
3. During the meeting, you must be attentive and co-operative throughout. There shall be no gaming and social media.
4. You are responsible for your own agenda for the meeting based on the task he is doing.
5. We will only call for supervisor meetings when needed.
6. Punctuality is essential always for all scheduled meetings. Once or twice late is tolerable but being always late will not. If you are running late, please be kind enough to notify the other group members and if you do not give notice it would lead to a warning. If you do not turn up for meetings you get warnings that would eventually lead to getting kicked out of the group.
7. Andrew will track all updates concerning group performance.
8. As a group driven by member participation all decisions will be concluded by a mutual decision after hearing every member say on the matter at hand. In moments where we do not get to reach a mutual decision the member responsible for the task makes the final decision.
9. We will have self- controlled small breaks during the day considering that we are all responsible adults.
10. Depending on the result of the task given to each member, the contributed work should equal the task.  If you have difficulties other members who have finished their tasks will help you.
11. We will evaluate the group project on Fridays from 11:00-12:00 of the 3 weeks.
12. Displaying indifference consistently towards the project will lead you to being expelled from the group.
13. We believe that responsible behavior will keep the group from falling apart.

In accordance with the terms and conditions listed above please sign below as to having agreed to all the stipulated terms and actions to be performed regarding SEP2. Any breach of contract will lead to warnings issued and if they exceed a reasonable level this will force the group to vote you out.

# INTRODUCTION

The process of developing an android application was done using scrum rules and guidelines. We decided to have a total of five () burning sprints. Sprint duration was set to be two (2) days, morning meetings consisted of daily scrum

# THE UP PHASES

## INCEPTION

We come up with an idea of helping people that are suffering from the same sickness have a platform where they can encourage each other and support one another. This provided the grounds for us to develop user stories relevant to the kind of system that was going to be built to meet the needs of the end user.

A prioritized list of user stories was developed (Appendix A) and an ideal burndown chart to keep track of the work done in each sprint (Appendix B). In planning for the project period, we developed a timeline (Appendix C). We defined seven (3) use cases in detail and the key risks identified were as follows:

|  |
| --- |
| *Key Risks* |
| Coherence between users and firebase. |
| Failure to create stable user/firebase system. |
| Connection failures.  Failure to provide real time data. |
|  |

Elaboration effort was also estimated to two (8) days.

## ELABORATION

Four (4) top user stories were selected to create a foundation of the system and when tested they proved to be working. This reduced the risks we had in Inception.

## CONSTRUCTION

In this phase we built on the already existing system we had by adding more user stories. We expanded the UML needed to guide us in writing the necessary code needed to complete user stories and UML with classes only showing main methods was developed. According to each user story, a scenario test was conducted (appendix). The product backlog was remade, getting rid of redundant user stories and prioritizing our product backlog.

## TRANSITION

The final system was tested using black box testing due to lack of time to perform unit testing. The product owner went through the user stories completed, tested and working for the system.

# SCRUM DOCUMENTATION

**Scrum roles:**

Scrum Master: Andrew

Product Owner: Patrik Ihnát

My role as a product owner was to insure that everybody understand clearly my view on the system and follow the order and priority of requirements which we stated at the beginning of the project period.

## SPRINT 1

### Sprint Planning.

#### *Sprint backlog:*

1. Product backlog
2. Elaboration user stories defined.
3. Create a new timeline (the old one included weekend and was short on the elaboration phase).

**(**Daily scrum)

Morning meetings which lasted 10 – 15 minutes.

**Sprint review**

1. Backlog is created.
2. Product owner accepted the product backlog.

**Sprint retrospective.**

1. After the end of the sprint we had a ready to use product backlog.

## SPRINT 2

### Sprint Planning.

#### *Sprint backlog:*

1. User should be able to connect to the database from different devices.
2. User should be able to see the UI with all necessary information
3. User should be able to create profile

**(**Daily scrum)

Morning meetings which lasted 10 – 15 minutes.

Work on track.

**Sprint review**

1. Backlog is created.
2. Product owner accepted the product backlog.

**Sprint retrospective.**

1. After the end of the sprint we had a stable foundation of the project implemented.

## SPRINT 3

### Sprint Planning.

#### *Sprint backlog:*

1. User should be able to make Posts
2. User should be able to see other posts

**(**Daily scrum)

Morning meetings which lasted 10 – 15 minutes.

**Sprint review**

1. Making posts feature implemented.
2. Product owner accepted the post design and implementation.

**Sprint retrospective.**

1. Posts now added to system.

## SPRINT 4

### Sprint Planning.

#### *Sprint backlog:*

1. User should be able to display user information from database

**(**Daily scrum)

Morning meetings which lasted 10 – 15 minutes.

**Sprint review**

We were stuck on this requirement which led us to start working on our documentation after consulting our supervisor. We could not do other work because the other requirement also needed us to retrieve information from the database.

**Sprint retrospective.**

Requirement not completed and is push to the next sprint.

## SPRINT 5

### Sprint Planning.

#### *Sprint backlog:*

1. Documentation of process and project report
2. User should be able to display user information from database

**(**Daily scrum)

Morning meetings which lasted 10 – 15 minutes.

1. Here we agreed that it would be better if 2 of the group members could focus on the problem at hand and 1 to start documentation.

**Sprint review**

Documentation of the project in process.

**Sprint retrospective.**

Documentation still ongoing

Requirement not completed and is push to the next sprint.

## SPRINT 6

### Sprint Planning.

#### *Sprint backlog:*

1. Documentation of process and project report
2. User should be able to display user information from database
3. User guide

**(**Daily scrum)

Morning meetings which lasted 10 – 15 minutes.

We finally had completed user requirement of displaying data from the database which proved to be a vital requirement because a lot of the remaining requirements had something similar to data retrieval from the database.

**Sprint review**

Documentation of the project in process.

Completed display user information from database requirement.

**Sprint retrospective.**

Documentation still ongoing and User can now display user information.

## SPRINT 7

### Sprint Planning.

#### *Sprint backlog:*

1. Documentation of process report, project report and user guide
2. Implement Callback for retrieving user information

**(**Daily scrum)

Morning meetings which lasted 10 – 15 minutes.

We finally had completed user requirement of displaying data from the database which proved to be a vital requirement because a lot of the remaining requirements had something similar to data retrieval from the database.

**Sprint review**

Documentation of the project in process

**Sprint retrospective.**

# MEETINGS WITH THE SUPERVISOR

## Data retrieval

Problem:   Displaying information from the database.

Decision:   To handle other requirements and start working on the documentation while we wait for feedback from supervisor.

Outcome: Requirement completed, and application is able to get data from the database.

# REFLECTIONS

## Team reflections

### Patrik Ihnat

During this project I experienced working with guys who I was working with in 1st semester project. But this time around it was different because when we were analyzing our project it was fun time for me.  Everything what was happening was in good and friendly mood I can say that we had so much fun working together. Working with Patrick again was so much fun for me because his knowledge is impressive. When he was working with firebase he overcome a lot by himself. Andrew on the other hand did such a nice job on creating layouts.

#### Patrik Kucerka

#### Andrew Farid Ngwira

## Group reflection on SCRUM

The project was a challenging experience which made us as students get out of the comfort zone and work to produce an outcome that displays what knowledge and skills we have acquired over the past months during this semester. It gave us the chance to put to test the knowledge that we acquired during classes and learn new things from fellow group members. In the beginning we came up with lots of user stories some of which were unachievable considering the time given as project deadline.

Scrum rules and guidelines were used, and it was good practice, except it didn’t go so well with a timeline of only 3 weeks including documentation.

It is every groups goal to develop a project system that will be appreciated not only by supervisors but everyone who comes across it and semester projects are a big deal even though the period given is short.

## Self-assessments

### Patrik Ihnat

This is the end of my 4th semester here in Denmark and this is the 3rd semester project which I’m working on. I experienced working on Android application with group of experienced and good developers. During this period, we were following SCRUM rules and it helped a lot. To sum this up this project was the most fun one just because it was my first semester project in cross media specialization even some of the things didn’t go as planned it was good experience for me.

#### Patrik Kucerka

#### Andrew Farid Ngwira