

# ROVER RESCUE SYSTEM

# Project File

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# Contents

1	Col	laboration	2
	1.1	Mission statement	2
	1.2	Objective	2
	1.3	Agreements and expectations	
	1.4	Agreements for team blog	
2	Coa	aching	3
	2.1	Coaching 1	3
	2.2	Coaching 2	3
	2.3	Coaching 3	3
	2.4	Coaching 4	3
	2.5	Coaching 5	3
	2.6	Coaching 6	3
3	Coc	ordinator	4
	3.1	Sprint 1	4
	3.2	<del>-</del>	4
	3.3	Sprint 3	4
	3.4	Sprint 4	4
4	Tim	ne	5

#### 1 Collaboration

#### 1.1 Mission statement

This project we want to build a robot that is able to detect people in the rubble of buildings. It needs to be deployable in disaster regions. We will receive a robot from our instance to use for our project, we will need to be able to control the robot from our mobile device.

#### 1.2 Objective

At the end of this project we want to produce a working robot and we would like to see the thing we can accomplish as a team of only TI students. We want to learn different things with this project, things like; controlling a robot with code, understanding how the hardware of a robot works, making an app, knowing how to connect a robot to a phone with Bluetooth and we hope to learn more about scrum. Our goal is also to accomplish all our learning goals.

#### 1.3 Agreements and expectations

- Every member of the team is present at meetings of the group
- If a member can't be present at a meeting of the group, he has reported this to the other members of the group by WhatsApp or email.
- Every member is accessible through WhatsApp or email
- WhatsApp is used for general communication (not for personal communication)
- Git is used for storage and management of versions
- ZenHub is used for management of board to implement Scrum
- If something isn't clear to you, you tell this to the other members of the team, so that the other members can help you.
- You are responsible for your own work and for having your stuff with you.
- Decisions are made with all the members of the team, not individual.
- Everyone does everything they can to produce a good-looking end product...

#### 1.4 Agreements for team blog

On the blog you can find weekly updates of our product, which problems we have faced in the past week and how we managed to solve them. If something interesting happens, we will put it on the blog too. Each team member is responsible for the blog. A team member should update/create the blog post of the week with the work that he or she has done.

# 2 Coaching

This chapter we will discuss the meeting with the coach.

#### 2.1 Coaching 1

This meeting was held on the 10th of September 2018. We introduced ourselves to each other. This was done in less than 5 minutes because we were in the same class throughout the first half of the first year.

#### 2.2 Coaching 2

This meeting was held on the 2th of November 2018. During this meeting we discussed the draft of the team manifesto. We integrated our two personal learning goals from Project Agile Development into the manifesto. The coach told us more about the two competences that were at the center of this project, Ethics and Research.

#### 2.3 Coaching 3

This meeting was held on the 28th of November 2018. During the previous meeting the coach asked us to look back at the previous projects and take note of our own behavior and the effect of this behavior on the team members and the end result. This information is labeled as classified and won't be publicly published.

### 2.4 Coaching 4

This meeting was held on the 5th of December 2018. We discussed the feedback forms that each of us had filled in for each of the team members. After discussing them we all thought of two SMART learning goals based on the feedback from our team members. We also discussed the status and planning of the project. We were way ahead of the schedule and were researching possible autonomous behavior of the Rover.

### 2.5 Coaching 5

This meeting was held on the 12th of December 2018. We discussed the retrospective of the previous sprints with the coach. We also discussed our portfolio and talked about the internship.

## 2.6 Coaching 6

TBD

#### 3 Coordinator

We went to all of the progress meetings with the main stakeholder Ed Kuijpers.

#### 3.1 Sprint 1

- Kick-off project.
- Stakeholder approved use of ZenHub instead of Trello, Hexo instead of Tumblr and GitHub instead of GitLab but a clone had to be available at the end of the project.
- Requested clarification on the requested functionality.
- Discussed the status of the provided Rovers (all broken) with the stakeholder.

#### 3.2 Sprint 2

- Requested clarification on the C/C++ knowledge at the technical meeting. Resulted in not having to know any C/C++ except all which had been provided through the workshops or provided code.
- Scrum process was given a negative grade, no comment available from the stakeholder why it was insufficient.
- Discussed excellence track for us (non-excellence students), stakeholder was really negative about having such ambitions.

#### 3.3 Sprint 3

- Discussed the status of the provided magnetometers (all broken) with the stakeholder.
- Requested clarification on using Virtual Reality as control for the Rover/Robot, stakeholder approved.
- Requested workshop on S.L.A.M. and Facial recognition, both turned down due to limited knowledge and time.
- More information about the design trade-offs for the Rover and its environment.

### 3.4 Sprint 4

**TBD** 

# 4 Time

Reflecting the time each team member has worked per sprint. Time is based on task in the ZenHub board. Team members are responsible for updating their own task if the number of points was different than predicated during one of the planning sessions.

Sprint Number	Christiaan	$Rapha\ddot{e}l$	Nino	Martijn
Sprint 1	26 points	25 points	22 points	69 points
Sprint 2	33 points	36 points	50 points	179 points
Sprint 3	20 points	21 points	42 points	102 points
Sprint 4	TBD	TBD	TBD	TBD