

Sprint Review

ROW Team 5

Introduction

Sensors and
actuators

Communication

User Interface

Operational
scenario

Documentation

Innovation

Scrum

Quality
assurance

End

ROW5 Sprint 4 Review

ROW Team 5

Amsterdam University of Applied Sciences
<https://rescueonwheels.github.io/>

Januari 14, 2019

Introduction

Sprint Review

ROW Team 5

Introduction

Sensors and
actuators

Communication

User Interface

Operational
scenario

Documentation

Innovation

Scrum

Quality
assurance

End

Christiaan van Arum	Developer
Raphaël Bunck	Scrum Master
Nino van Galen	Developer
Martijn Vegter	Product Owner

Overview

Sprint Review

ROW Team 5

Introduction

Sensors and
actuators

Communication

User Interface

Operational
scenario

Documentation

Innovation

Scrum

Quality
assurance

End

- 1 Introduction
- 2 Sensors and actuators
- 3 Communication
- 4 User Interface
- 5 Operational scenario
- 6 Documentation
- 7 Innovation
- 8 Scrum
- 9 Quality assurance
- 10 End

Sensors and actuators

Sprint Review

ROW Team 5

Introduction

Sensors and
actuators

Communication

User Interface

Operational
scenario

Documentation

Innovation

Scrum

Quality
assurance

End

Sensor(s):

- Distance sensor (ultrasonic sensor HC-SR04)

Actuator(s):

- Custom double axis servo platform

Other:

- Fisheye lens

Communication

Sprint Review

ROW Team 5

Introduction

Sensors and
actuators

Communication

User Interface

Operational
scenario

Documentation

Innovation

Scrum

Quality
assurance

End

Rover ↔ Cockpit:

- Socket.IO

Rover → Tincidunt:

- H.264 over HTTP

Cockpit ← Controller:

- Bluetooth
- USB

User Interface: Epicenter

Sprint Review

ROW Team 5

Introduction

Sensors and
actuators

Communication

User Interface

Operational
scenario

Documentation

Innovation

Scrum

Quality
assurance

End

Cockpit

oJH0ALisTGebctA_AAAA (::ffff:192.168.0.246)

Rover

dCWxZubMufkwWuTeAAAB (::ffff:192.168.0.246)

Connection Queue

oJH0ALisTGebctA_AAAA
dCWxZubMufkwWuTeAAAB

Connect

User Interface: Chrome

Sprint Review

ROW Team 5

Introduction

Sensors and
actuators

Communication

User Interface

Operational
scenario

Documentation

Innovation

Scrum

Quality
assurance

End



User Interface: Tincidunt

Sprint Review

ROW Team 5

Introduction

Sensors and
actuators

Communication

User Interface

Operational
scenario

Documentation

Innovation

Scrum

Quality
assurance

End



Operational scenario

Sprint Review

ROW Team 5

Introduction

Sensors and
actuators

Communication

User Interface

**Operational
scenario**

Documentation

Innovation

Scrum

Quality
assurance

End

TODO

Documentation

Sprint Review

ROW Team 5

Introduction

Sensors and
actuators

Communication

User Interface

Operational
scenario

Documentation

Innovation

Scrum

Quality
assurance

End

- Rover Rescue System - Business Case
- Rover Rescue System - (Technical) Documentation
- Rover Rescue System - Manual - Application
- Rover Rescue System - Manual - Epicenter
- Rover Rescue System - Manual - Rover
- Rover Rescue System - Project File
- Rover Rescue System - Sprint Review 1
- Rover Rescue System - Sprint Review 2
- Rover Rescue System - Sprint Review 3
- Rover Rescue System - Sprint Review 4

Innovation

Sprint Review

ROW Team 5

Introduction

Sensors and
actuators

Communication

User Interface

Operational
scenario

Documentation

Innovation

Scrum

Quality
assurance

End

- Virtual Reality as video output;
- Virtual Reality connected to the camera;
- Automated prevention systems:
 - Auto-stop to prevent crashes;
 - Auto-stop based on communication events;
 - Auto-reset of camera view based on communication events;
 - Scalable for large scale operations.

Scrum

Sprint Review

ROW Team 5

Introduction

Sensors and
actuators

Communication

User Interface

Operational
scenario

Documentation

Innovation

Scrum

Quality
assurance

End

- Use of GitHub projects;
- Use of GitHub because of third-party integrations;
- Use of ZenHub for automated issue tracking;
 - Issues
 - Epics
 - Pull Requests
- Use of ZenHub for Burndown and Velocity tracking;

Scrum: Cumulative Flow

Sprint Review

ROW Team 5

Introduction

Sensors and
actuators

Communication

User Interface

Operational
scenario

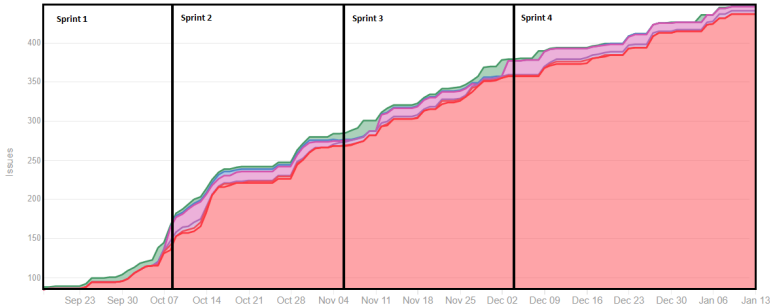
Documentation

Innovation

Scrum

Quality
assurance

End



Scrum: Burndown sprint 1

Sprint Review

ROW Team 5

Introduction

Sensors and actuators

Communication

User Interface

Operational scenario

Documentation

Innovation

Scrum

Quality assurance

End



119 Total Story Points

119 Completed / 0 Remaining

72 Total Issues and Pull Requests

72 Completed / 0 Remaining

Scrum: Burndown sprint 2

Sprint Review

ROW Team 5

Introduction

Sensors and actuators

Communication

User Interface

Operational scenario

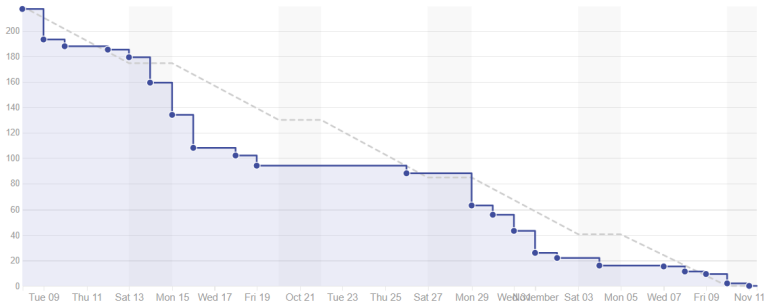
Documentation

Innovation

Scrum

Quality assurance

End



219 Total Story Points

219 Completed / 0 Remaining

150 Total Issues and Pull Requests

150 Completed / 0 Remaining

Scrum: Burndown sprint 3

Sprint Review

ROW Team 5

Introduction

Sensors and actuators

Communication

User Interface

Operational scenario

Documentation

Innovation

Scrum

Quality assurance

End



130 Total Story Points

130 Completed / 0 Remaining

74 Total Issues and Pull Requests

74 Completed / 0 Remaining

Scrum: Burndown sprint 4

Sprint Review

ROW Team 5

Introduction

Sensors and actuators

Communication

User Interface

Operational scenario

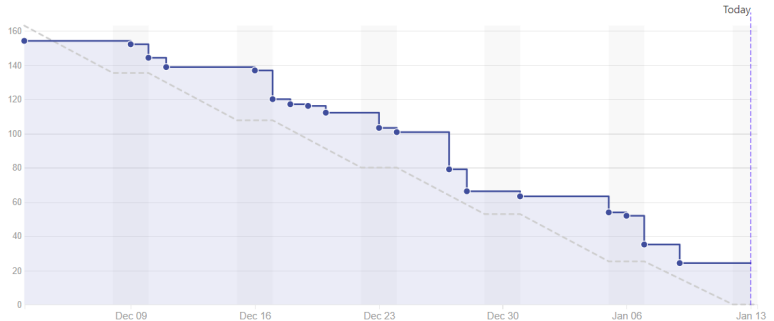
Documentation

Innovation

Scrum

Quality assurance

End



163 Total Story Points

139 Completed / 24 Remaining

91 Total Issues and Pull Requests

82 Completed / 9 Remaining

Quality assurance

Sprint Review

ROW Team 5

Introduction

Sensors and
actuators

Communication

User Interface

Operational
scenario

Documentation

Innovation

Scrum

Quality
assurance

End

- Use of GIT submodules;
- Custom mocks for simulation usage;
- Protected branches with following rules:
 - Require pull request reviews before merging;
 - Require status checks to pass before merging
 - Travis-CI used for tests and code style;
 - CodeClimate used for unbiased code quality;
 - Coveralls is used for code coverage.
- Definition of Done;
- Definition of Ready.

Sprint Review

ROW Team 5

Introduction

Sensors and
actuators

Communication

User Interface

Operational
scenario

Documentation

Innovation

Scrum

Quality
assurance

End

The End