

Sprint Review

ROW Team 5

Introduction

Sensors and
actuators

Communication

User Interface

Operational
scenario

Documentation

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Scrum

Quality
assurance

End

ROW5 Sprint 4 Review

ROW Team 5

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

Januari 14, 2019

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

Overview

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Sensors and actuators

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Sensor(s):

- Distance sensor (ultrasonic sensor HC-SR04).

Actuator(s):

- Custom double axis servo platform.

Other:

- Fisheye lens.

Communication

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Rover ↔ Cockpit:

- Socket.IO.

Rover → Tincidunt:

- H.264 over HTTP.

Cockpit ← Controller:

- Bluetooth;
- USB.

User Interface: Epicenter

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Cockpit

oJH0ALisTGebctA_AAAA (::ffff:192.168.0.246)

Rover

dCWxZubMufkwWuTeAAAB (::ffff:192.168.0.246)

Connection Queue

oJH0ALisTGebctA_AAAA
dCWxZubMufkwWuTeAAAB

Connect

User Interface: Chrome

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User Interface: Tincidunt

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Operational scenario

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TODO

Documentation

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- 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

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- 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

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- 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

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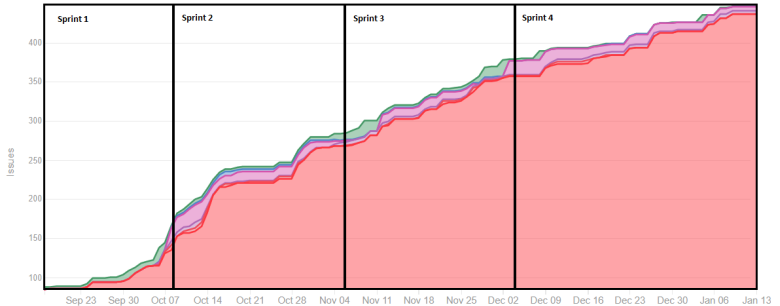
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Scrum: Burndown sprint 1

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119 Total Story Points

119 Completed / 0 Remaining

72 Total Issues and Pull Requests

72 Completed / 0 Remaining

Scrum: Burndown sprint 2

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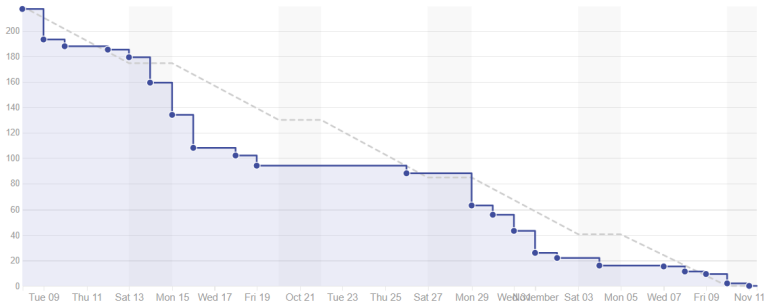
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219 Total Story Points

219 Completed / 0 Remaining

150 Total Issues and Pull Requests

150 Completed / 0 Remaining

Scrum: Burndown sprint 3

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130 Total Story Points

130 Completed / 0 Remaining

74 Total Issues and Pull Requests

74 Completed / 0 Remaining

Scrum: Burndown sprint 4

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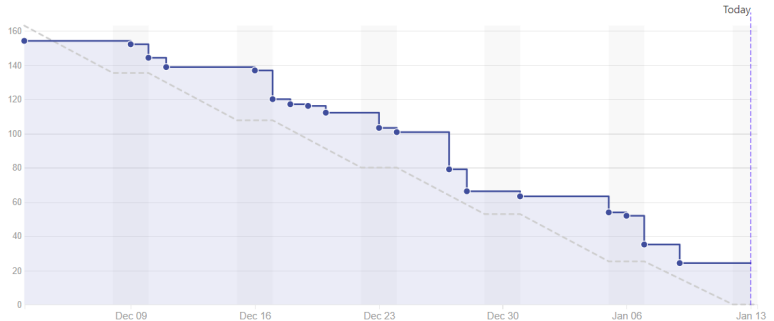
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163 Total Story Points

139 Completed / 24 Remaining

91 Total Issues and Pull Requests

82 Completed / 9 Remaining

Quality assurance

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- 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.

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Any Questions?

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The End