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#### Welcome

#### **Project Willy**

- History of Willy
- Project Willy
- Publicity
- Sponsors

#### **Getting started**

- Introduction to ROS
- Development Guide
- Driving Willy
- Manual
- Wiki Manual

#### **Build of Willy**

- Design history
- Hardware

#### Architecture

- Software Architecture
- ROS topic design

#### Raspberry Pi's

- Sensor node
- Social Interaction node
- Power node

#### **Components**

- ROS master
- New ROS master on Lubuntu
- Sonar
- Lidar
- Kinect
- Localization and navigation
- Motor controller
- Joystick

#### **Lessons learned**

- Todo & Advice
- Lessons Learned

#### **Archive**

- Previous Groups
- Research Archive
- Skylab Architecture
- Skylab
- Multi master
- WillyWRT
- Realisation
- Hardware
- Brain
- Design Guild
- Social interaction

- Speech
- · Speech recognition
- IMU
- Human Detection
- Radeffect App

# **Previous groups**

## 1. Group of 2019 Q3 & Q4

### 1.1. Members

Table 1. Student list of 2019 Q3-Q4

Student	Study Major
Lars Assen	SE
Dion Koster	ESA
Bas Frericks	IDS
Thijmen Bos	IDS
Dennis ter Haar	IDS

### 1.2. Main tasks

Our goals for this semester were to fix the autonomous driving, create a manual for future groups and to clean out any files that are not used. A common occurring problem is that project groups have a hard time starting this project. A lot of vague documentation and a lot of outdated features create a lot of confusion. To fix this problem we have decided to create a manual to help future groups get started.

### 1.3. Archive

https://drive.google.com/drive/folders/1iXSppo7ixLBBuq7eIAkdq87K1\_OjAdsh

# 2. Group of 2019 Q1 & Q2

### 2.1. Members

Table 2. Student list of 2019 Q1-Q2

Student	Study Major
Tom van den Noort	ESA
Jeroen van 't Hul	ESA
Thomas Zwaanswijk	ESA

### 2.2. Main tasks

The goals of this group was to improve the autonomous driving capabilities of Willy.

### 2.3. Archive

https://drive.google.com/drive/folders/19r20QrsDuQnvz\_Ml-B0VzvG879wsa93G

# 3. Group of 2018 Q3 & Q4

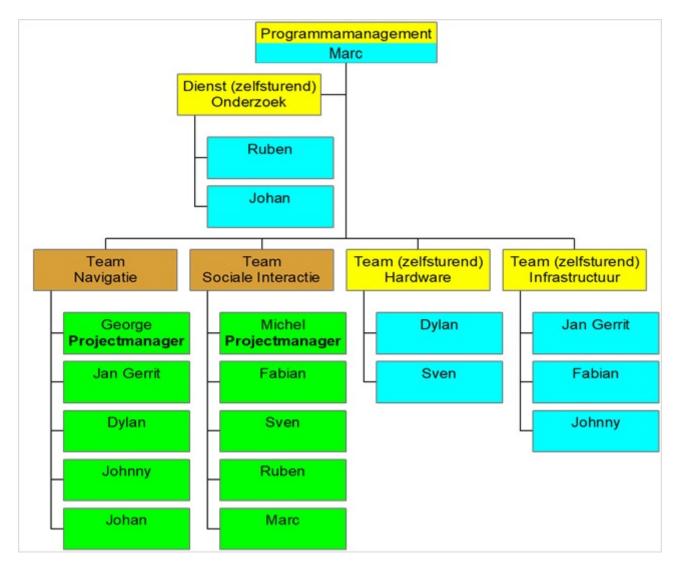
### 3.1. Members

Table 3. Student list of 2018 Q3-Q4

Student	Study Major
Dylan Reimerink	SE
Fabian van de Bor	SE
George Wassink	BIM
Jan Gerrit Elzinga	SE
Johan in t Hout	BIM
Johnny Borg	SE
Marc van Walt Meijer	BIM
Michel Stompe	BIM
Ruben Stuut	BIM
Sven Pook	SE

### 3.2. Main tasks

Our goals for this semester consist of creating an autonomous driving robot on T5 as well as integrating Social Interaction in Willy. We started off with two teams of five, but we came to realise very soon that its not possible to achieve one thing, without the other. Therefore, weve had numerous different virtual teams, for physical hardware, software architecture, hardware architecture and so on.



We've also set some ground rules for transference in the process, as we've learned that many groups before us, including ourselves, struggled at getting the system up and running in the first weeks. Besides the two main goals, and transference, weve also redesigned a lot of functionality. Weve created a logical and modular design on both hard- and software. If used as described, the following project group can use our rework and fastrack towards their own new project goals.

### 3.3. Archive

All our documents will be transferred to the new student group through SharePoint. Everything including templates and images for virtual machines and other hardware will be included in the process.

2018 Q3 & Q4 SharePoint archive

## 4. Group of 2018 Q1 & Q2

#### 4.1. Members

Table 4. Student list of 2018 Q1-Q2

Student	Study Major
Jesse Bouwman	BIM
Vincent van Dijk	IDS
Jonathan ten Hove	SE
Martijn van Olst	ESA
Gerard Zeeman	ESA

### 4.2. Research archive

2018 Q1 & Q2 SharePoint archive

# 5. Group of 2017 Q3 & Q4

### 5.1. Archive

2017 Q3 & Q4 SharePoint archive

# 6. Group of 2017 Q1 & Q2

### 6.1. Archive

2017 Q1 & Q2 SharePoint archive

# 7. Group of 2016 Q3 & Q4

### 7.1. Archive

2016 Q3 & Q4 SharePoint archive