**Welcome**

**Project Willy**

- History of Willy
- Project Willy
- Publicity
- Sponsors

**Getting started**

- Development Guide
- Driving Willy
- Documentation

**Build of Willy**

- Design history
- Requirements
- Design reference
- Physical build
- Hardware

**Robotic Operating System**

- Introduction to ROS
- ROS Tutorials
- Multi master

**Architecture**

- Software Architecture
- Hardware Architecture
- Skylab Architecture
- ROS topic design

**Hardware nodes**

- sensor node
- si node
- power node
- WillyWRT

**Components**

- ROS master
- New ROS master on Lubuntu
- Brain

- Sonar
- Lidar
- Localization and navigation
- Motor controller
- Joystick
- Social interaction
- Speech
- Speech recognition

**Skylab**

- Setup Skylab
- Python scripts
- Webserver
- Functions of the webserver
- Skylab servers
- ROS installation on Ubuntu VMs in Skylab
- DNS,DHCP, pfSense & Ubuntu

**Radeffect App**

- Radeffect App

**Lessons learned**

- Todo & Advice
- Lessons Learned

**Archive**

- Previous Groups
- Research Archive

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[Build Status]

# 1. Welcome

Welcome to project Willy. Before starting the project it is useful to know a few things about the project. Our first advice is to become acquainted with Willy. Follow our WillyWiki from begin to end and try to understand how to use Willy.

# 2. Wiki

Documentation on the Wiki contains all the details about Willy and the project. If certain details about design decisions, configuration, hardware or other components about Willy cannot be found, more details can be found on Google Drive.

This wiki is public and should not contain any private information nor passwords.

Use Github's search to find certain keywords in the content of the wiki. Github WillyWiki

For more information about Willy's previous life as garbage collector view Willy the garbage collector

# 3. Winnovation

Project Willy is found at Windesheim Campus on T5, walking route is seen below:

# 4. Status

The table below shows all the milestones and their current status.

| Milestone | Researched | Realized | Tested | Category |
|---|---|---|---|---|
| Assessment current status | Done | Done | Done | Documentation |
| Willy Improvisation | Done | Done | Done | Hardware Software Documentation |
| Design | Done | Done | Done | Software |
| WillyWiki | Done | Done | Done | Software |
| Willy web | Done | Done | Done | Software |

| Milestone | Researched | Realized | Tested | Category |
|---|---|---|---|---|
| Indoor navigation | Done | Done | In progress (fine tuning) | Software Hardware |
| Plating | Done | Done | | Hardware |
| Social interaction | Done | In progress | | Software |