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# Components

• ROS master

• WillyWRT

- New ROS master on Lubuntu
- Brain
- Sonar
- Lidar
- Localization and navigation
- Motor controller
- Joystick
- Social interaction
- Speech
- Speech recognition

## **Radeffect App**

• Radeffect App

#### **Lessons learned**

- Todo & Advice
- Lessons Learned

#### **Archive**

- Previous Groups
- Research Archive
- Skylab Architecture
- Skylab

#### Welcome

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# 1. Radeffect App

Together with another group of Windesheim students an app was developed for Willy. The app is developed in Mendix. The application can be found here: https://callwilly-sandbox.mxapps.io/ The main function of the app is to call Willy over. This is done by:

#### Post:

- Retrieving from Willy topics the location (AprilTag number) and activity
- Converting the ArpilTag number to the classroom number
- Publishing the location (classroom number) and activity of Willy in Json format to the Mendix App site

#### Get:

- Retrieving the designated location (classroom number) when a visitor calls for Willy in Json format from the Mendix app site
- Converting the classroom number to AprilTag number
- Publishing the AprilTag number on a Willy topic

The activities are done in two Python scripts published here: https://github.com/Windesheim-Willy/Skylab/blob/master/Fetcher/Skylab\_app\_get\_status\_0.py and https://github.com/Windesheim-Willy/Skylab/blob/master/Fetcher/Skylab\_app\_post\_status\_0.py

For test purposes a test script is created to publish every 10 seconds a new location and activity so the app can work without Willy being active. The script is published here: https://github.com/Windesheim-Willy/Skylab/blob/master/Fetcher/Test\_script\_for\_RADeffect.py

The scripts for Radeffect connectivity are run on the Fetcher in Skylab.

A backup of the Mendix code is stored on SharePoint at the map "Winnie App".