# **BeeWatch Documentation**

Release unreleased

**Digital** 

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BeeWatch aims to help beekeepers understand their beehive. Easily ansewer questions like:

- How much honey did my bees produce?
- What information do you want to know about your bees? Tell Me!

**Note:** This project is very experimental. I do not advise you to use it yet. The documentation is incomplete, so don't wonder about strange stuff.

Warning: You loose the game.

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Inspiration

### **Motivation for this project**

This project started when my father asked me to build a weighing scale for his beehive. I agreed and this is what I made so far.

#### **Fee Software**

My goal is to produce free software. 'Free' as in freedom or libre. That means the software I write respects your privacy and rights. Sounds great, but what does that mean? Let's take a look at the definition of free software by gnu.org - free software:

A program is free software if the program's users have the four essential freedoms:

- 0. The freedom to run the program as you wish, for any purpose (freedom 0).
- 1. The freedom to study how the program works, and change it so it does your computing as you wish (freedom 1). Access to the source code is a precondition for this.
- 2. The freedom to redistribute copies so you can help your neighbor (freedom 2).
- 3. The freedom to distribute copies of your modified versions to others (freedom 3). By doing this you can give the whole community a chance to benefit from your changes. Access to the source code is a precondition for this.

So basically you are free to run, copy, distribute, study, change and improve my software.

### Installation Guide for BeeWatch

You can install the module, build the documentation or do both (advised; P). If you install the module after you have built the documentation, the documentation is copied to the folder of the installed module.

#### **Install BeeWatch**

To install BeeWatch run ./setup.py install in BeeWatch-X.X. For more options run ./setup.py help or see Distributing on python.org

#### **Build the documentation**

This project uses Sphinx for documentation generation. Sphinx can create the documentation in a variety of formats, eg html, pdf, epub an more. Run make help to get a list of supported file formats. Let's say you chose html, so you run make html. This creates the documentation inside 'build/docs/<format>'. The entry point for reading the html version of the docs is build/docs/html/index.html.

#### Todo

add requirements installation help

# $\mathsf{CHAPTER}\,3$

**Getting Started** 

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## **Getting Started subheading**

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HowTo Configuration

This page explains how to configure BeeWatch.

## Program Design

This page explains the structure of BeeWatch.

**Note:** This is how i want it to be, not how it is right now. In the current state the core and the server are not separated, the core opens a public server.

#### Core

The Core handles gpio stuff and analyses data. The data can be accessed through a file socket opened by the Core.

#### Server

The Server connects to the file socket of the core and serves has extensions for different types of (public) apis. authentication will be implemented using ssl, username/password or both.

### Client

The Client is the front end of BeeWatch. Right now it is a program but I plan a web interface client.

BeeWatch Reference

This is the documentation of the code.s

### **Gui Client**

### Server

Template text.

## **Gpio Api**

Template text.

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Tell Me!

This page explains how to tell me stuff.

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