

The Duckietown Book



TABLE OF CONTENTS

Part 1 - The Duckietown project	3
Chapter 1 - What is Duckietown?	4
Section 1.1 - Watch some videos	
Section 1.2 - Read papers about Duckietown	4
Section 1.3 - Beginnings of Duckietown	
Chapter 2 - Duckietown around the world	
Section 2.1 - Coming up in 2017	5
Chapter 3 - First steps	6
Section 3.1 - How to get started	
Section 3.2 - How to keep in touch	6
Section 3.3 - How to contribute	
Chapter 4 - Duckietown for instructors	7
Chapter 5 - Duckietown for self-guided learners	
Chapter 6 - Introduction for companies	9
Chapter 7 - Contributing to this documentation	
Section 7.1 - Where the documentation is	10
Section 7.2 - Editing links	10
Section 7.3 - Comments	
Section 7.4 - Compiling the documentation	10
Section 7.5 - Deploying the documentation	10
Chapter 8 - Features of the documentation writing system	11
Section 8.1 - Embedded LaTeX	11
Section 8.2 - Other interesting features	11
Chapter 9 - Frequently asked questions about Duckietown	12
Part 2 - Modeling	
Chapter 10 - Kinematics of Duckiebot	14

PART 1 The Duckietown project

TODO:

CHAPTER 1 What is Duckietown?

TODO: Write the mission statement

1.1. Watch some videosTODO:1.2. Read papers about DuckietownTODO:1.3. Beginnings of Duckietown

CHAPTER 2 Duckietown around the world

TODO:

2.1. Coming up in 2017

TODO:

CHAPTER 3

First steps

3.1. How to get started

If you are an instructor, please jump to Chapter 4.

If you are a self-guided learner, please jump to Chapter 5.

If you are a company, and interested in working with Duckietown, please jump to Chapter 6.

3.2. How to keep in touch

TODO: add link to Facebook
TODO: add link to Mailing list

TODO: add link to Slack?

3.3. How to contribute

TODO: If you want to contribute to the software...

TODO: If you want to contribute to the hardware...

TODO: If you want to contribute to the documentation...

TODO: If you want to contribute to the dissemination...

CHAPTER 4 Duckietown for instructors

Chapter 5 Duckietown for self-guided learners

CHAPTER 6 Introduction for companies

CHAPTER 7

Contributing to this documentation

7.1. Where the documentation is

All the documentation is in the repository duckietown/duckuments.

The documentation is written as a series of small files in Markdown format. The output is:

- a publication-quality PDF;
- HTML (single-page);
- HTML (multiple pages).

7.2. Editing links

The simplest way to contribute to the documentation is to click any of the "\sim " icons next to the headers.

They link to the "edit" page in Github. There, one can make and commit the edits in only a few seconds.

7.3. Comments

In the multiple-page version, each page also includes a comment box powered by a service called Disqus. This provides a way for people to write comments with a very low barrier. (We would periodically remove the comments.)

7.4. Compiling the documentation

TODO: Write instructions - it's "make all" but the dependencies are complicated.

7.5. Deploying the documentation

TODO: Write instructions

CHAPTER 8

Features of the documentation writing system

8.1. Embedded LaTeX

You can use LATEX math, environment, and references. For example, take a look at

$$x^2 = \int_0^t f(au) \, \mathrm{d} au$$

or refer to Proposition 1.

Proposition 1. (Proposition example) This is an example proposition.

TODO: other LaTeX features supported

8.2. Other interesting features

Chapter 9 Frequently asked questions about Duckietown

PART 2 Modeling

TODO:

CHAPTER 10 Kinematics of Duckiebot

TODO: