



# The Duckietown Book



# TABLE OF CON- TENTS

**Part 1 - The Duckietown pro-  
ject..... 3**

Chapter 1 - What is Ducki-  
etown? ..... 4  
Subsection - Watch some videos  
    ◇ Subsection - Read papers  
    about Duckietown   ◇ Begin-  
    nings of Duckietown   ◇ Duck-  
    ietown around the world   ◇  
Coming up in 2017

Chapter 2 - First steps ..... 5  
How to get started   ◇ How to  
keep in touch   ◇ How to con-  
tribute

Chapter 3 - Duckietown for in-  
structors ..... 6

Chapter 4 - Duckietown for  
self-guided learners..... 7

Chapter 5 - Introduction for  
companies..... 8

Chapter 6 - Contributing to  
this documentation ..... 9  
Where the documentation is   ◇  
Editing links   ◇ Compiling the  
documentation   ◇ Deploying  
the documentation

Chapter 7 - Features of the  
documentation writing sys-  
tem ..... 10  
Embedded LaTeX   ◇ Other in-  
teresting features

Chapter 8 - Frequently asked  
questions about Duckietown . 11

**Part 2 - Modeling..... 12**

Chapter 9 - Kinematics of  
Duckiebot..... 13

PART 1

# The Duckietown project

## CHAPTER 1

# What is Duckietown?

TODO: write mission statement

### 1) Watch some videos

TODO: add videos here

### 2) Read papers about Duckietown

TODO: add references here

## 1.1. Beginnings of Duckietown

TODO: Write a short history of how Duckietown got started

## 1.2. Duckietown around the world

TODO: Write a list of all Duckietown-related activities outside of MIT.

## 1.3. Coming up in 2017

TODO: What's coming up in 2017

## CHAPTER 2

# First steps

### 2.1. How to get started

If you are an instructor, please jump to [Chapter 3](#).

If you are a self-guided learner, please jump to [Chapter 4](#).

If you are a company, and interested in working with Duckietown, please jump to [Chapter 5](#).

### 2.2. How to keep in touch

TODO: add link to Facebook

TODO: add link to Mailing list

TODO: add link to Slack?

### 2.3. 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 3

# Duckietown for instructors

TODO: to write

## CHAPTER 4

# Duckietown for self-guided learners

TODO: to write

## CHAPTER 5

# Introduction for companies

TODO: to write



## CHAPTER 6

# Contributing to this documentation


### 6.1. Where the documentation is

All the documentation is in the repository [duckietown/duckuments](#).

It is written in a series of small files in Markdown format.

Some magic code reads them and assembles them into this book.

### 6.2. Editing links

The simplest way to contribute to the documentation is to click any of the “” 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.

### 6.3. Compiling the documentation

TODO: Write instructions  
- it’s “make all” but the dependencies are complicated.

### 6.4. Deploying the documentation

TODO: Write instructions

CHAPTER 7

Features of the documentation writing system

7.1. Embedded LaTeX

You can use *LaTeX* math, environment, and references.

For example, take a look at [\(1\)](#)

$$a^2 = \int_0^1 f(x) dx,$$

(1)

or refer to [Proposition 1](#).

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

TODO: other LaTeX features supported

7.2. Other interesting features

TODO: to write

## CHAPTER 8

# Frequently asked questions about Duckietown

TODO: to write

PART 2

**Modeling**

TODO:

## CHAPTER 9

# Kinematics of Duckiebot

TODO: