



# The Duckietown Book



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## PART 1

# The Duckietown project

CHAPTER 1

# What is Duckietown?

TODO: write mission statement

1) Watch some videos

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TODO: add videos here

2) Read papers about Duckietown

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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](#).

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).

### 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. 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.)

### 6.4. Compiling the documentation

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

### 6.5. 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)

$$x^2 = \int_0^t f(\tau) d\tau, \quad (1)$$

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: