

AY 2021/2022



POLITECNICO DI MILANO

# Implementation Document

Ottavia Belotti   Alessio Braccini   Riccardo Izzo

Professor  
Elisabetta DI NITTO

**Version 1.0**  
January 15, 2022



# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	Purpose . . . . .	1
1.2	Definitions, Acronyms, Abbreviations . . . . .	1
1.3	Revision History . . . . .	1
1.4	References . . . . .	1
<b>2</b>	<b>Development</b>	<b>1</b>
2.1	Implemented Functionalities . . . . .	1
2.2	Adopted Development Frameworks . . . . .	1
2.2.1	Programming Language . . . . .	1
2.2.2	Django Framework . . . . .	2
2.2.3	Django REST Framework . . . . .	2
2.2.4	Vue.js . . . . .	2
2.3	API Integration . . . . .	2
2.3.1	Open Weather API . . . . .	2
2.3.2	Google Maps API . . . . .	2
<b>3</b>	<b>Source Code</b>	<b>2</b>
3.1	Backend Structure . . . . .	2
3.2	Frontend Structure . . . . .	2
<b>4</b>	<b>Testing</b>	<b>2</b>
4.1	Backend Testing . . . . .	2
<b>5</b>	<b>Installation</b>	<b>2</b>
5.1	Requirements . . . . .	2
5.2	Backend Installation . . . . .	2
5.3	Frontend Installation . . . . .	2
<b>6</b>	<b>Effort Spent</b>	<b>2</b>

# 1 Introduction

The code can be found in the official project repository on GitHub at the link:  
<https://github.com/AlessioBraccini/SE2-Belotti-Braccini-Izzo>.

## 1.1 Purpose

## 1.2 Definitions, Acronyms, Abbreviations

## 1.3 Revision History

## 1.4 References

- Django Framework: <https://www.djangoproject.com/>
- REST Framework: <https://www.django-rest-framework.org/>
- Vue.js: <https://vuejs.org/>
- Axios: <https://axios-http.com/docs/intro>

# 2 Development

## 2.1 Implemented Functionalities

## 2.2 Adopted Development Frameworks

Model-View-Controller paradigm

### 2.2.1 Programming Language

The programming language of choice for the DREAM backend is Python.

- **Pros:**
  - + Allow fast Development
  - + Readability
  - + Widely spread among WebApps
- **Cons:**

- Slow

### 2.2.2 Django Framework

### 2.2.3 Django REST Framework

### 2.2.4 Vue.js

## 2.3 API Integration

### 2.3.1 Open Weather API

### 2.3.2 Google Maps API

## 3 Source Code

### 3.1 Backend Structure

### 3.2 Frontend Structure

## 4 Testing

### 4.1 Backend Testing

## 5 Installation

### 5.1 Requirements

### 5.2 Backend Installation

### 5.3 Frontend Installation

## 6 Effort Spent

Student	Time for implementation
Ottavia Belotti	?h
Alessio Braccini	?h
Riccardo Izzo	?h