

# **CEN 308 SOFTWARE ENGINEERING**

# PROJECT DOCUMENTATION

PROJECT NAME

Prepared by: Melika Brkić

Proposed to: Nermina Durmić, Assist. Prof. Dr. Aldin Kovačević, Teaching Assistant

# Table of Contents

1. Introduction	3
1.1. About the project	3
1.2.Project functionalities and screenshots	
2. Project Structure	6
2.1.Technologies	
2.2. Database entities	
2.3. Architectural pattern	6
2.4. Design patterns	
3. Conclusion	

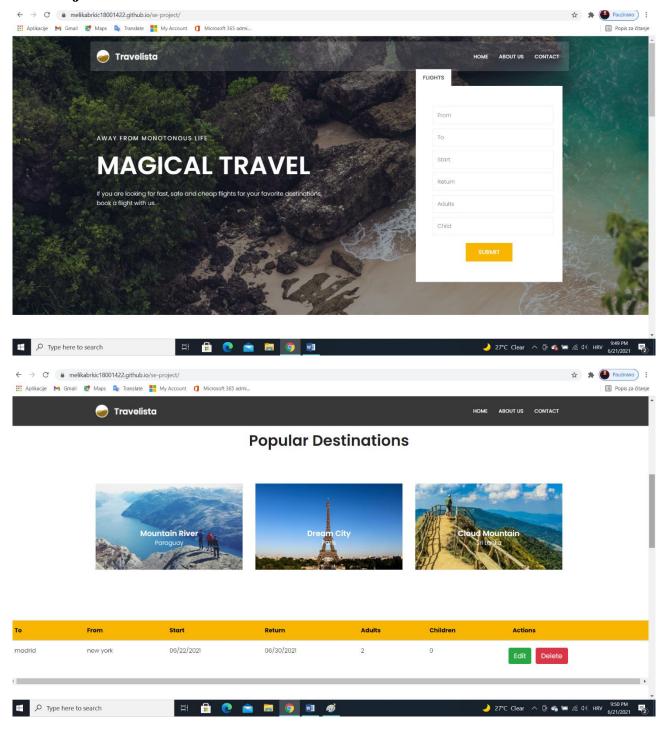
### 1. Introduction

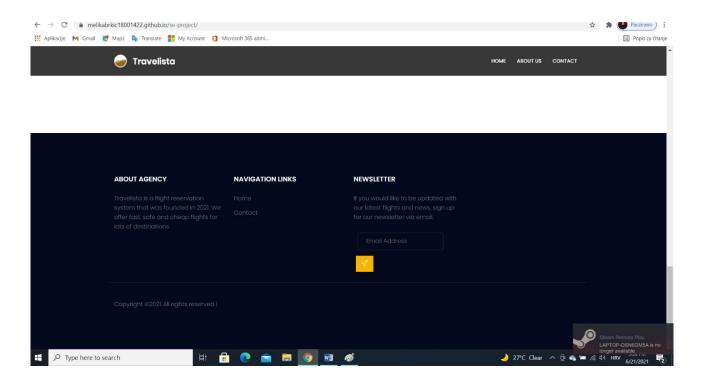
For my Software Engineering class I had to work on a web based application with separate front-end and back-end parts. This documentation represents all the technologies, programming languages, architectural and design patterns and any other requirement that I used and/or needed to satisfy.

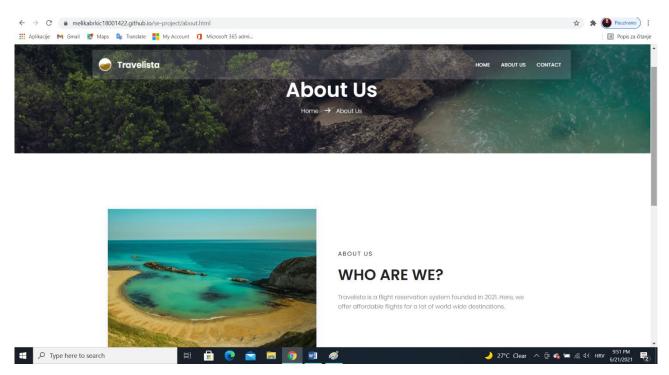
## 1.1. About the Project

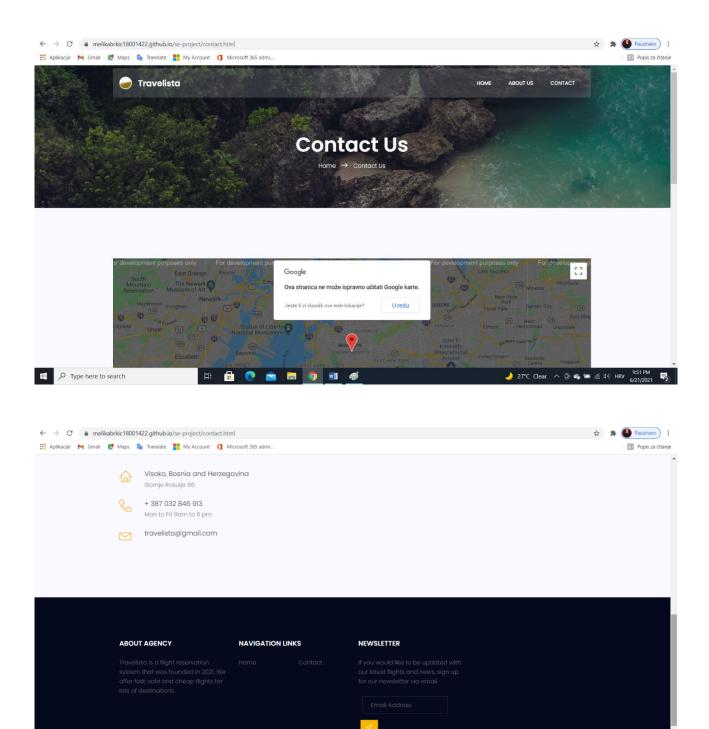
This web application is meant for searching for flights and booking them. My idea was to create a simple UI that has a responsive database so when the user enters the data that's needed, the application provides feedback. Link to where it's deployed: <a href="https://melikabrkic18001422.github.io/se-project/">https://melikabrkic18001422.github.io/se-project/</a>

## 1.2. Project Functionalities and Screenshots









The application has a Home, About Us and Contact section in the header part. At the Home page we can see a box called Flights that contains necessary info in order to book a flight. The footer also provides the Contact button and some other information. The About Us section contains just a small description of the agency while the Contact one provides necessary info of every company.

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# 2. Project Structure

## 2.1. Technologies

I have used Django, Postman, VisualStudio Code, Python, HTML, CSS, JS, SCSS, and PHP. For the front-end I used the DRY (Don't Repeat Yourself) coding standard a lot. I also commented a few times but it's mostly just to separate where the header part of the code is, where the footer part of the code is and etc. I have used meaningful variable and function names in the back-end.

Afterwards, specify which *coding standard* you used and in which part of your project (was it on the backend, frontend, both, etc.). If you are unclear about coding standards, refer to Week 2 and Week 3 on LMS.

#### 2.2. Database Entities

When it comes to the CRUD operations I have implemented create, update, delete and edit. The tables are From, To, Start, Return, Adults and Child. Most of them are pretty self-explanatory but just for reference, the From table is our first (start) destination where as To is our final point destination (e.g. From New York To Dallas). The Start is the day of our departure from our start point and Return the day when we are going back to our first start point.

### 2.3. Architectural Pattern

I have used the MVC (Model-View-Controller) architectural pattern for my project and the reason behind that is that this architectural pattern is mostly used for WWW applications in major programming languages and web frameworks such as Django that I have used. Also the general idea for my project was to separate the backend logic from the frontend that represents the program which is part of the MVC pattern.

## 2.4. Design Patterns

To be honest, I don't think I have implemented any of the design patterns that we have learned so far. Because I am not sure, I will not put any information here because I don't want to provide something false or wrong.

### 3. Conclusion

Overall I think I could've done better on the project especially on the front-end but also on the back-end. Personally I am not a fan of working with the back-end portions so I had a lot of difficulties to implement it. When it comes to the front-end I am satisfied but I think for the future I can go back and improve it together with the back-end when I gain more knowledge and experience. The most difficult/challenging part of this project for me was, as before mentioned, the back-end. Also I think the lack of time cause of the last minute split up with my colleague affected my work but luckily I have managed to make something out of it.