# WELCOME
# to the future

**Coding Challenge**
Full-Stack Software Developer (m/f/d)

VOLOCOPTER

# CODING CHALLENGE
## Full-Stack Software Developer (m/f/d)

Dear applicant,

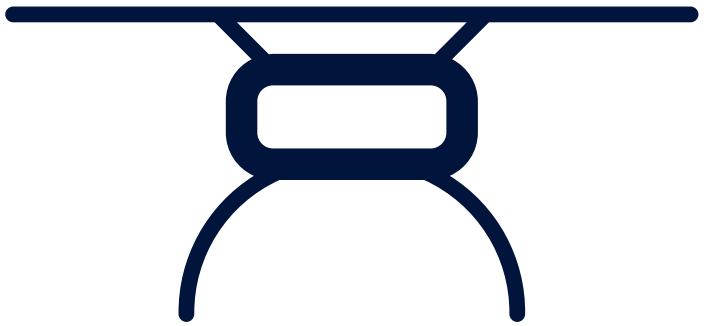
In order to get to know you better and to understand your way of approaching certain situations and see your coding skills, we would like to ask you to prepare the following generic coding challenge in advance.

Please share your solution with **Philipp Schlösser** (Team Lead in the Aircraft Analytics team) one whole working day prior to your scheduled interview by sending him the Git repository as a .zip file.

We will be discussing your results during your next interview with us.

Please feel free to contact us if you have any questions or feedback.

**We look forward to meeting you soon!**



# CODING CHALLENGE
## Context

Once Volocopter goes into service, our VoloCity aircraft will need to have their Flight Missions managed and documented. Our Flight Mission Controllers must keep track of which missions are in-flight, or in pre-/post-flight operations. And in order to facilitate their work, we would like to provide the Flight Mission Team with a tool that helps them perform their tasks. Flight Mission Controllers will use our application to create Flight Missions, move them from one step to the next, and possibly remove them from the list of tracked missions.

The application's user interface will have a board with columns representing the flight mission states (pre-flight, in-flight, and post-flight) and buttons to create and delete flight missions. Please follow the UI design among the next slides. As a side-note, the mechanism for moving flight missions on the board is flexible. It can be buttons, or draggable items, or any other alternative.

Simply put, your task is to implement this Flight Mission Control tool in accordance with the acceptance criteria and the UI/UX designs.

# CODING CHALLENGE
## Acceptance Criteria

"As a Flight Mission Controller, I need to be able to control and oversee the status of all missions on a given day."

The user expects to be able to:

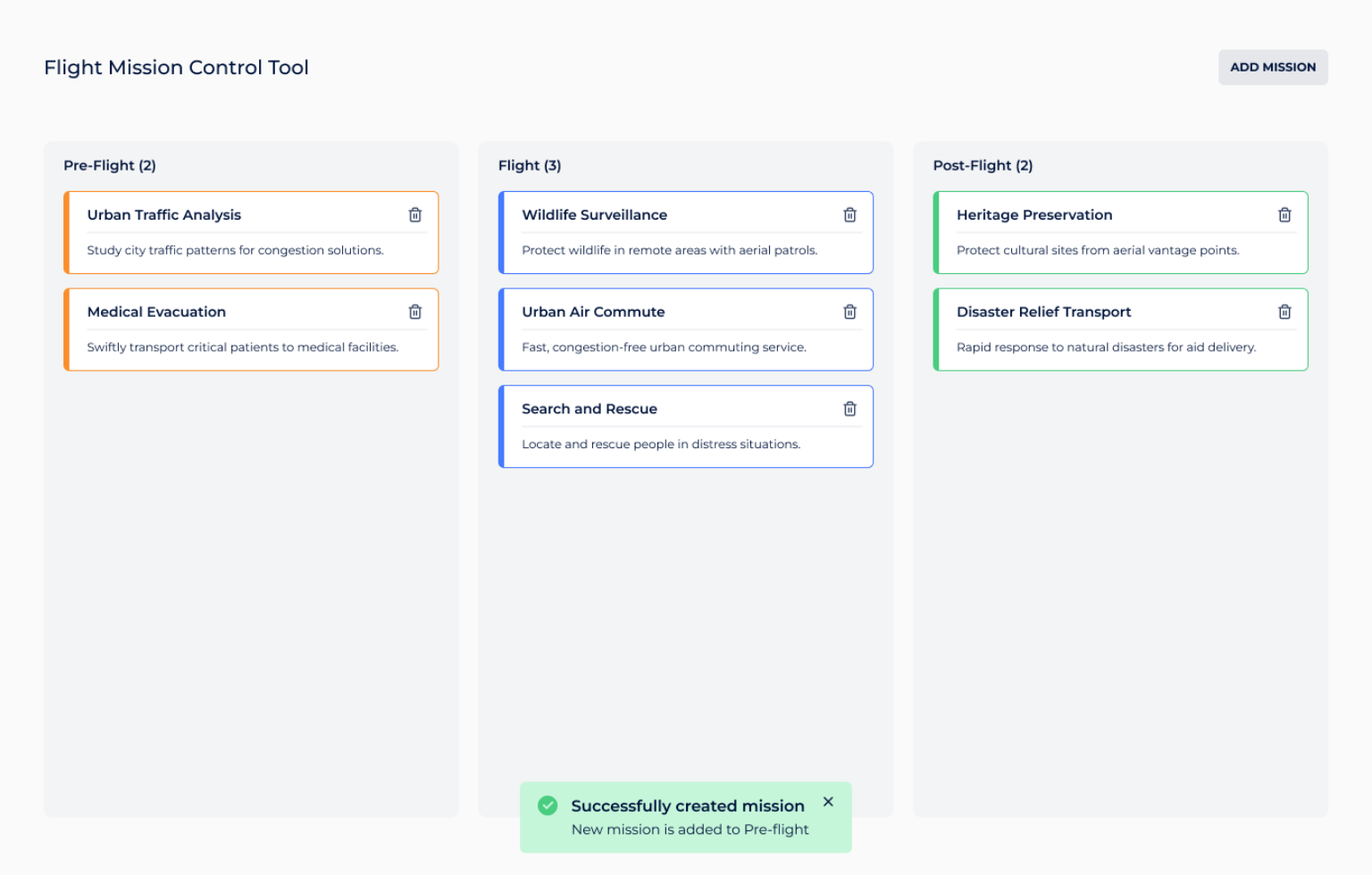
1. **View** all the Flight Missions in each state on the same page
   The states are: **Pre-Flight**, **In-Flight**, and **Post-Flight**.
2. **Insert** Flight Missions on the board;
3. **Move** the Flight Missions from one state to the next;
4. **Delete** Flight Missions;

Note that the data displayed on the board must be persisted in some sort of database (eg. sqlite, postgres, MSSQL, Mongo, etc.)

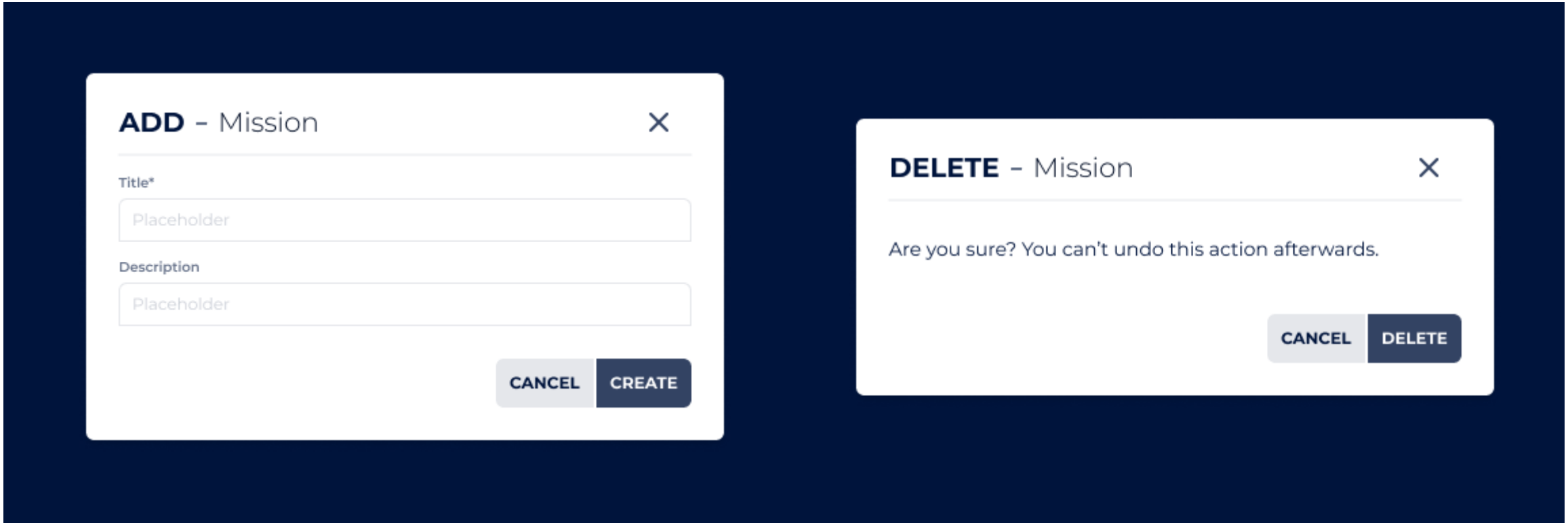
With this challenge we want to understand how you work towards a solution. And "the journey is more important than the destination". It doesn't matter to us, if you finish the task completely. We want you to focus on:

- *Creating clean, readable and extensible code*
- *Testing your code properly*
- *Using Git with proper commits*

# CODING CHALLENGE
## UI/UX Designs (1)



# CODING CHALLENGE
## UI/UX Designs (2)



# CODING CHALLENGE
## Constraints

**Recommended time:** 120 minutes

**Language:** English

**Environment:**

Back End:

Python with FastAPI, Django or Flask

Front End:

TypeScript with React

Feel free to style your components yourself or to use a component library

**Testing:** For testing, any of your favorite libraries are ok

# CODING CHALLENGE
## Pre-configured Repository (Optional)

We will provide you with a repository pre-configured for a development environment where you are able to run a back end and a front end simultaneously. The repository is using Docker containers to accomplish this. For instructions on how to run everything, you will have to read its README.md file.

Our intention with this repo is saving you time during your implementation. We know (from experience) how long it can take someone to have a project set up from scratch and wanted to provide some assistance there.

It's important to note that **usage of this repository is optional and completely up to you**. As long as your code is within our contraints (previous slide) there will be no problem.

# **WE LOOK FORWARD**
# TO MEETING YOU!

VOLOCOPTER