Travel Schedule App

An application that provides traveling plans for trips and guides the user through the process of choosing the right tourist attractions and activities, and managing the time spent in a foreign city with the help of artificial intelligence.

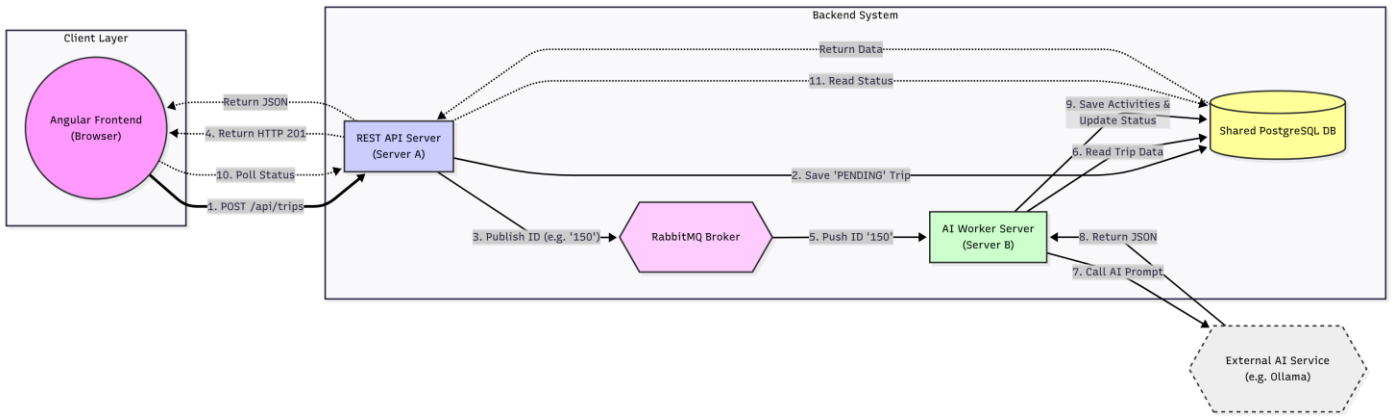
How it works:

The user creates a new trip request, with the name of the destination and the number of days, that is being sent to the REST API server, and the trip is saved in the database as pending. The server then sends the id of the trip as a message, using RabbitMQ Broker, to the AI worker server. The AI server fetches the trip saved in the database using the received id and then runs a prompt that generates an itinerary with activities (an activity is comprised of a description, its duration, the number of the day in which it would take place and its order index) and saves them in the database, finally marking the trip as complete. The user can manage the given activities to their liking by adding new activities, rearranging their order, or deleting them.

Technologies used:

- ***Spring Boot –*** for the REST API and AI worker backend servers
- ***PostgreSQL –*** for the database
- ***RabbitMQ –*** for communication between the two backend servers
- ***Angular –*** for the frontend
- ***Ollama –*** for executing the AI prompts
- ***Docker –*** for running the database and the message queue

The architecture and flow diagram:



Distribution of tasks:

- REST API server – Mădăras Lucian-Dan
- AI worker server – Nemeș Mihnea
- Angular frontend – Magnani Neve, Mixich Tania