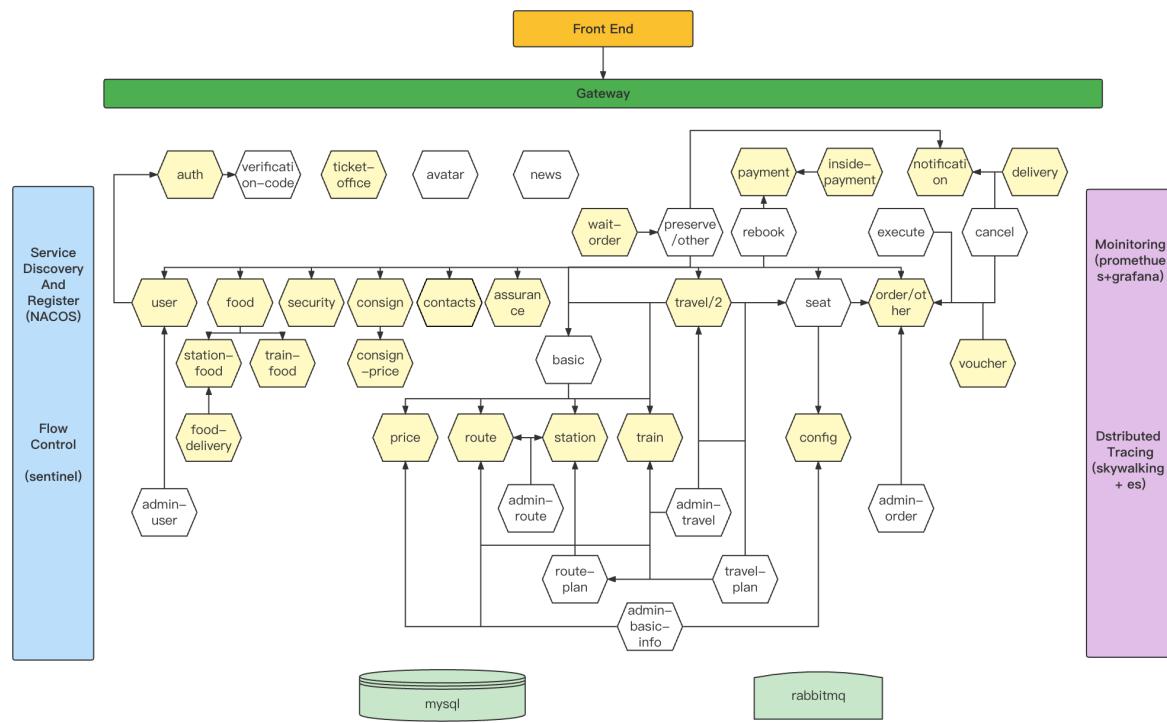


Home Exercise - Backslash - Backend

- The attached JSON file represents a full, working graph of Train Ticket micro-services and the relations between them:

<https://github.com/FudanSELab/train-ticket>



Assignment Description

- The mission, should you choose to accept it, is to load the attached JSON file and build a basic query engine on top of it.
- Create a RESTful API for querying the graph you have created:
 - The API should return a graph structure, that can be easy to render in a client side application.

- The API should provide a way to filter the routes between the services, based on the following filters:
 - Routes that start in a public service (`"publicExposed": true`)
 - Routes that end in Sink (rds/sql).
 - Routes that have a vulnerability in one of the nodes.
- Build the API to be generic as possible, so additional filters can be added easily.

Deliverables

1. A short, written explanation of the planned solution (explaining decisions, assumptions...) in a README file.
2. Link to a git repo with the implementation of the program (written in a language of your choice - Preferably TypeScript)

Good Luck!

Backslash Team.

JSON