Demo

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1 introduction

In this document we will see how we proced the task and why we make the golang chose for programming, after that we will speak about the tools we use.

The projet is on our github in two part, first part is purlly the backend and maybe in the future the front end in two separates files.

The seconde part is functionnal, it permit to create table, fill it and run it. We have also put a docker file to create the mysql server and PhpMyAdmin.

2 Backend Part

We choose golang for the backend because is more efficency and fastest than python.

We enter in the Backend file witch contains files and folders.
The .air.toml we see is a config file for auto reload the API.
The config.yaml is the config file for the API.
The file go.mod and go.sum is for the golang modules.
We see a directory named internal.
In internal
we see three directories

1. http
2. sql request
3. utils

the utils is for loadding configuration into the server

the folder http contains two directories and one file " http.go ". The file is like the main file for running the API.

The folder middlewares contain securty constrain and controllers all the handler for the API.

Back to the sql request folder, it contains just all the code for making request to the data base.

Each tables have it handler and it sql request file.

3 Request Possibillity

- List of company aircraft
- List of Sup Air Line pilots
- List of personnel by category
- List of passengers per flight
- List of flights to a given city
- List of departures for the day
- List of cities served by Sup Air Line
- List of destinations served by a captain
- List of pilots whose license must be renewed
- Lists of regular passengers who fly more than 2 flights / month
- Professions with the most regular passengers
- Number of hours worked by a captain
- Number of flight hours of each aircraft
- Number of passengers transported by plane over a given period
- Number of passengers carried over a given period
- Number of tickets sold per day / week / month
- Total sales
- Average flights per pilot
- Most profitable destinations (high occupancy rate)
- Average occupancy rate by plane / flight / destination
- Which pilots fly to their city

- Create Data for all tables
- Update Data for all tables
- Delete Data for all tables