Ingrid Coding Assignment

This is a small coding assignment to assess candidate's development skills.

Task Background

At Ingrid, we're building shipping solutions. One of the problems we face is presenting
a list of pickup locations available in customer area so that he can have his package delivered to the nearest location in his neighbourhood.

Description

We need to build a small web service that takes the source and a list of destinations and returns a list of routes between source and each destination. Both source and destination are defined as a pair of latitude and longitude. The returned list of routes
should be sorted by driving time and distance (if time is equal).

Thus, we want to answer the question: which destination is closest to the source and how fast one can get there by car.

The API call should look like this:

```
GET
http://your-service/routes?src=13.388860,52.517037&dst=13.397634,52.529407&dst=13.428555,52.523219
```

The response should look like this:

```
HTTP/1.1 200 OK
Content-Type: application/json

{
  "source": "13.388860,52.517037",
  "routes": [
    {
      "destination": "13.397634,52.529407",
      "duration": 465.2,
      "distance": 1879.4
    },
    {
      "destination": "13.428555,52.523219",
      "duration": 712.6,
      "distance": 4123
    }
  ]
}
```

Where input parameters are:

- src - source location (customer's home), only one can be provided
- dst - destination location (pickup point), multiple can be provided

For this assignment, you must use http://project-osrm.org/ third-party router service to
get driving times and distances.

Example request for OSRM you would be using is:

```
curl
'http://router.project-osrm.org/route/v1/driving/13.388860,52.517037;13.397634,52.529407?overview=false'
```

Example OSRM response is:


```
{
  "routes": [
    {
      "legs": [
        {
          "summary": "",
          "weight": 634,
          "duration": 465.2,
          "steps": [],
          "distance": 1879.4
        }
      ],
      "weight_name": "routability",
      "weight": 634,
      "duration": 465.2,
      "distance": 1879.4
    }
  ],
  "waypoints": [
    {
      "hint":
"DxQKgArnaoYoAAAAPwAAAA8AAAAAAAAAKAAAAD8AAAAPAAAAAAAAAC7rAAAATMwAqVghAzxMzACtWCEDAQDfCp4VrCU=",
      "name": "Friedrichstraße",
      "location": [
        13.3888,
        52.517033
      ]
    },
    {
      "hint":
"VFQUgPPB9YENAAAACwAAAF0BAAAAAAAADQAAAAsAAABdAQAAAAAAAC7rAAB_bswAGIkhA4JuzAD_iCEDAgCfEJ4VrCU=",
      "name": "Torstraße",
      "location": [
        13.397631,
        52.529432
      ]
    }
  ],
  "code": "Ok"
}
```

Relevant parts of the response are `routes.0.duration`, `routes.0.distance` and `code` for error handling.

Technology Stack

- Go
- Any other 3rd party packages or frameworks that you want to use

Requirements

- We should be able to run the code on our computer. Hint: A good README.txt goes a long way
- Tests are not mandatory due to the assignment's scope but good to have, for example to test your own sorting.

What we are looking at

Here is a list of what we are looking at when judging your work:

- Ability to learn new technologies
- Ability to translate requirements into working implementation
- Ability to write code that is easy to follow and understand
- Ability to document and explain non-coding requirements if there are any

Bonus

For extra credit, you can deploy your application to Google App Engine or some other PAAS provider and send us the link. There are many PAAS providers out there where you can host small applications free of change. Alternatively, you can create a Docker image or Dockerfile with instructions how to build and run your solution. Feel free to improve the solution if you think that we didn't think of something important!