

# Overview

In this assignment, I have developed a simple task management web application with CRUD functionality. The frontend uses React with Ant Design as the UI Framework, while the backend uses Golang.

Personally, I'm happy to have dipped my feet into Golang, as it has been on my checklist for awhile now. It is a rather simple backend, and I cannot claim to fully understand the language, but it did serve as a decent introduction to the language and I'm happy for that. The frontend is something I am familiar with, having done full stack development in my previous internship, where they also used React for their frontend. As such, I've taken the liberty to explore new packages and libraries, notably the colour picker and infinite scroll components. Additionally, I did get to play around with Balsamiq wireframes when designing the UI, which I've seen but never found a chance to work with it before.

All in all, I'm glad that I took on this assignment as it allowed me to explore and try different things in full stack development.

# Set-up

Configure the backend config with your database details.

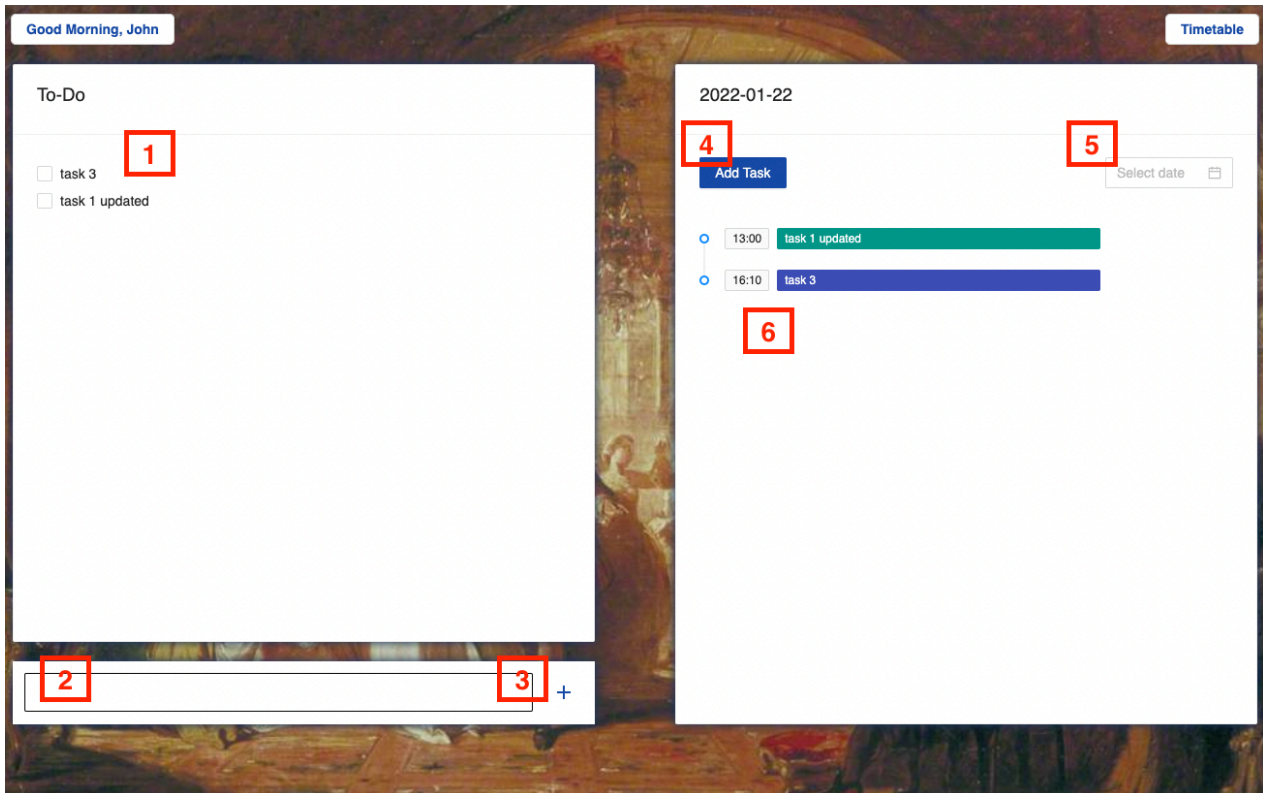
```
cfg := mysql.Config{
    User:   "b128a6f15bb789",
    Passwd: "cc8c3882",
    Net:    "tcp",
    Addr:   "us-cdbr-east-05.cleardb.net",
    DBName: "heroku_94064b77a7dac8a",
}
```

Then run `go mod tidy` and then `go run .` in the backend directory.

For the frontend, run `npm install` to install node modules and `npm start` to run the frontend.

# User Manual

The application is a single-page application. There are 2 main parts: the To-Do list (left), and the Timeline (right).



## To-Do List

This To-Do list does what its name suggests. Add a task quickly by typing something in the input box (2), and click the + button (3). Your to-do items will appear in the list above (1). This list is synced with the items shown on the right (6). Note that adding tasks this way will add them without a date, and thus not show up on the timeline (6).

## Timeline

To add a task with details, click on 'Add Task' (4). A pop-up will appear to fill in. Note that only Task Name, Date, Time, and Colour are compulsory fields. The Task (Optional) field is to select an already existing task that is in the To-Do list on the right. This is so that you can edit/update any task that was previously added. Once done, click on the 'Add Task' button at the bottom of the form. If successful, the form will close. To view your items, adjust the date by selecting it on the top right corner of the section (5). Upon selecting your date, the tasks that were tagged to that date will show up.

Add Task

X

Task (Optional)

Select if task is already created

Task Name

Task Name

Date

Select date

Time

Select time

Colour

Additional Info

Optional

Add Task