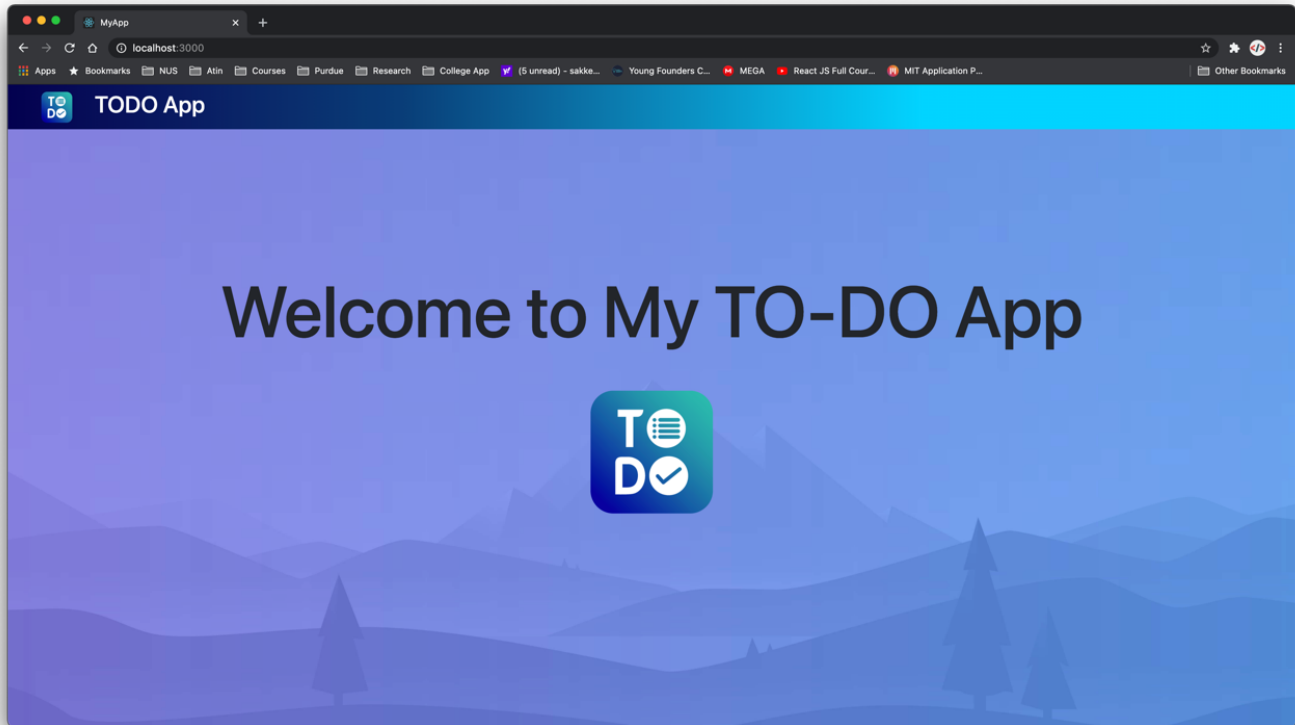


My TO-DO App



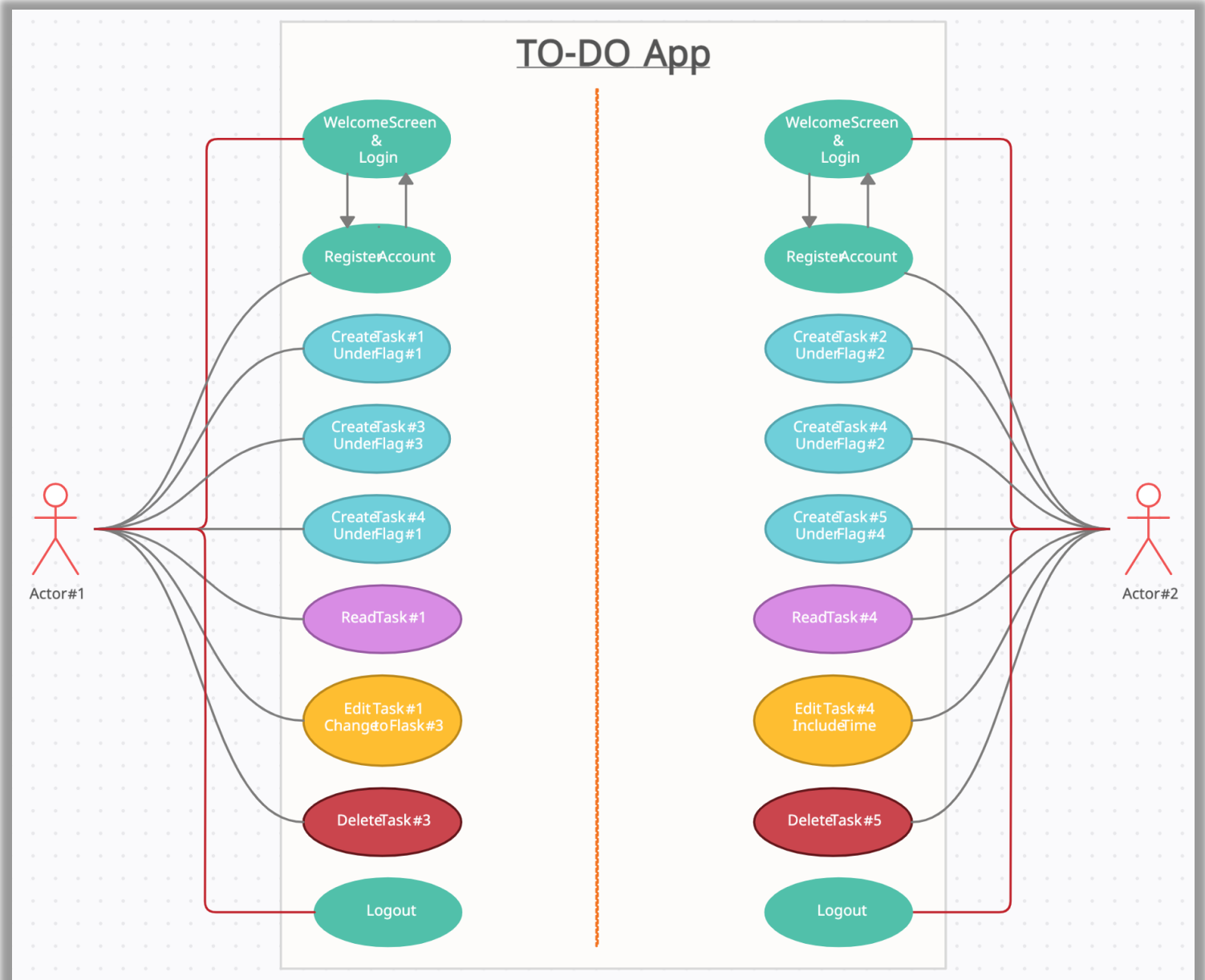
This website helps you manage your tasks easily, with an easy to use but elegant interface designed using Rails and a backend implemented using Rails.

Use Cases

The website is designed to handle multiple users and each user is restricted to their own creating, reading, updating and deleting their own tasks associated with their account. There is no interference between two users. The user is greeted by a welcome screen that scrolls to the login form. The user can choose to go to the signup page to create an account or directly login.

A user once logged in, is taken to the main page where all the tasks are shown, grouped by their flag and sorted according to their deadline. A sidebar with list of all flags is given so as to easily navigate to tasks belonging to a specific flag. The user has three options for each task: “show”, “edit” or “delete”.

- If “show” is chosen, the user is taken to a page that displays all information of the task. The fields are title, flag, description, deadline and time if applicable. The user can choose to edit or delete the task from this page too.
- If “edit” is chosen, the user is taken to a page that displays all information and can update the fields.
- If “delete” is chosen, a confirmation dialog is shown which on validation deletes the task from the database and also the user’s view.



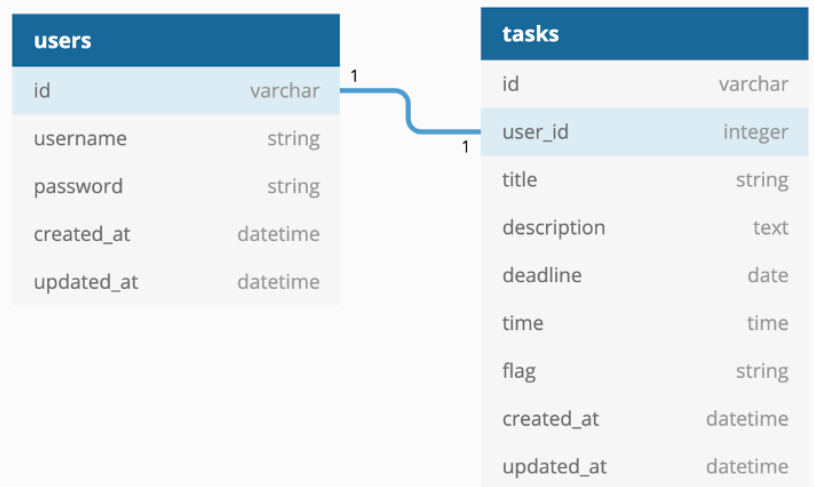
Execution Plan

1) Database Design

To handle all the data in this website, there will be two models: A User Model and A Task Model. The User Model will handle the user information and contains the username and password pairs. The Task Model will handle all the task information including user id the task belongs to, title, description, deadline (date), time (optional) and a flag for tagging the task. The user_id field in tasks will be used to link the task to the user through its id field.

```
ActiveRecord::Schema.define(version: 2020_12_09_150855) do
  create_table "tasks", force: :cascade do |t|
    t.integer "user_id"
    t.string "title"
    t.text "description"
    t.date "deadline"
    t.time "time"
    t.string "flag"
    t.datetime "created_at", precision: 6, null: false
    t.datetime "updated_at", precision: 6, null: false
  end

  create_table "users", force: :cascade do |t|
    t.string "username"
    t.string "password"
    t.datetime "created_at", precision: 6, null: false
    t.datetime "updated_at", precision: 6, null: false
  end
end
```



2) Webpage Design

The application will contain 6 main pages: Welcome/Login page, Create Account page, Index page for viewing all tasks, Create Task page, Read Task page to show and Edit Task page with their respective backend functions. The frontend will almost entirely be designed on the React framework with CSS (and Bootstrap) to stylize the webpages and JavaScript for extra functionalities. The backend, including CRUD, will be done using Rails.

The starting page will be welcome/login page with a link to the user registration page. The index page will show all the tasks grouped by their flags and ordered by deadline and time (if applicable). Each task should have options to show, edit or delete. Edit and Show will take the user to their respective pages and Delete should show a confirmation page.

-----THANK YOU-----