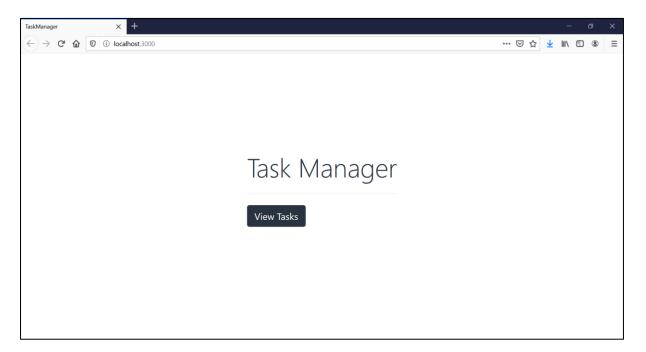
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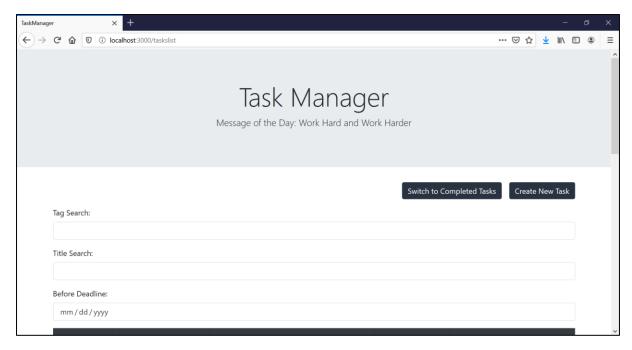
User Manual:

- 1. Clone the repository from https://github.com/hopinxian/task-manager
- 2. Run bundle install, yarn install, rake db:create, rake db:migrate, rake db:seed on command prompt from within the cloned directory.
- 3. Go to http://localhost:3000/ on Google Chrome. This brings you to the welcome page with a single button.



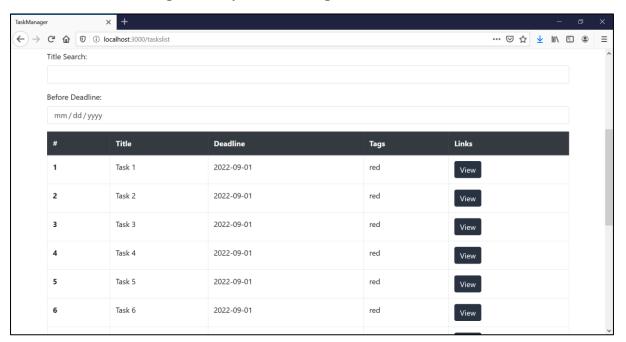
Picture 1: Welcome page

4. Click on the "View Tasks" button. This leads to the tasks list page, which allows you to view all uncompleted tasks.



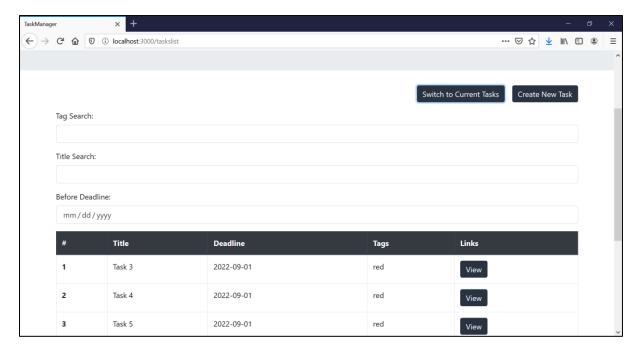
Picture 2: Tasks list page, showing the search fields above

5. Scrolling down the page leads to a table of tasks. The table shows the title, deadline and tags of every task starting from the closest deadline.



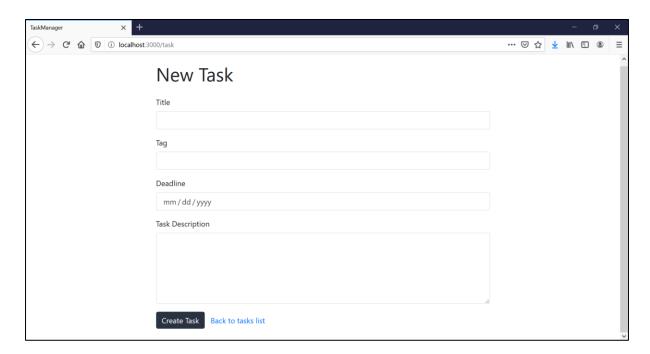
Picture 3: Tasks list page, showing the table of tasks below

6. Click on the "Switch to Completed Tasks" button on the top right corner. This leads to an identical task list page but the tasks shown in the table are completed tasks. Users can toggle back to the uncompleted tasks list page by clicking on the "Switch to Current Tasks" button.

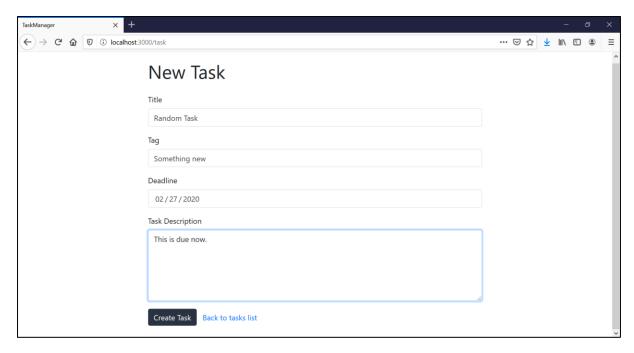


Picture 4: Showing the list of completed tasks

- 7. Creating a new Task
 - a. Click on the "Create New Task" button on the top right corner. This leads to a task form page. Fill in the details of the new task in the specified fields. Each task must come with a title, description and deadline. The tags are optional, but are useful to facilitate searching.

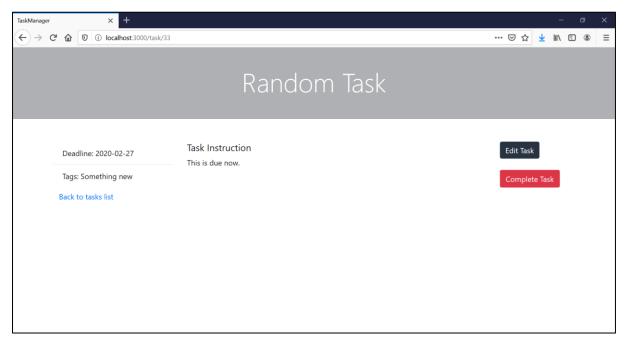


Picture 5: Form for creating new task



Picture 6: Form after details of new task have been filled

b. At the bottom of the form, click on the "Back to tasks list" link to return to the tasks list page without creating a new task. After completing the form, click on the "Create Task" button to create a new task. This leads to the following page.



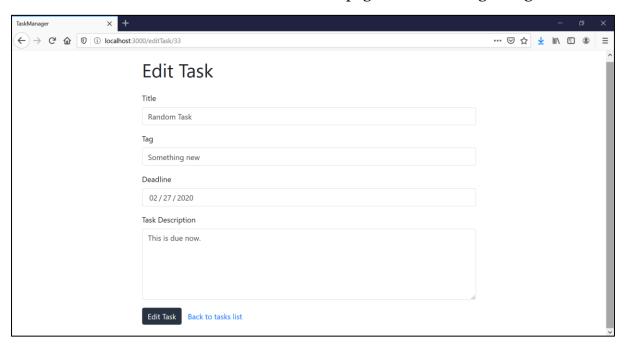
Picture 7: Task page of newly created task

c. In this Task page, details of the newly created task can be seen. The title of the task is seen in the grey row at the top of the page. Deadline and Tags details are in the right column, the task description is in the middle column, and on the left column are two buttons allowing the user to edit task or complete task.

d. Click on the "Back to tasks list" on the left column of the page to return to the tasks list page.

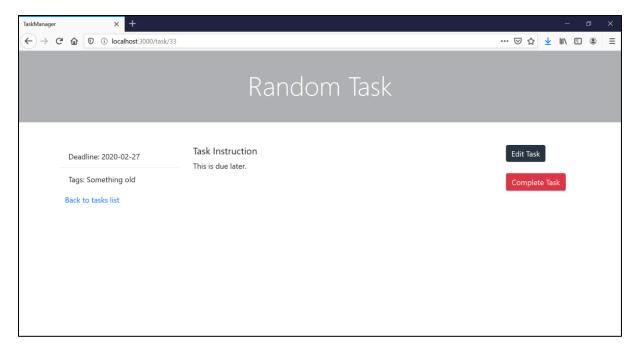
8. Reading a Task

- a. Click on the "View" button in the same row as the task you want to read in picture 3. This leads to the same task page as seen in Picture 7.
- 9. Updating an Existing Task
 - a. Click on the "Edit Task" button on the right column of the task page in picture 7. This leads to an edit task page. The fields in the form have been filled with pre-existing data of the task. Edit the fields in the form before clicking on the "Edit Task" button. Click on the "Back to tasks list" link to return to the tasks list page without saving changes.



Picture 8: Form for editing a current task

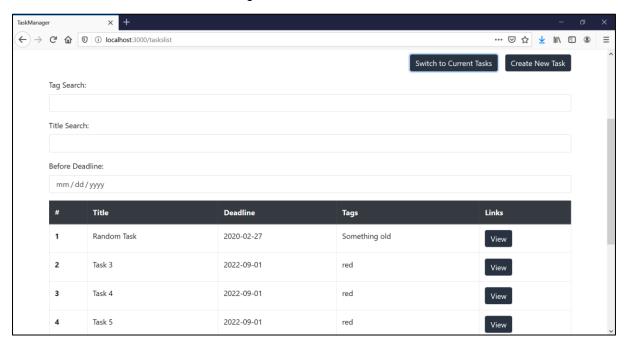
b. After clicking on the "Edit Task" button, the task page of the newly edited task will be shown.



Picture 9: Reading an uncompleted task

10. Completing a Task

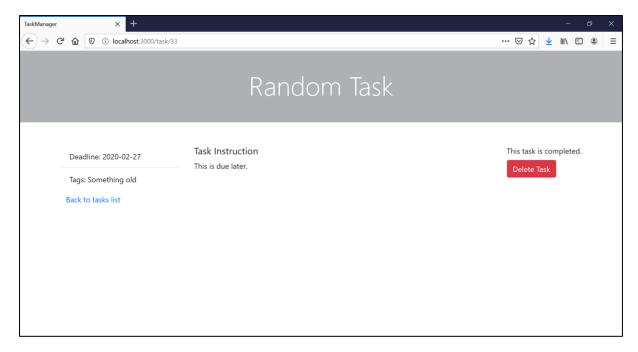
a. Click on the "Complete Task" button in the right column of picture 9. The page returns to the tasks list page and the completed task can now be found in the completed task view.



Picture 10: Viewing list of completed tasks

11. Deleting a completed Task

a. Click on the view button of the completed task. Once a task has been completed, the details of the task can no longer be edited. The right column no longer has the "Edit Task" and "Complete Task" buttons, and is replaced with a "Delete Task" button.

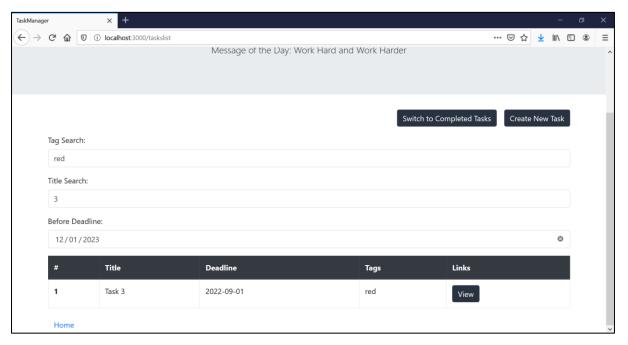


Picture 11: Task page of a completed task

b. Click on the "Delete Task" button on the right column. The task will be deleted and the page returns to the tasks list page.

12. Searching for Tasks

a. Tasks can be filtered by tags, title and deadline. Fill in the details in the search form to search for a specified task. For e.g. To search for a task due before 2023-12-01, has the tag "red", and has the number 3 in the title, the user may fill up the search form as such. The tasks list will update with each change to the search fields.



Picture 12: Using the search function

Write-up on what I feel about my accomplishments in this assignment

Without any prior experience in software engineering, I have faced many challenges while making this task manager. While it was a challenge to go through a website development cycle, I am happy to have learnt many things in this assignment (e.g. about MVC, how to fetch data using the fetch API, how to create a rails application, how to use components and state in React and others). I have also learnt how to create a GitHub repository, to push files and do commits. I have found GitHub to be especially useful in versioning and allowing me to return to an older version of my app when mistakes were made. I foresee increasing usage of GitHub in the future for software engineering projects. I have also become familiar with using JavaScript, routing, Ruby on Rails and React.

I have implemented a task manager with basic CRUD functionality. The task manager is able to show an index of all tasks, create new tasks, read the details of individual tasks, update existing tasks and delete completed tasks. Tasks can be tagged and tagged tasks can be filtered for by using the search function. This allows for specific tasks to be searched for easily. An additional functionality is archival. Completed tasks will not be immediately deleted from the database and will instead be archived. This allows the user to separately view the history of completed tasks for archival or referential purposes.

I am satisfied that I have overcome the challenge of implementing React with my Ruby on Rails app and having components from React interact with the controller and the model. However, given that I have not completely implemented all the optional tasks, I still have lots of room for improvement. I am confident that this experience in making this task manager will help me out in future projects.

Proof of working application: https://nameless-cove-88597.herokuapp.com/

A copy of the task manager is hosted in the above link. There is a slight difference with the app in GitHub, which is that the hosted task manager is using a PostgreSQL database instead of SQLite3. The hosted app also fails to show the styling that is implemented in the GitHub copy, but functions similarly to the file in GitHub.