

CVWO 2020 Final-Assignment Submission Write-up

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Introduction

This journey of creating todo application from scratch using Ruby on Rails and React was my first venture into creating a whole application alone. It has taught me many skills, both technical and non-technical, that I believe will benefit future projects that I embark on. That being said, I believe that I have barely scratched the surface for many technical topics and feel my biggest takeaways from this project thus far are the soft skills of understanding how to prepare myself before engaging in a project.

Learning Points

The process of creating this application has taught me the importance of good planning and ensuring that I have the necessary skills required before engaging in any actual development. There have been many times where I have had to make significant changes to the application to accommodate new features and realized that planning ahead from the start is key to making future development easier.

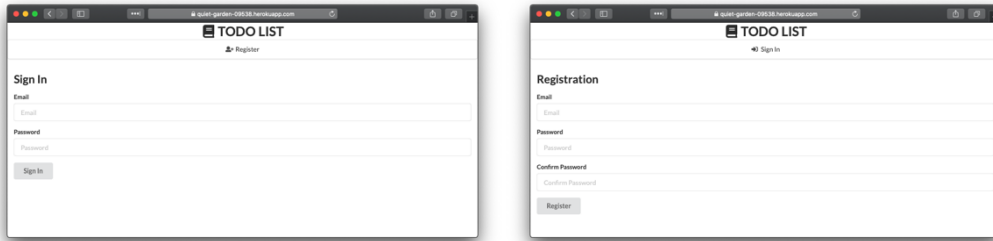
Throughout this project, apart from the programming languages I had to learn (Ruby/HTML/JavaScript), I had to verse myself in JSON and the REST API which has allowed me to gain a better understanding of how webpages communicate with servers and vice versa. Additionally, I had to think about basic security for the application and implementing simple methods within my capabilities to prevent a leak of information in the API backend was a significant hurdle.

Room for Improvement

I remain unsatisfied with the current security implementation used to prevent unauthorized viewing of the API data and wish to gain a better understanding of JSON web tokens which I believe will be a better alternative for such a use case. I also hope to gain a better understanding of Redux and TypeScript as they would make larger applications easier to construct and maintain. Additionally, I wish to hone my skills on Git and use more of its advanced features for better collaboration in future projects. Lastly, I aim to embark on more self-initiated projects that can streamline my workflow in daily life.

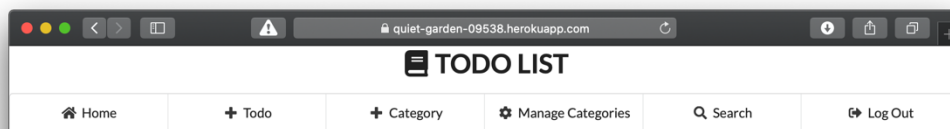
User Manual

Signing In & Registration



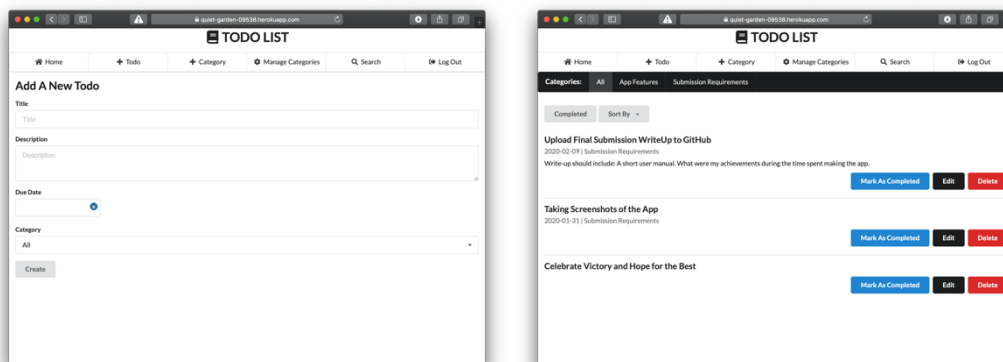
Upon first entering the site, users are greeted by a login page where they can register using the “Register” button located at the top of the webpage. Users are required to provide their email and a password to sign up for the application.

Navigating the Site



Located at the top of the webpage is a navigation bar with links to key pages in the application and a “Log Out” button.

Adding and Managing Todos



To add a new todo, the user can click the “+Todo” button in the navigation bar which will bring them to a form. Users are required to provide a Todo name/title and can optionally provide a description, a due date and a category.

**The default category is “All” and is treated as uncategorized.*

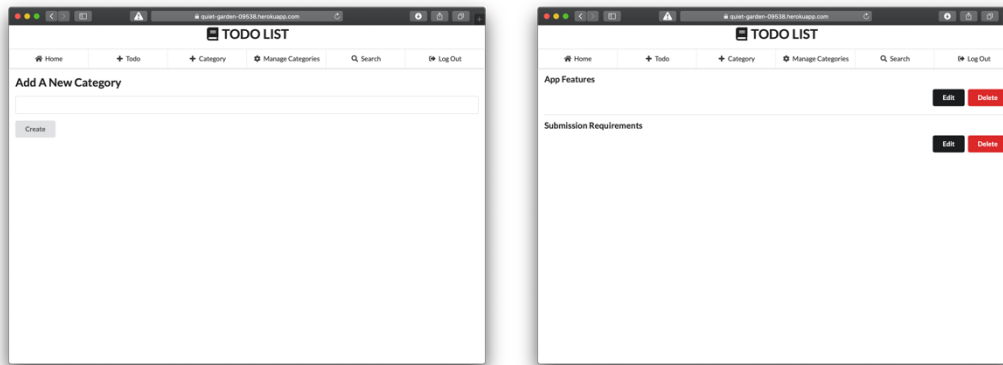
Users can view and manage their todos under the “Home” page.

Here, users can mark a todo as completed, edit the details of a todo and delete the todo.

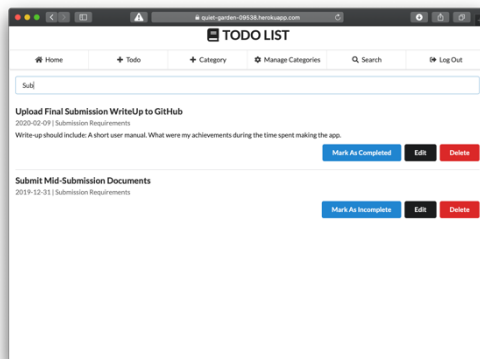
Additionally, users can toggle between displaying incomplete or completed todos and also sort the list by Creation Date (Default), Due Date or by Title.

Users can also filter the list by category through the category selector located below the navigation bar.

Adding and Managing Categories

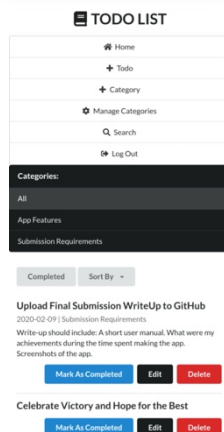


To add a category, the user can click the “+Category” and provide a unique name for the new category. The user can also edit or delete categories in the “Manage Categories” Tab.



Search Todos

A user can also use the “Search” page to find specific todos regardless of completion status using their name or part of description.



Multi-Device Support

The application also supports mobile devices. It automatically switches between desktop view and mobile view for seamless usage across various platforms to allow users to manage their todos wherever they are.