### **CVWO Winter Mid-Assignment Submission Write-up**

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Github Repository: <a href="https://github.com/eksinyue/cvwo-todolist-xinyue">https://github.com/eksinyue/cvwo-todolist-xinyue</a>

#### **Basic Use Cases**

- Todo-List
  - Each todo item consists of <u>title</u>, <u>due date</u>, <u>description</u>, <u>type</u> and <u>if it has</u>
    been done.
  - o CRUD operations for each todo item
    - CREATE Click on the "+" button to add a new to do item
      - Todo <u>title</u> MUST be filled otherwise a warning message will be shown and todo is unable to be saved.
    - READ Click on any todo item in the list to display its detail.
    - EDIT Click on the "\" to edit the details / mark it as done.
    - DELETE Click on the "×" button to delete a todo item
- Search bar
  - Search by title, description, type or due date by typing the relevant information inside the search bar
  - Sort todo items in the list by its due date / created date (by default) by clicking on the relevant buttons.

### **Execution Plan**

- Create React-Rails Application with react-rail Gem [COMPLETED]
- Create Primary model Todo [COMPLETED]
  - o CRUD [COMPLETED]
- Implement a tagging system to categorize tasks [IN-PROGRESS]
- Add search functionality [COMPLETED]
  - Search by title, type, description, due date, etc. [COMPLETED]
- Add sort functionality [COMPLETED]
  - o Sort by due date [COMPLETED]
  - o Sort by created date (by default) [COMPLETED]
- Improve user interface using CSS [IN-PROGRESS]

# Optional Tasks:

- o Cron
- o Typescript
- $\circ$  Hosting Deploy to Heroku
- o Redux
- o Docker

# Progress Timeline & Challenges faced

Date	Progress
10/12 -	Learning Ruby - Codecademy
12/12	
13/12	Learning HTML & CSS - Codecademy
14/12	Learning Ruby on Rails – Codecademy
	Learning Rails – RoR official guides
	Codecademy Rails tutorial uses an older version of Rails → switch to
	Rails website guides
15/12	Create Rails Application with Bootstrap Gem
	Create Primary model Post - added create & destroy function
16/12	Post – added show & update function
	Create Secondary model Note - added create & destroy function
	Though a todo list app with basic CRUD functionality was developed,
	the frontend was developed in the rails view in erb and React was not
	used this time. To view this version: check "cvwo-todolist-
	withoutReact" folder.
17/12 -	Learning Recreate part I & II – Codecademy
19/12	Learning Recreate— React Docs
20/12	Learning Git – Codecademy
21/12	Followed online tutorial built a todo list frontend recreate app with
	rails api (separate apps)
	https://medium.com/@pamit/todo-list-building-a-react-app-with-
	<u>rails-api-7a3027907665</u>
	After exploring the various methods of integrating rails with react, I
	was unsure about which one to adopt for this project → if to build the

	backend and frontend in two separate apps or simply integrate the
	two with webpacker/gem.
22/12	Failed to initialize a rails-react application with webpacker
	Unable to solve "Webpacker::Manifest::MissingEntryError" unable to
	display component content on localhost
23/12	Initialized a new Rails Application with react-rails gem (git was used
	to track commits)
	Set up rails backend – json
	Created several React components to <u>display</u> todo list (on a new git
	branch – test-react)
24/12	Develop React component to support <u>create</u> , edit & delete
	functionality
25/12	Added search bar, sort functionality (by due date / by created date),
	Datepicker, Flash Message to replace alert, etc.
26/12	Worked on css styling of the website
	- Completed todo
	- Style for active link/links while hovering, etc.
	Created secondary controller and model Subpost
	I wished to build a subtodo list under each todo item with create and
	delete functionality. However, I have yet figured out how to work with
	associated models in react and json.
27/12	Added type & description columns for todo items
	Attempted on building a tagging system
	I intend to use the ready-to-use react tagging component 'React-Tags'
	however installing the package seems to interfere with the existing
	'React-rails' package as "uncaught error: cannot find module
	'react_ujs'" error was shown.
28/12	Tidy up the files for mid-submission

## P.S.

To run the programme on local machine:

Download the zip file from Github  $\boldsymbol{\rightarrow}$  run "rails db:migrate" in terminal

 $\rightarrow$  run "rails s"  $\rightarrow$  open <a href="http://localhost:3000">http://localhost:3000</a> in browser to view the website