

# CVWO Winter Mid-Assignment Submission Write-up

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**Github Repository:** <https://github.com/eksinyue/cvwo-todolist-xinyue>

## Basic Use Cases

- Todo-List
  - Each todo item consists of title, due date, description, type and if it has been done.
  - CRUD operations for each todo item
    - CREATE - Click on the “+” button to add a new to do item
      - Todo title 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]
  - 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]
  - Sort by due date [COMPLETED]
  - Sort by created date (by default) [COMPLETED]
- Improve user interface using CSS [IN-PROGRESS]

- Optional Tasks:
  - Cron
  - Typescript
  - Hosting - Deploy to Heroku
  - Redux
  - Docker

### Progress Timeline & Challenges faced

Date	Progress
10/12 – 12/12	Learning Ruby - Codecademy
13/12	Learning HTML & CSS - Codecademy
14/12	Learning Ruby on Rails – Codecademy Learning Rails – RoR official guides <b>Codecademy Rails tutorial uses an older version of Rails → switch to Rails website guides</b>
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 <b>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 “<code>cvwo-todolist-withoutReact</code>” folder.</b>
17/12 – 19/12	Learning Recreate part I & II– Codecademy 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) <a href="https://medium.com/@pamit/todo-list-building-a-react-app-with-rails-api-7a3027907665">https://medium.com/@pamit/todo-list-building-a-react-app-with-rails-api-7a3027907665</a> <b>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</b>

	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, edit &amp; delete</u> 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 <ul style="list-style-type: none"> <li>- Completed todo</li> <li>- Style for active link/links while hovering, etc.</li> </ul> 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 → run “rails db:migrate” & “rails db:seed”

→ run “rails s” → open <http://localhost:3000> in browser to view the website