# Final Submission Write-up

#### Honest Thoughts and Reflections

It has been an amazing 2 months learning web development and I think I want to be a web developer after graduation from computer science. In this 2 months, brushed up on my HTML (and ERB,EJS,JSX), CSS (and SCSS), JavaScript (DOM manipulation and ES6 and ES7 features) and also learned the concept of Rails and framework using the MVC model. I would be honest, I thought I will be able to incorporate a lot more features into my App but I underestimated the complexity of trying to learn a new framework especially with React and Redux. Due to the limited time and other personal commitments, I was not able to go through every aspect as meticulously as I would like. But Ultimately, I am satisfied with the finished product. I will still be pushing new features into this App even after the submission. Because I learnt many different concepts (class components, functional components, Hooks, Redux) in different stages while creating the App, the code is not as consistent as I would like but I think it shows that I am able to incorporate different technologies into my App. Even with all the difficulties I faced, I really had a blast this 2 months and I hope I will be given the opportunity create more Apps for CVWO. Thank you!

#### Initial troubles

The Front-end (React and Redux is perhaps the most frustrating aspect out of this entire project). There were many bugs I initially faced related to promises, memory leakages, CSRF token, styling bugs, communicating with the database using React, sessions, ... etc. Because the entire App was conceived by me, there wasn't a specific tutorial that I could follow so I had to spend countless hours looking through documentation and stack overflow trying to debug which was painful. However, I am now quite confident with using React and am quite fond of it. However, the concepts were hard to grasp initially, especially coming from pure JavaScript and Html to manipulate the DOM. Even simple tasks like creating a form that updates a database that would usually take minutes took me hours to implement. But as I began to familiarise myself with React, it became more and more natural. The component requires a state, to update a state you need to set state, and to handle data changes in your JSX you need handlers which in turn changes the state. (Well at least with old fashion class components but the concepts are the same with newer features like hooks). I also learned Redux but because my App was almost completed at that point, I find it hard to implement it into my App and school has already begun which severely limits the time I can spend on this project.

The Backend was a much more familiar place to me since I have done web applications before. There were some bugs that I could not figure out and I had to cook up some work arounds while still maintaining the user security. But no App is perfect and even Windows have the occasional bugs. This is something I hope that I will be able to improve on with more experience. Through this project, I brushed up on my database concepts; migration, schemas, models, associations as well as Authentication related concepts like Salts, Peppers, and Hashes.

### Final thoughts

This App is by no means perfect and it is still an ongoing process even when the submission dateline is up. There are many more things I wish to implement and features I wish to explore. (Perhaps using a google authentication service instead of my own, or a chat forum, or a add friend feature etc) Yet there is so little time. Regardless, I learned so much and I really enjoyed it.

## Manual

This App is currently hosted on Heroku <a href="https://morning-chamber-11614.herokuapp.com/">https://morning-chamber-11614.herokuapp.com/</a>. For some reason, there are some visual bugs on the deployed version which is not on the local version and I am still trying to patch them.

Otherwise, if you wish to view the in progress version, please feel free to clone the repository from <a href="https://github.com/todoge/CVWO-PROJECT">https://github.com/todoge/CVWO-PROJECT</a> and run <a href="rails-s">rails-s</a> on your local system.

Regarding the actual App, todos title are restricted to 50 characters while body is restricted to 200. This is to prevent misusing of the database which is free courtesy of Heroku.

You can view other users by clicking on their names on their posts.

Thank you to the CVWO team.

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