

CVWO Final-Assignment write-up

Only having some previous competitive programming experience, building a website using react on rails is wholly a new concept for me. And because it is an applicable project, I do have to adjust the way of thinking and coding. However, through learning basic react on rails application solely by myself, I am so happy and pleased that I do overcome the challenges and difficulties encountered all the way to the final achievements.

The first time I received the whole assignment file, the most unforgettable though is that I do not know where to start. Git, Ruby on Rails, React, almost all the needed tools are new to me. Fortunately, by following the instructions, I'm able to first focus on React, a very useful tool for frontend programming. I found some followed up teaching videos on YouTube where I learned basic frontend skills which are later deployed in my own project. Additionally, to design my web and make it more user-friendly, I also learned some CSS skills specifically bootstrap to decorate the whole web however time consuming.

After a completed frontend work, I moved to the backend part to create my own database used for the words and tags. Again, to be familiar with Ruby on Rails, I watched some videos which equipped me with the ability to think from the backend perspective and some basic Ruby skills. So at first I used SQLite(the default database for ROR), which is easier to manipulate locally. After creating the database, I'm able to connect it with the frontend work and achieved a basic CRUD operations, and later I added the tagging system to increase user experience.

Finally, by using Git tool, I pushed all my source code to Github and get ready to deploy my work to Heroku. However, as it strongly supports PostgreSQL database, I must transform it from SQLite, which seems to be an easy part but actually took me much time to solve the installation and connection problems. Fortunately, by following detailed instructions, I finally make it and also able to use PostgreSQL provided by Heroku itself and create my own website(provided in the assignment submission)

To sum up, one of the most important abilities I got increased is the ability to learn new things through the whole process. This ability, along the way, will be very precious when encountering problems and

challenges during CVWO work if I’ m luckily selected. And the debugging ability is also considered important in actual work.

User manual:

Website: <https://xiaoyan13.herokuapp.com/>

Add word/filter tag:

Search for your words

Filter

(Add filter tag)

Step1: Input the tag you want to add

Add tag

Add tag

Step2: Click "Add tag" button

My-words list

Add

Add Word...

None

apple

(Tag: fruit)

Update

Delete

hello

Update

Delete

fish

(Tag: animal)

Update

Delete

Step3: Click the "Add" button

Step1: Input the word you want to remember

Step2: Choose the corresponding tag

None

fruit

item

food

drink

animal

Update word:

Search for your words

Filter

None

Delete tag

Add tag

Add tag

My-words list

Add

Add Word...

None

apple

(Tag: fruit)

Update

Delete

hello

Update

Delete

fish

(Tag: animal)

Update

Delete

Step1: Click the corresponding "Update" button, then a Modal pops up

Update Word

Word

(previous: hello)

hello

Tag

(previous: None)

None

Confirm

Step2: Update the word and the tag

Step3: Click "Confirm" button to confirm your change

The Modal

Del

ete word/filter tag:

Search for your words

Filter

Delete tag

Add tag

Add tag

My-words list

Add

asdgasdg

None

apple

(Tag: fruit)

Update

Delete

Delete word: Click the "Delete" button

Delete tag: Click the "Delete tag" button

Notice: Only the tag without any word in it can be deleted
(To prevent classification problems)

Filter word:

Search for your words

Filter

None

fruit

item

food

drink

animal

Add new tag...

Add tag

My-words list

Add

asdgasdg

None

hamburger

(Tag: food)

Update

Delete

Step1: Choose the tag you want to filter

Step2: The list will only display words in this tag

Search word:

Search for your words

Filter

Delete tag

Add tag

Add tag

My-words list

Add

roomkey

item

keyboard

(Tag: item)

Update

Delete

key

(Tag: item)

Update

Delete

roomkey

(Tag: item)

Update

Delete

Step1: Input the word you want to search

Step2: The words with the same letters inside will be displayed