Todo-Manager Final-Submission

User Manual

Basic Information

Todo-Manager is built based on Ruby on Rails, with the Rails installation version 5.1.4 and Ruby version 2.3.5 (used to be 2.4.3). Bootstrap, Devise and Ransack are the three main gem that were used during the development period.

Use Cases and Functions

It is an electronic memo pad, which aims to assist people with remembering and managing their tasks in daily life. With Todo-Manager, it will be easier for users to analyse and decide the priority when doing tasks. In order to make it more flexible and user friendly, the following functions are provided:

1. the basic CRUD function (for groups and tasks)

Todo-Manager allows you to **create**, **read**, **update** and **delete** groups as well as its following tasks. For groups, you only need to provide name; while for tasks, text and group must be provided. (Although Todo-Manager doesn't check the existence of deadline, there is actually no way for you to leave deadline blank.) Moreover, bulk_delete is accessible in Todo-Manager, click on the select boxes in front of task-text in the group-detail or view-all page and then delete, all the tasks that have been selected will be deleted immediately.

NOTE: You MUST have **at least ONE** group before you continue to create tasks. If you delete a group, all of its containing tasks will be deleted as well.

2. classification of tasks

While creating or editing tasks, you can select which group is the task in. If you create a task in a group-detail page, the default choice of group of the new task will be that group by default, but you can change it if you want to assign the task to another group. (e.g. You want to create a task when you are at General group-detail page, the default group of your new task will be General.) The group where the task is assigned will decide in which group-detail page the task will appear. In the meantime, if you prefer viewing all tasks at the same time, group assigned to the tasks will also be shown in the view-all page so that it will be easier for you to manage overall tasks.

NOTE: Todo-Manager allows one task to belongs to **only one** group.

3. highlight urgent tasks

You are able to highlight urgent tasks by **select the radio button** when creating or editing tasks. As emergency is not an attribute that tasks must have, you are allowed to choose neither option. In this situation, Todo-Manager treats this as choosing NO by default. Highlighting can remind you of urgent tasks.

4. search

In order to help you to find out the specific task that you may want to have a look at, Todo-Manger provides a simple search function which is built based on *ransack*. It allows you to search tasks with keyword. As long as the word appears in the text attribute of one task, that task will turn out to be one of the search result. This can be used as another grouping if you manage to set text of tasks properly. (e.g. You can find all tutorials as long as you attach a single for that in the text of tasks, even if you divide tasks into groups based on module code.)

NOTE: Groups won't take part in the searching function. Spelling mistakes or too many key words may not turn out expected results.

5. navigation bar

Navigation bar is built with *bootstrap* for Todo-Manager. You can either click on Todo-Manager to get to the homepage (where all groups appearing without their tasks) or click on group names to get to the detail page of that group (which contains all tasks of that group). It should be noted that user based options (log in/out, register, etc.) as well as search function are also shown in navigation bar.

6. user authentication

User authentication is built based on *devise*. You have to log in in order to get access to other pages except the welcome page. Moreover, you will only have access to your own created groups and tasks. Therefore, there is no need to worry about your list being messed up by others' lists. Todo-Manager is a private helper for you.

My Accomplishment

Honestly this is the first time I try to reach something that I have never known of before and I did suffer from that at the beginning. However, I am satisfied with myself that I finally made it. During this period, except for the most basic way to build ruby application, I learned about some ideas that I can use in the future.

Less duplication

Firstly, it is senseless to keep repeating myself when programming. Rails provides several ways to keep me away from that, such as layout and partial template. Besides, DRY (Don't Repeat Yourself) is also a spirit that it advocates, which shares the same meaning about this programming methodology. I feel that less repeat makes my life easier and my program neater. It brings convenience especially when I need to change template that are used in many areas, such as navigation bar.

Use tools

Secondly, it is important to be able to find appropriate tools to help myself, like gem. With the improvement of computer science, a lot of useful tools are provided online. Although some of them may fail to supply the most efficient way to build up a function, we should seed their help based on the situation. In order to save time and manpower, the ability to search for useful tools should be necessary in industrial production process, as long as the efficiency of final version is acceptable.

Consider more situations

Thirdly, it is beneficial to consider exceptions instead of pretending that users will follow my instruction. When building an application, one of the most important things to consider is user experience. My last version of this application just tell users that they should build a group before creating new tasks, and assume that everyone will follow my instruction. However, when I ask my friends to test for me, there are some of them having ignored my instruction and ran into errors. Therefore I realise that building an application is different form doing labs. When doing labs, I can ignore the unexpected situations and doing nothing for that, however, when it comes to building an application, I have to make sure that there are as few as confusing errors that affect my users. I need to make sure I consider as many situations as possible.