

Basic use cases and execution plan

Nguyen Minh Tuan (A0223318M)

Applied Mathematics – Faculty of Science

1. Use Case

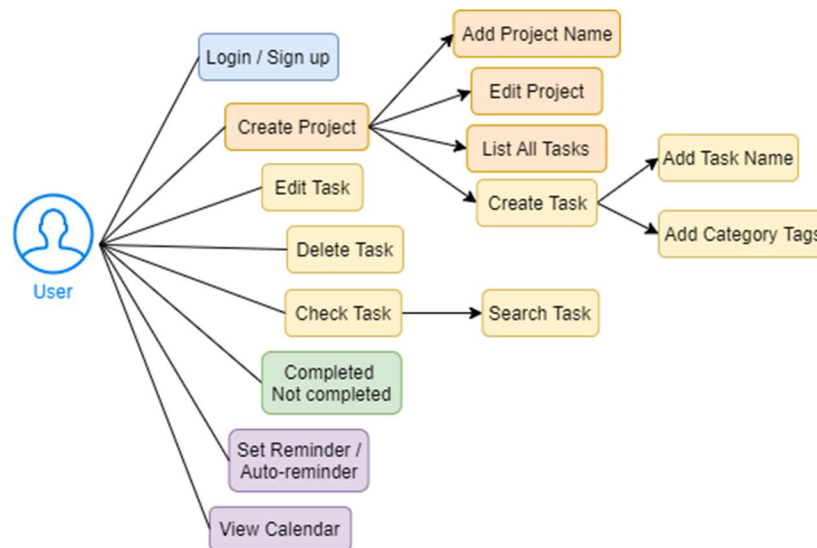


Fig 1: Use Case Diagram for my ToDo App

1.1. Login / Sign up

First, to start using the todo manager, users must sign up for an account with their emails. Emails are required so that reminders from the manager can be sent to their emails. If the users already have an account, they can login to the todo manager.

1.2. Project

In this todo manager, tasks can be grouped together into a project. Every task in a project will share a common project tag. (Searching for this tag will return all the tasks in the project.)

Users can create a new project and name the project. The project name will be the tag, so different projects cannot have the same name. Project names can be edited after creating the project. Users can also list and see all tasks under that project.

After creating a new project, users can then create new tasks under that project.

1.3. Task

When creating a new task, users must add a name for the task and may choose to add new tags (other than the project tag). Users can edit task names and tags after creating the task and delete the tasks that are no longer wanted.

Moreover, users can check and search through all their tasks using the search function (search by task names). There is also a filter function that allows users to find all tasks with the same tags.

1.4. Task Completion

Users can mark any task as completed or not completed. Once all the tasks in a project are marked as completed, the project will be considered completed, and moved to the completed project page. Users can always review the completed projects on that page.

1.5. Calendar and Reminder

Users can set the due dates for their tasks and projects. To receive reminders about their tasks and projects through email, users can either choose the “send reminder” option when selecting the due dates or enable Auto-Reminder (will always send reminder) in settings.

Moreover, users are also able to view all their tasks and projects in a calendar.

2. Execution plan

- Set up:
 - + Set up Ruby on Rails, React, Github repository
 - + Create a new Rails application and start the application, generate Rails controller, React components
- Create a basic todo manager:
 - + Generate controller for Main page, a Task model, create a table in database
 - + Build index page and install React dependencies
 - + Create necessary React components, such as Home, Completed, etc.
 - + Style with CSS, Bootstrap
- Create the tagging system:
 - + Create projects, add project tags
 - + Add search function, filter function
- Login / Sign up:
 - + Create Login / Sign up page
 - + Add necessary gems such as mailer
- Add calendar (using necessary gems)
- Add reminder system