

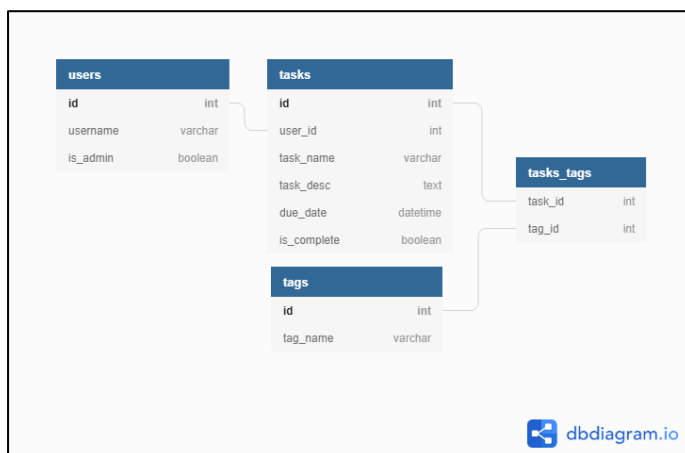
Basic Use Cases for ToDoApp

User	Normal	Add task
		View a specific task
		View all tasks
		Update task (such as name, description, due date and status)
		Delete task
		Add a tag to a task
		Delete a tag of a task
		Search via tag
		Search via task's name and task's due date
	Admin	View a specific user
		View all users
		Update user (such as name and admin status)
		Delete user
		All operations by a normal user

General Execution Plan

1. Add basic models and methods for Task and User
2. Add authorisation
3. Add UI for forms and index pages
4. Add Tag model and setup the association
5. Add Tag methods within each Task
6. Add searching operations
7. Streamline the index pages for users and tasks
8. Test the application
9. Setup the application for deployment
10. Add additional features

Database Model



Execution Plan – with a bit more details

Models and Controllers

1. After setting up the model for user and task, authorisation was done in simplified way – only with username.
2. Users can key in the username they used previously to retrieve their past tasks. Also, if they do not logout, the session is preserved within `cookies[:user_id]`.
3. Upon logging in, users can perform CRUD actions on their own tasks.
4. Admins (saved within `cookies[:is_admin]`) can perform CRUD actions on users.
5. The tag model is associated with the task model via a join table. It is setup such that deleting a task would delete related ActiveRecord in the join table, but the tags are still present in the tag table.
6. Creation / linking of tags – On a task's new, show and update pages, tags should be able to be added or retrieved, and these chosen tags would be linked to the task.
7. Searching can be done either on a task's name, task's due_date or via the tag.

Views

1. Views are done via React, and the React-Bootstrap UI library.