

## Creating a simple to-do list application

### User's Requirements

According to the assignment's requirements, I need to build a simple single-page to-do list web application. The application should have –

- Signup, login
- Create tasks, set as complete
- Assign others to a task and get alerts about incomplete tasks.

### Research

Firstly, researching of how to use Angular JS itself, the nature and the structure of Angular and how to build small and simple applications with it (particularly on w3school website). <https://www.w3schools.com/angular/default.asp>

Then, researching of creating the to-do list application. There are some good examples of to-do applications as well as the signup and login features applications.

#### *User Signup and Login*

<https://www.youtube.com/watch?v=W6ZYcBAPtrs>

#### *To-do Application*

[https://www.youtube.com/watch?time\\_continue=119&v=FSOiVprDdj0](https://www.youtube.com/watch?time_continue=119&v=FSOiVprDdj0)

[https://www.bogotobogo.com/AngularJS/AngularJS\\_Controller\\_DataBinding\\_TodoList\\_App.php](https://www.bogotobogo.com/AngularJS/AngularJS_Controller_DataBinding_TodoList_App.php)

<https://scotch.io/tutorials/build-a-todo-app-using-sailsjs-and-angularjs>

#### *File & Directory Structure*

<https://scotch.io/tutorials/angularjs-best-practices-directory-structure>

### Plan

According to the requirements and research from the applications on the internet, my to-do list application should include –

- ✚ User signup page, login and logout
- ✚ (with user's name and password stored in the database)
- ✚ To-do task with 'Create Task' button
- ✚ Tasks should have an option to set the priority and date to complete
- ✚ Show all available (unfinished) tasks (with checkboxes)
- ✚ Mark completed tasks (with strikeouts or show different font colours)
- ✚ Give alerts or warnings to overdue tasks.

## Design

The followings are the initial wireframe designs for the application.

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### Login Form

User name

Password

### Signup Form

User name

Password

Confirm Password

Email

### My To-Do Application

Check the finished tasks

☐ Task 1

☒ ~~Task 2~~

☐ Task 3

## Development

### Phase 1

First of all, I tried to get the most important things to be done. With the help of reference websites, I could create a working to-do list application with some basic features and very basic appearances using Angular JS framework.

### Phase 2

Next, the login and register forms were created with validation checks using Angular JS framework. Merge these two forms with the main application.

### Phase 3

Adding UI design to all pages, such as text boxes, buttons and form header styles, using Bootstrap framework and custom CSS features. All structure and design on the pages are the same to maintain the consistency of the site.

## User Manual

(You need to put the project in “**xampp/htdocs**” folder.)

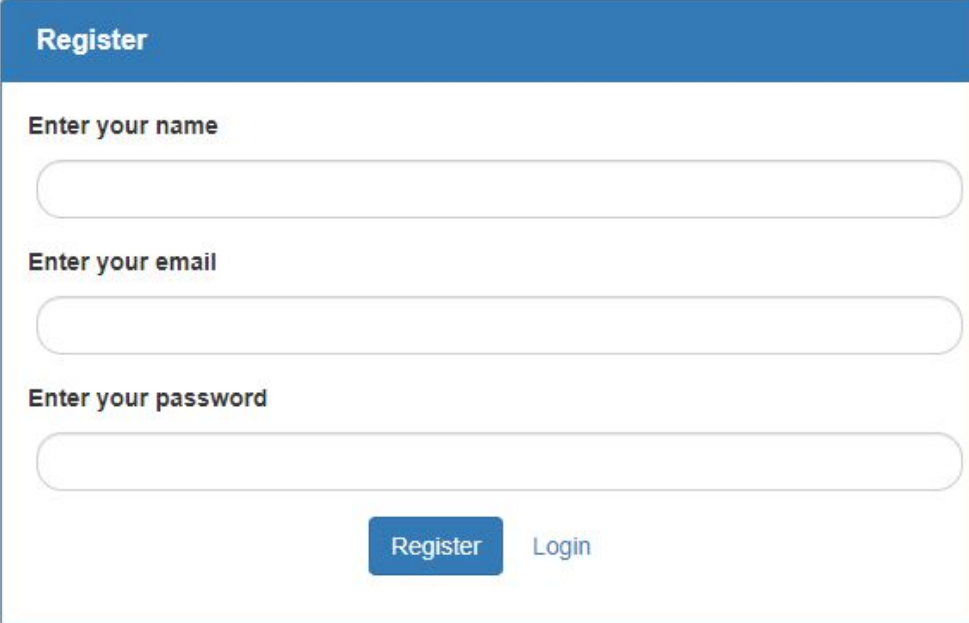
This project has three webpages, main application page, login page and register page. User needs to login first before using the application or register as a new user using register form. Registered information is stored in mySQL database. Instead of storing user's actual password, only password-hash is stored in the database to secure the password.

| name         | email                | password   |
|--------------|----------------------|--|
| Myo Thet Tun | nickylee83@gmail.com | \$2y\$10\$OzKLFr2p.Cq0iJpubccHqupRSX7qJD5Zd0TsDD3MmH2... |

Fig. “**register table**” in database which stores user's login information

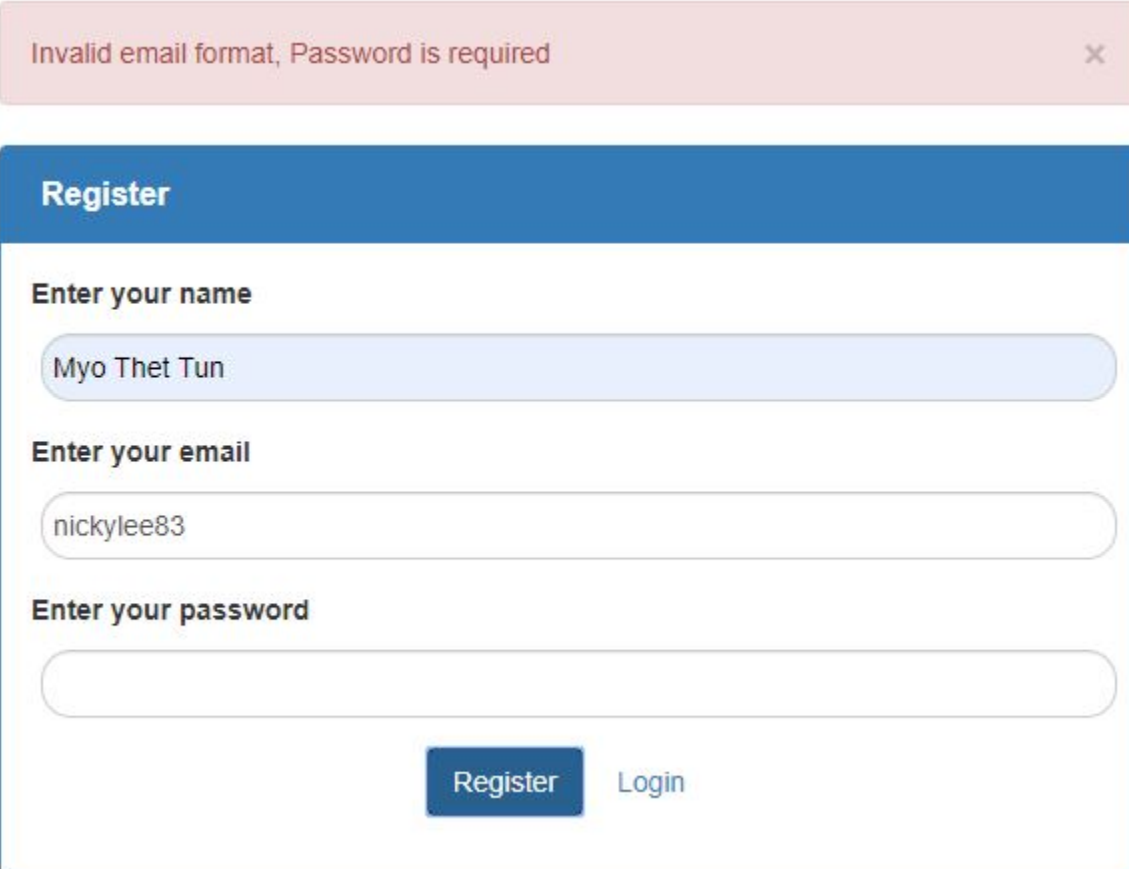
New user needs to register for the account (name, email and password).

## My To-do Application Register & Login



The register form has a blue header with the text "Register". Below the header, there are three input fields with labels "Enter your name", "Enter your email", and "Enter your password". At the bottom right, there are two buttons: "Register" (blue) and "Login" (light blue).

Fig. register form

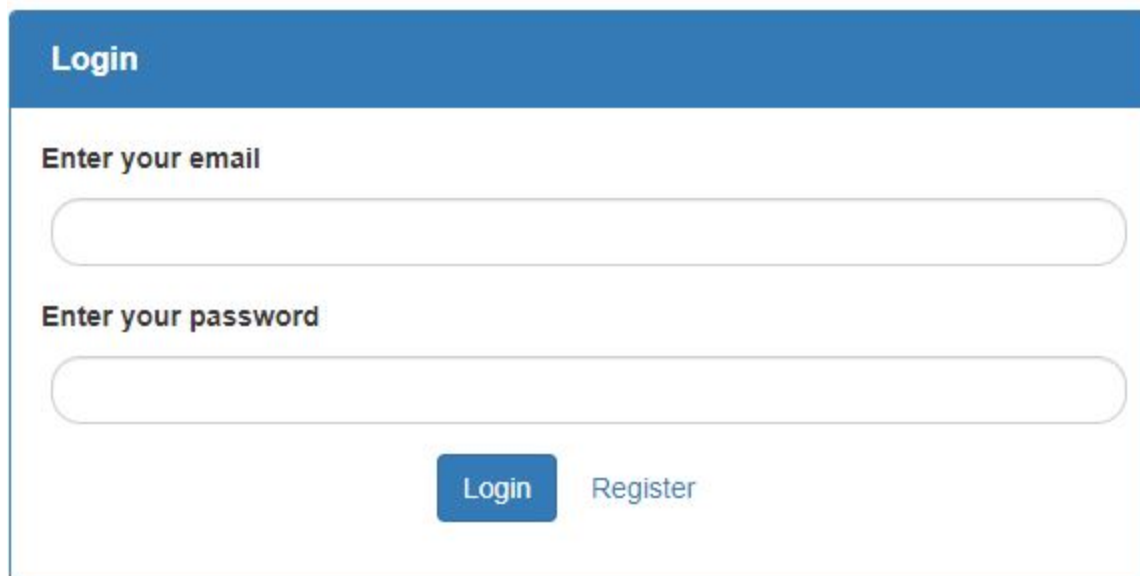


The register form is shown with a validation error message at the top: "Invalid email format, Password is required" in red text, with a close button (X) on the right. The input fields are now filled: "Enter your name" contains "Myo Thet Tun", "Enter your email" contains "nickylee83", and "Enter your password" is empty. The "Register" button is blue, and the "Login" button is light blue.

Fig. **register form** with validation checks

User can login using login form after registering.

## My To-do Application Register & Login



The login form is titled "Login" in a blue header. It contains two input fields: "Enter your email" and "Enter your password". Below the password field are two buttons: "Login" (blue) and "Register" (grey).

Login

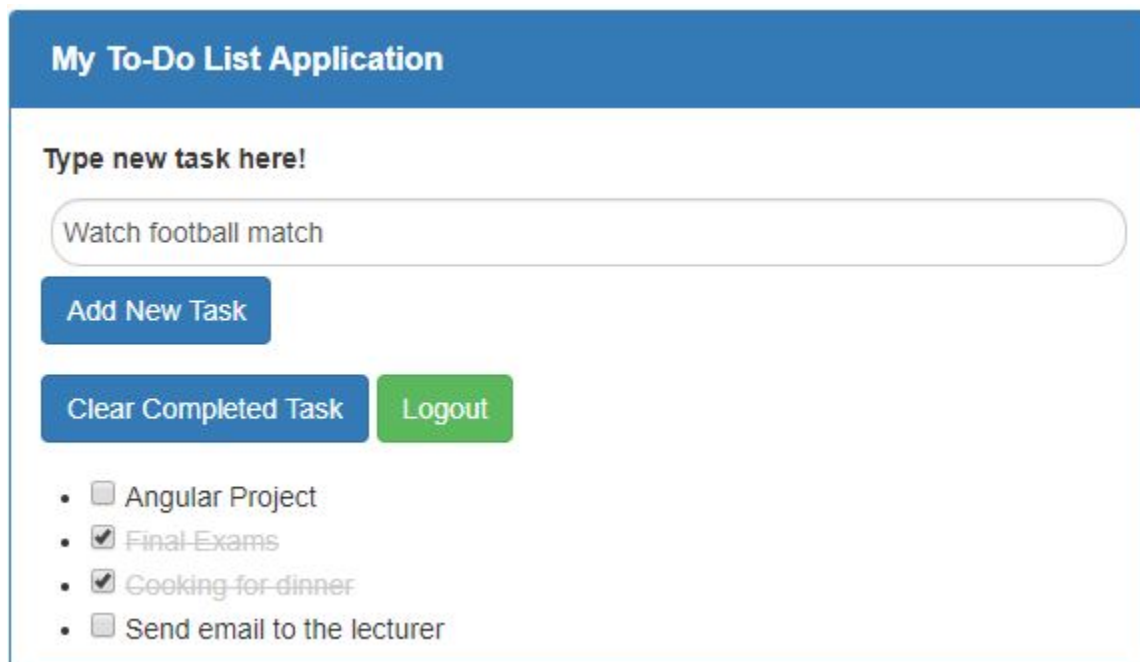
Enter your email

Enter your password

Login Register

Fig. login form

After successful login, you can use the main application now.



The main application interface is titled "My To-Do List Application" in a blue header. It features a text input field with the placeholder "Type new task here!" containing the text "Watch football match". Below this are three buttons: "Add New Task" (blue), "Clear Completed Task" (blue), and "Logout" (green). At the bottom is a list of tasks with checkboxes:

- ☐ Angular Project
- ☒ Final Exams
- ☒ Cooking for dinner
- ☐ Send email to the lecturer

Fig. my to-do list application page

User can type in new task in the text box and press **"Add New Task"** button to add the new task in the list. You can click the check boxes as the tasks have been done and it would turn to grey colour with a strike-through line. You can click the check box again in case you checked the unfinished task. You can clear the completed

tasks by pressing “**Clear Completed Task**” button. If you wish to logout from the application, press “**Logout**” button.

## Conclusion

As limited time is given to submit the assignment, certain features requested on the assignment have to be left out due to limited time on research and development of the application. The main features included are as follows.

### General features

- Signup/Register feature
- Login and logout features
- Complete form validation checks on login and register forms (not null, valid email, valid password, etc.)
- Designed all pages with bootstrap and CSS

### On to-do list page

- Ability to add new to-do tasks
- Ability to strike-through finished tasks
- Ability to clear out all finished tasks

Nevertheless, the application included most of the features required by the assignment criteria.

### Future Enhancements

Future enhancements would be the followings.

- With time limitation on each task and this should alert user when the time is due if the task is not done yet.
- Tasks should have priority levels and user should be able to arrange a to-do list according to priority levels.
- The UI/UX design should be improved and should be more user-friendly.

### Addition Information

To login to the application, please use the following information.

Username/email: *nickylee83@gmail.com*

Password: abcdefgh

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