Task Management System

Java Programming

CSCI – 2210 - 01

WORA

University of New Haven

TAGLIATELA COLLEGE OF ENGINEERING, West Haven, CT

Submitted To:

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Progress Report of WORA

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WORA

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Roles of Team Members

1. Ahmed Muntasir Hossain

> Programmer, Report Writer, Researcher, Database administrator, User Menu and Tasks, Create Tasks, Search for Tasks

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> Programmer, Report Writer, Researcher, User Sign Up and Log in, Calendar, Create Tasks, Search for Tasks, Create New Admin Account

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Table of Contents

Introduction

The Task Management System (TMS) is an application that manages and holds a record of the personal task of different users. TMS displays a calendar for the desired week, month, or year. Using our application, the users are able to add tasks, see their individual calendar data, and update them.

Project descriptions

The application has two users:

1. Admin
2. General User

Admin:

The admin is able to log in using the admin portal. They provide their credentials: username and password to log in. After logging in, the admin is displayed a menu to select from the following options:

1. New User List:
    Displays the username and password of new users

2. Create New Admin Account:
    Creates an admin account for a new admin

3. Update Admin Account:
    Updates the personal log in information of an admin

4. Log Out:
    Logs Out of the portal and returns the admin to the log in page

General User:

The general user would initially create a new account. The new user is unable to log into TMS until they are approved by the admin. After an admin approves their account, from the new user list in the Admin Portal, the user logs into TMS and they are displayed the user menu. The user menu consists of the following options:

1. Calendar:
    Displays the current date, month, and year in a calendar format. Moreover, the user has the option to search for a particular month and year. The search will output a calendar of the particular month and year inputted by the user.

2. Create New Task:
    The user inputs the details for a task and adds the task to TMS. Details include title, start date, start time, end date, end time, and description. These details are stored for the particular user and are associated with the logged in user's account.

3. Search for Task:
    The user is able to search for a particular task by inputting data in the following fields: title, start date, start time, end date, end time, duration, and description. Based on the user's input, TMS outputs all the tasks that match with the user's request in a tabular form.
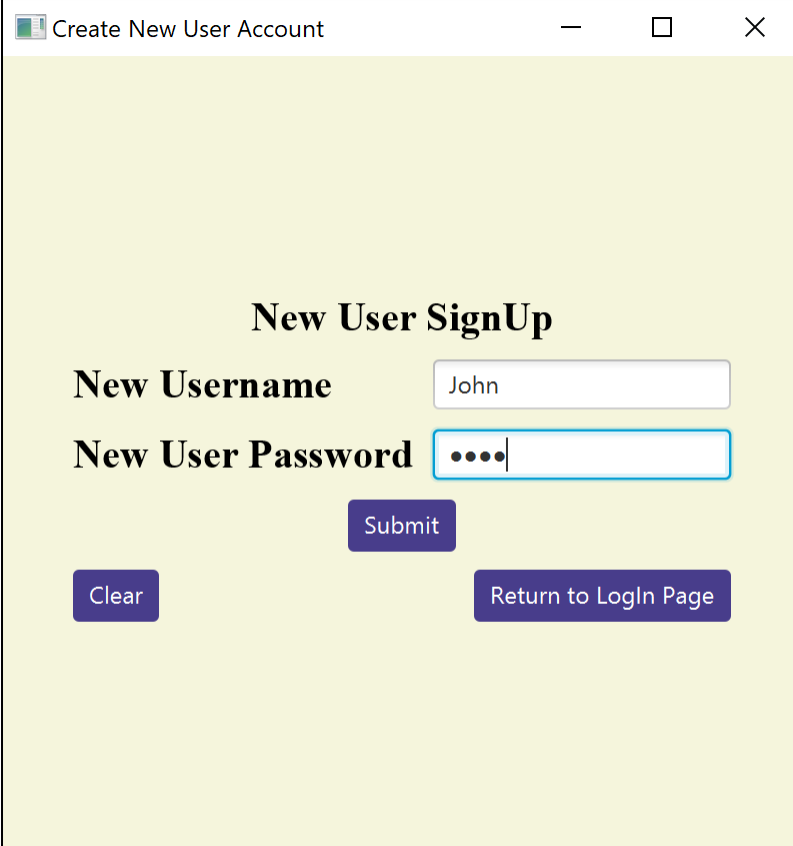
4. Log Out:
    Logs Out of the portal and returns the user to the user login page

Graphical User Interface (GUI)

General User

Step 1: New User Sign Up

User signs up by creating a new user account (Fig 1). They create a username and password. TMS verifies that the username is unique and that it does not match with a current user. If the user inputs an already existing username, then an error message is shown. If the username is valid then the information is saved in the Task Management System database. The user is then brought back to the User Log In page after they sign up with valid credentials (Fig 5).
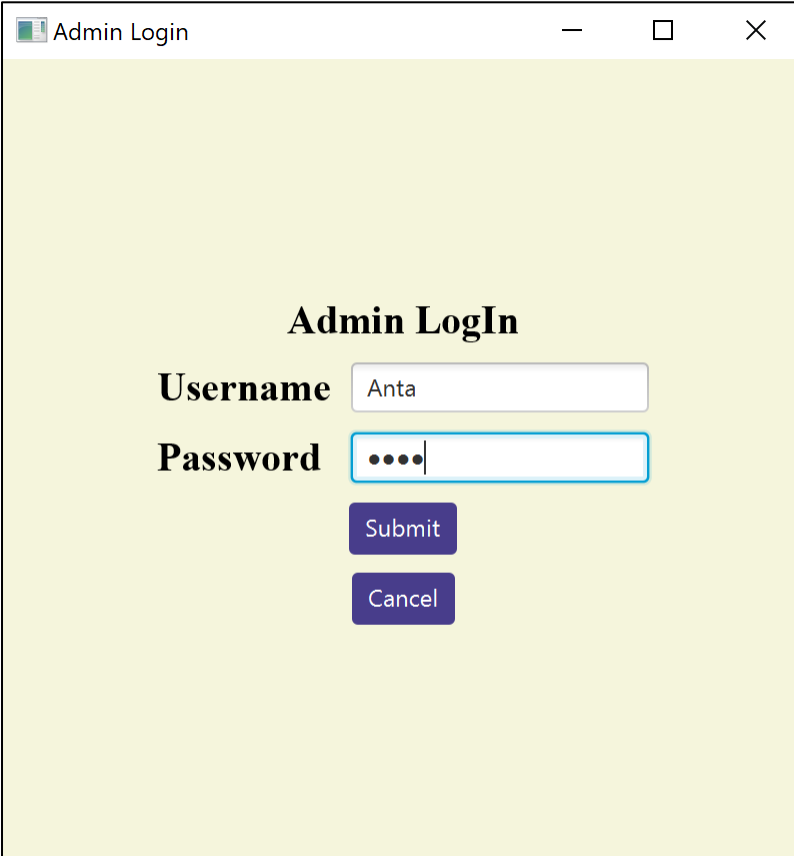
Fig 1: New User Sign Up

Step 2: Admin Log In

The user will not be able to log in until the admin approves their account. Therefore, the admin logs in using the admin portal (Fig 2). The admin username and password has been preset when building the application.

Fig 2: Admin Log In

Step 3: Admin Menu

The admin is brought to the Admin Menu page provided that the admin username and password is correct (Fig 3). If the information is incorrect then TMS displays an error message. The admin has the following options to choose from the menu:

1. Approving or Rejecting a New User in the New User List section
2. Creating a New Admin account
3. Updating their admin information
4. Logging out of the admin portal

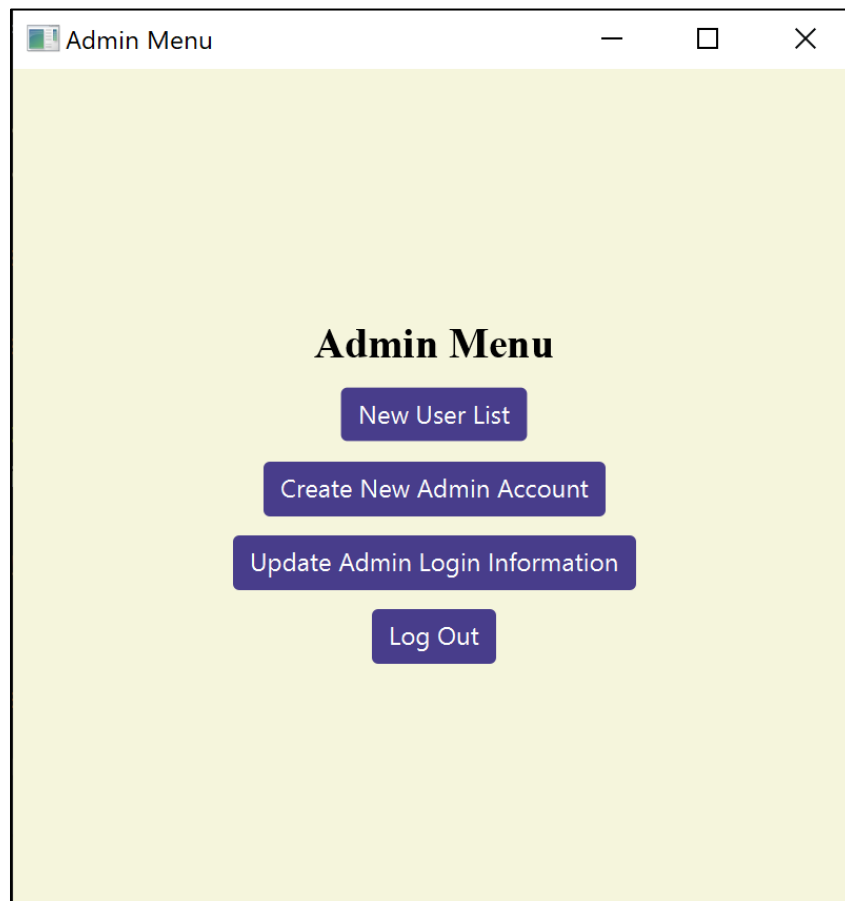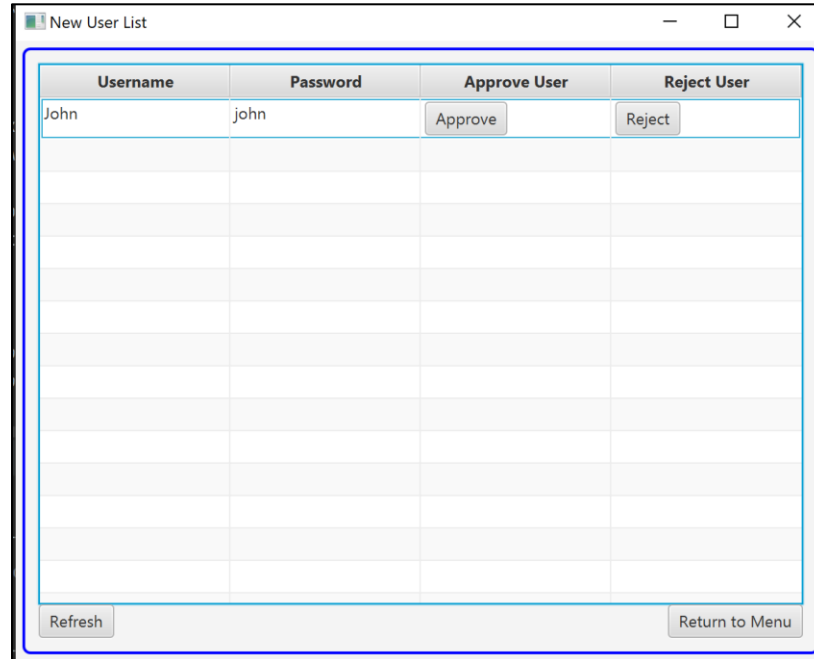To approve the new user, the admin selects New User List.

Fig 3: Admin Menu

Step 4: New User List

The admin is able to view a list of all new users (Fig 4) who have signed up in the New User List. The admin approves the new user "John" by clicking on the Approve button. The admin may also reject a user by clicking on the Reject button.
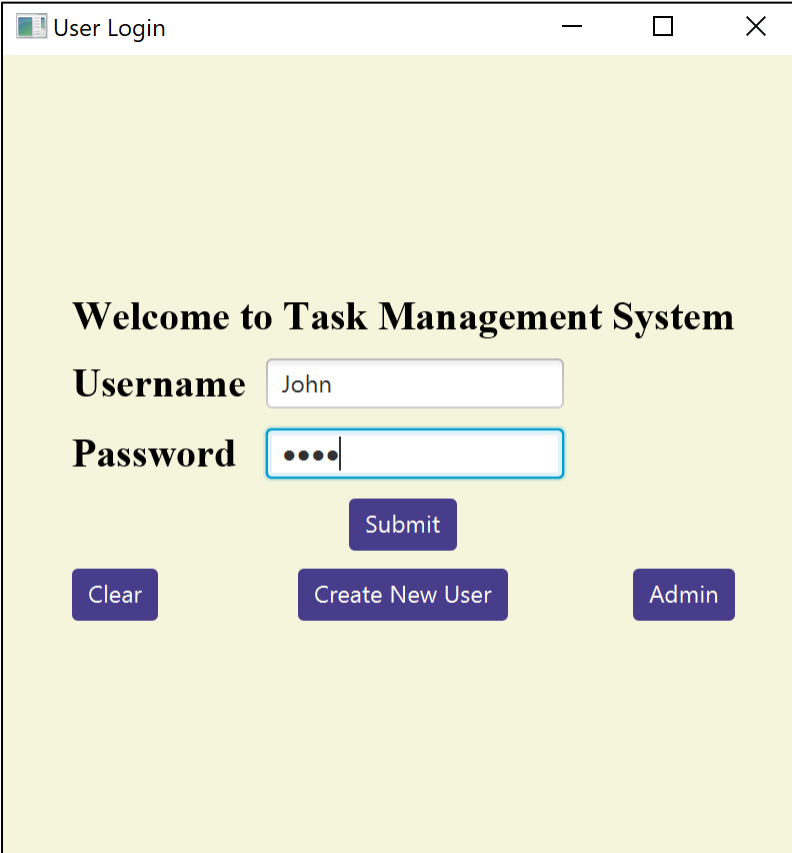

Fig 4: New User List

Step 5: User Log In

The new user is able to log in now since their account has been approved. The user inputs their username and password in the respective fields and clicks on Submit (Fig 5).

Fig 5: User Log In

Step 6: User Menu

The user is brought to the User Menu page provided that the username and password is correct (Fig 6). If the information is incorrect then TMS displays an error message. The user has the following options to choose from the menu:

1. Calendar
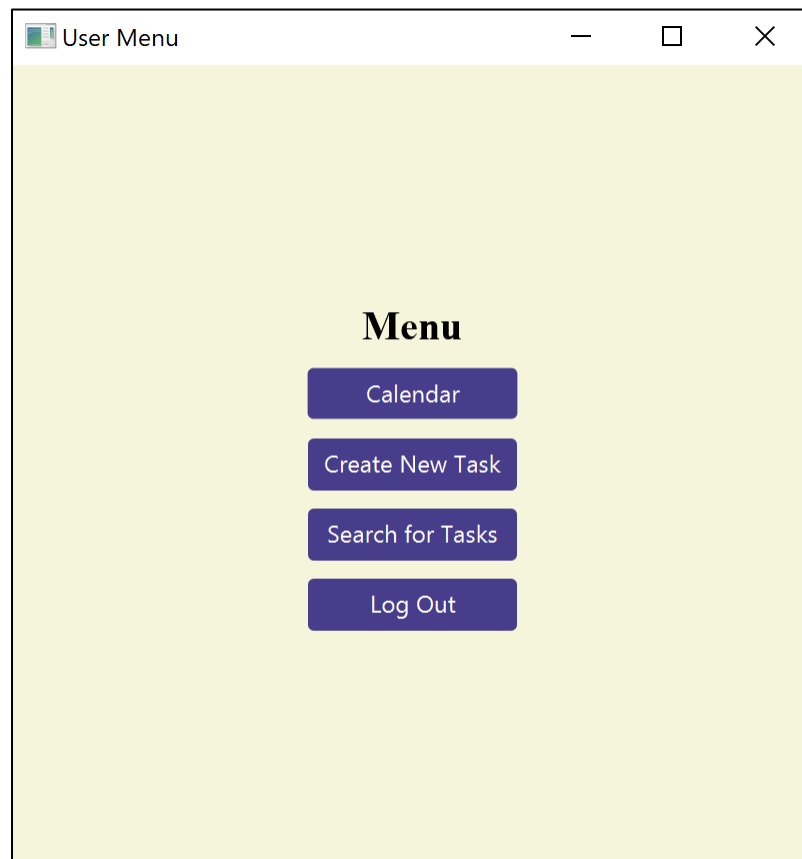2. Create New Task
3. Search for Tasks
4. Log Out

Fig 6: User Menu

Step 7: Current Date, Month, and Year on a Calendar

The user selects Calendar (Fig 7) from the Menu options. The user is directed to a different page where they are able to view the current date, month, and year on the calendar. They are able to navigate through the calendar using the month and year push buttons, to view a particular date. Moreover, for convenience, the user has the ability to search for a month and year by clicking on the Search for Month and Year button. The user clicks on Search for Month & Year button.
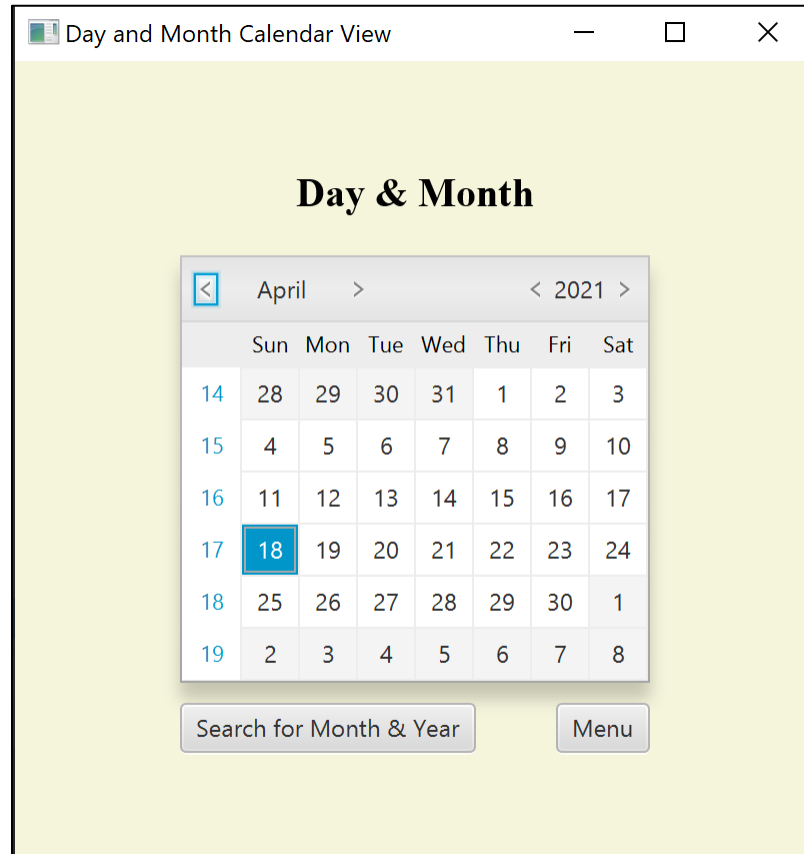
Fig 7: Current Date, Month, and Year on a Calendar

Step 8: Search for a Month and Year in the Calendar

The user inputs a Year and clicks on the Month they would like to view from the options provided (Fig 8). The search outputs a calendar view of the dates in the chosen month and year. The user may decide to return to the previous page by clicking on Current Date.

Fig 8: Search for a Month and Year in the Calendar

Step 9: Result from the Search of Month and Year (June 2000)

The user selected June 2000 and was displayed a calendar of that month and year (Fig 9). The user returns to the previous page where they have the following options:

1. Search for a different date
2. Return to the current date
3. Return to menu.

The user selects Menu. The user is provided the list of options as seen in Fig 6. The user selects Create New Task.
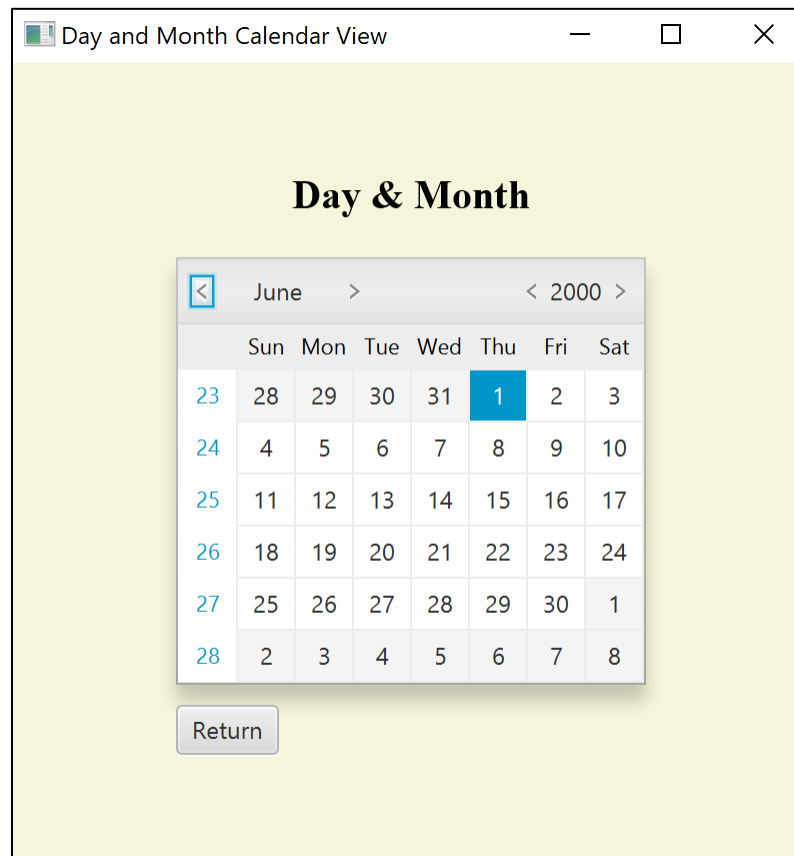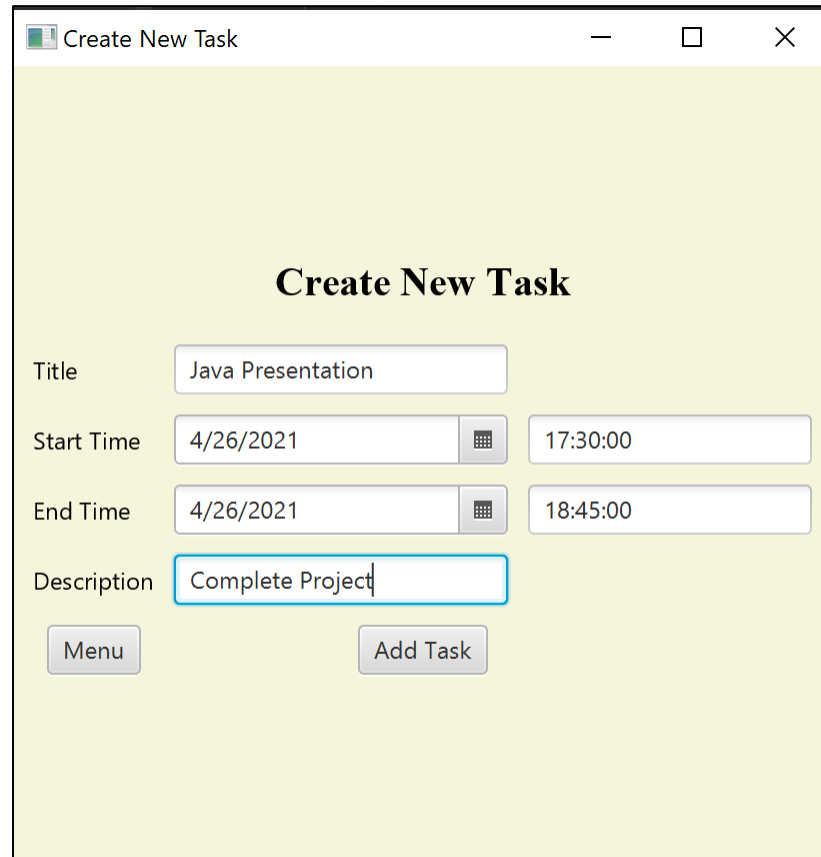

Fig 9: Result from the Search of Month and Year (June 2000)

Step 10: Create New Task

The user is displayed a new page where they are able to input details about their task (Fig 10). The user provides the title, start date, start time, end date, end time, and description. The start date and end date are mandatory fields to create a task, however, the rest of the fields are optional. In Fig 10. the user "John" inputted all the details for their Java Presentation task. The user clicks on add task to insert their task into the database. A particular user is able to view only their tasks; they cannot view the tasks of other users. After adding the task, the user returns to the Menu.

Fig 10: Create New Task

Step 11: Search for a Task and View the corresponding Result

The user selects Search for Tasks from the menu to search for a particular task and view its related data.

The user has several options to search for tasks:

1. The user may input the title of the task (Fig 11) and this would display a table of the all the tasks with that title (Fig 12).
2. The user may input the title and start date (Fig 13) and this would display all the tasks with the same title occurring on that date (Fig 14).
3. The user may input the title, start date, and start time (Fig 15) and this would display all the tasks with the same title, starting at that time on that particular date (Fig 16).

The comprehensive list of all combinations of search functions has been detailed below:

1. Title
2. Start Date
3. Start Time
4. End Date
5. End Time
6. Duration
7. Description
8. Title and Start Date
9. Title, Start Date, and Start Time
10. Start Date and Start Time
11. Start Date, Start Time, End Date, and End Time
12. Start Date and Duration
13. Title and Description
14. Default (No Input): List all tasks for that particular user

Fig 11: Search for a Task using the Title

Fig 12: Result of a Search using the Title of a Task

Fig 13: Search for a Task using the Title and Start Date

Fig 14: Result of a Search using the Title and Start Date of a Task

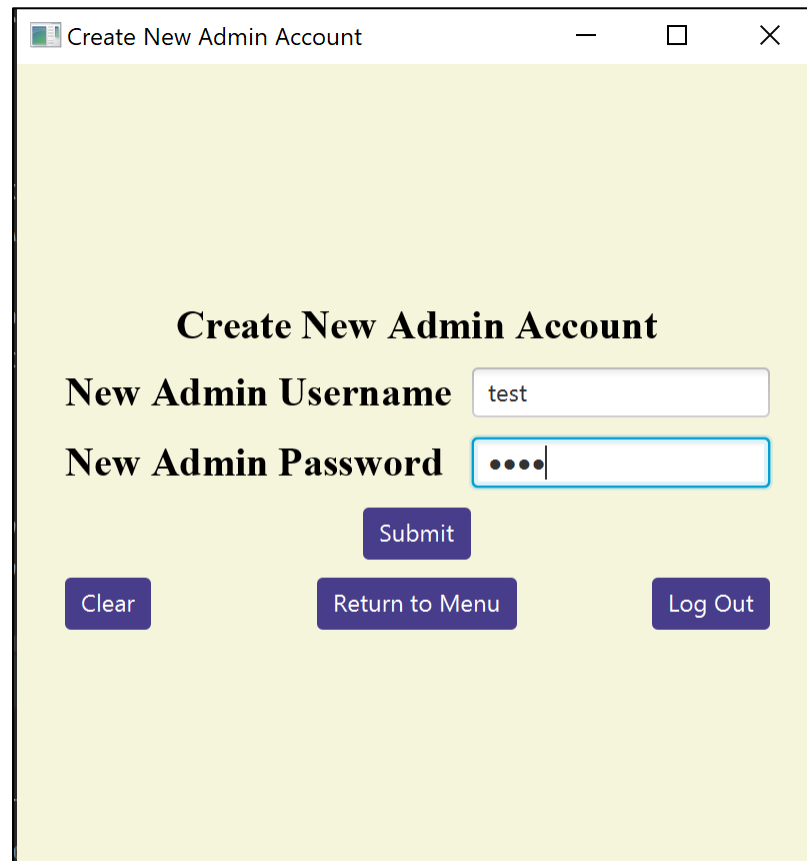**Fig 15: Search for a Task using the Title, Start Date, and Start Time**

Fig 16: Result of a Search using the Title, Start Date, and Start Time of a Task

Admin

Step 12: Create New Admin Account

The admin logs into their admin account using their credentials (Fig 2). The admin is displayed the admin menu and is able to choose from the options provided (Fig 3). The admin clicks on Create New Admin Account (Fig 17). This allows the current admin to add a new admin into TMS. The current admin inputs a username and password for the new admin. The information is then passed onto the new admin. The new admin would then log into their account and change their username and password in the Update Admin Account portal (Fig 18).

Fig 17: Create New Admin Account

Step 13: Update Admin Account Information

Any admin logged into their account is able to change their current username and password (Fig 18). In Fig 18, the Admin "Anta Fall" is changing their username from "Anta" to "Anta Fall". After clicking submit, their admin log in information is updated and they are logged out of their account. The admin is prompted to log into their account using their new username and password (Fig 19). As can be observed in Fig 20, the admin is able to login with their updated username and password.
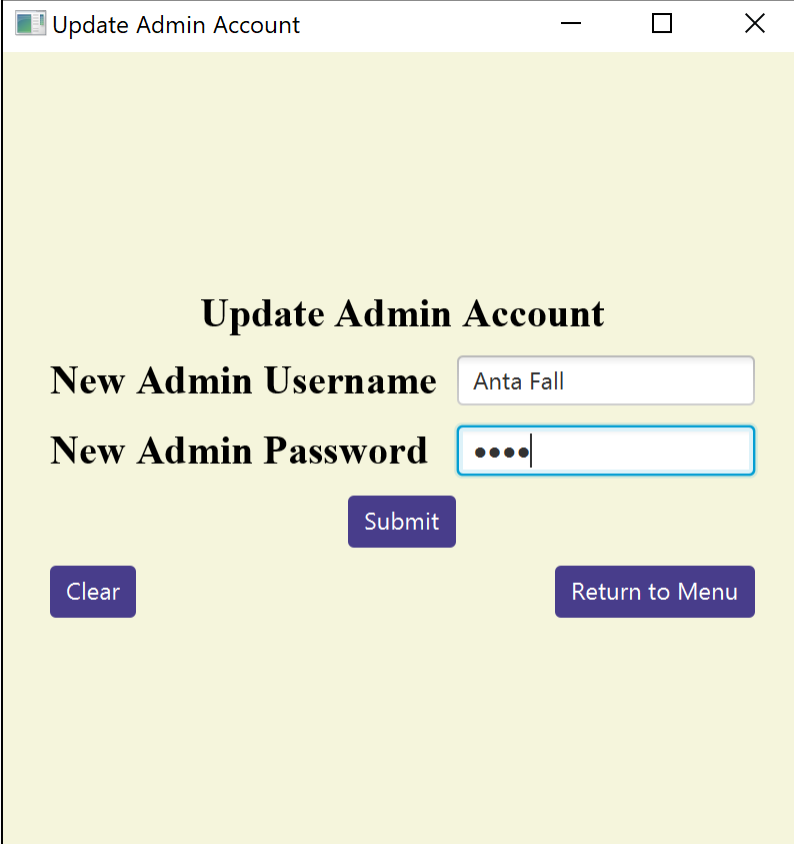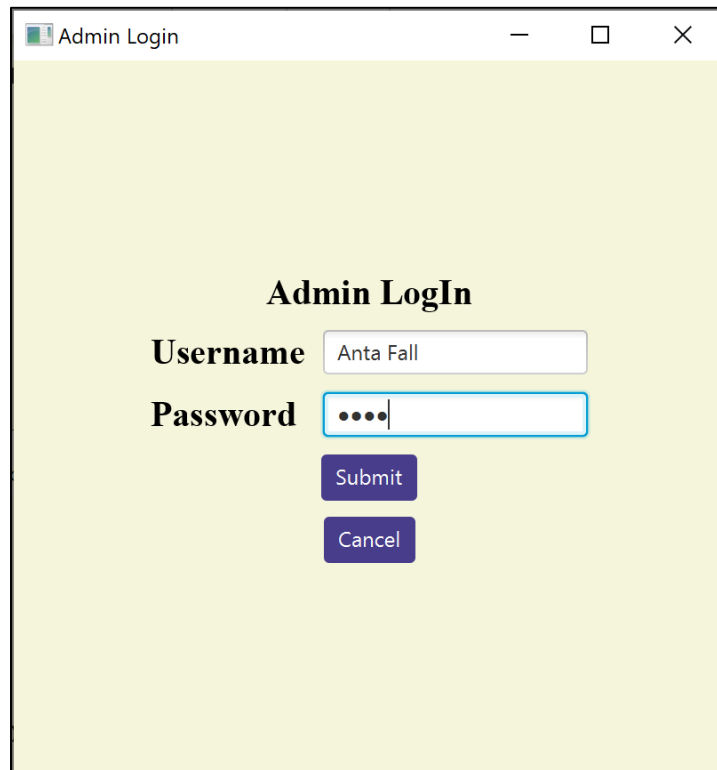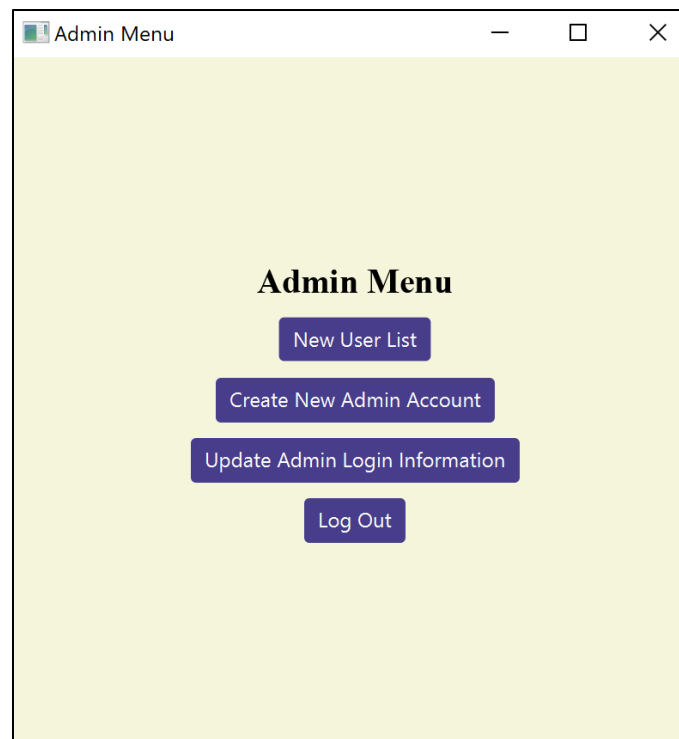

Fig 18: Update Admin Account Information

Fig 19: Admin Logging in with New Username and Password

Fig 20: Admin Successfully Logs In

Flowchart

Entity Relationship Diagram
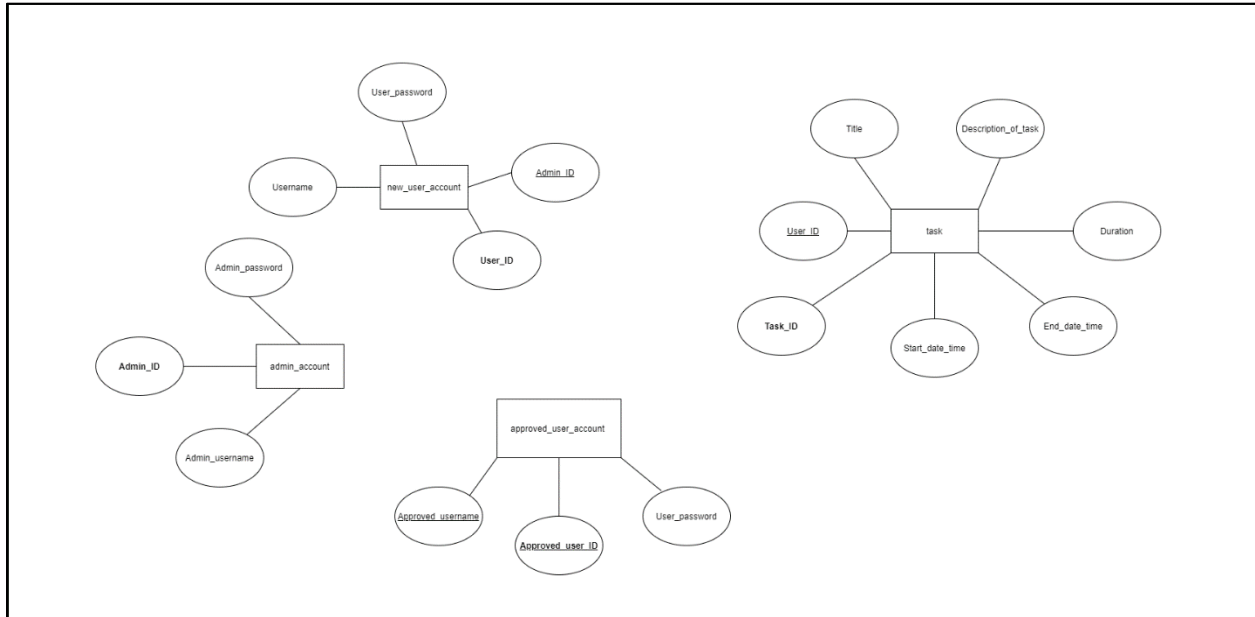
GitHub Repository Address

https://github.com/muntasir-hossain314159/Task-Management-System

Plans for Completing the Project

1. Display a warning message if a user tries to add a task on a particular date and time when there is already a task scheduled
2. Thank the user when the user quits the application
3. Configure the new user list to be divided equally among all admins
4. Add a Delete User page in the admin portal, so that an admin can remove a particular user's username, password, and corresponding recorded data
5. Add a delete button to allow a general user to remove a task from their account that they have previously scheduled
6. Add an edit button so that a user can edit a task that they previously scheduled
7. Check that the passwords set by the admin and users are at least 8 characters long.
8. Show an error message window if the admin or user inputs the wrong username or password during log in.
9. Show an error message window if a user or admin tries to create an account with a username that already exists
10. Show an error message if an admin tries to update their account with a username that already exists

New Features

1. An admin is able to create a new admin account
2. The user is able to search for a particular month and year in the TMS which will display in a calendar format the chosen month and year

Problems/Questions

Currently there are no problems that the team is facing.

Questions:

1. How many new features (additional features not mentioned in the project description) do we need to add in TMS? In the project description, you mentioned 1, however, in the progress report you mentioned 4.
2. What is table of tables and table of figures?
3. How much detail do you want us to include for variable description and Function description for our final report?
4. Is the project description that we included in this progress report detailed enough?