
SCHOOL OF ENGINEERING AND TECHNOLOGY

FINAL ASSESSMENT FOR THE BSC (HONS) INFORMATION TECHNOLOGY; BSC (HONS) COMPUTER SCIENCE; YEAR 2

ACADEMIC SESSION 2022; SEMESTER 3

PRG2104: OBJECT ORIENTED PROGRAMMING

Project

DEADLINE: Week 14

INSTRUCTIONS TO CANDIDATES

- This assignment will contribute 50% to your final grade.
- This is an individual assignment.

IMPORTANT

The University requires students to adhere to submission deadlines for any form of assessment. Penalties are applied in relation to unauthorized late submission of work.

- Coursework submitted after the deadline will be awarded 0 marks
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Lecturer's Remark (Use additional sheet if required)

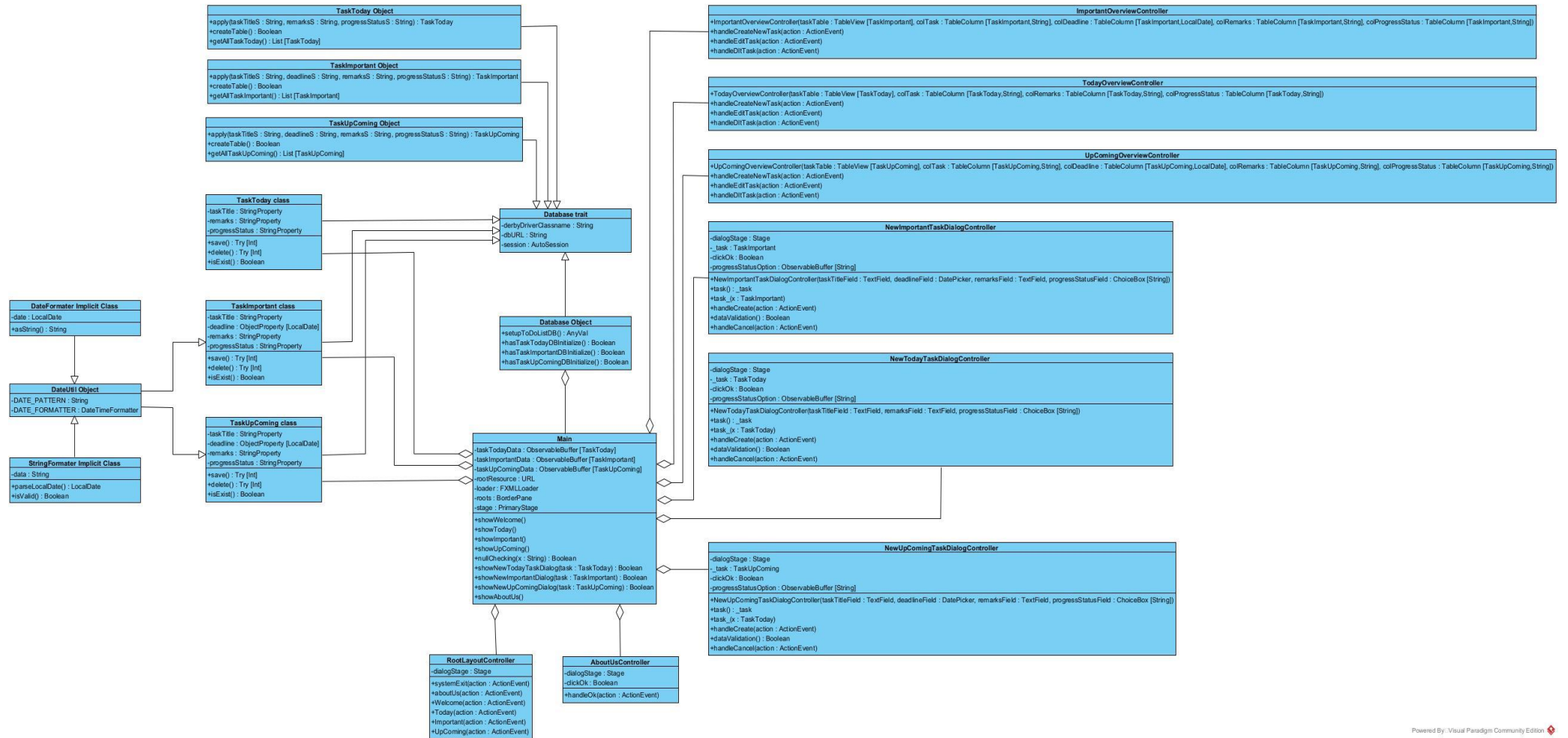
I Chua Yao Xian (Name) 20042552 std. ID received the assignment and read the comments *CHUA*
21/7/2022 (Signature/date)

Academic Honesty Acknowledgement

"I Chua Yao Xian (student name). verify that this paper contains entirely my own work. I have not consulted with any outside person or materials other than what was specified (an interviewee, for example) in the assignment or the syllabus requirements. Further, I have not copied or inadvertently copied ideas, sentences, or paragraphs from another student. I realize the penalties (*refer to page 16, 5.5, Appendix 2, page 44 of the student handbook diploma and undergraduate programme*) for any kind of copying or collaboration on any assignment."

CHUA 21/7/2022 (Student's signature / Date)

UML Class Diagram



To-do List System

This is a to-do list system for user.

Demo Video Link:

https://www.youtube.com/watch?v=EOn6qvp9qjw&ab_channel=YaoXian

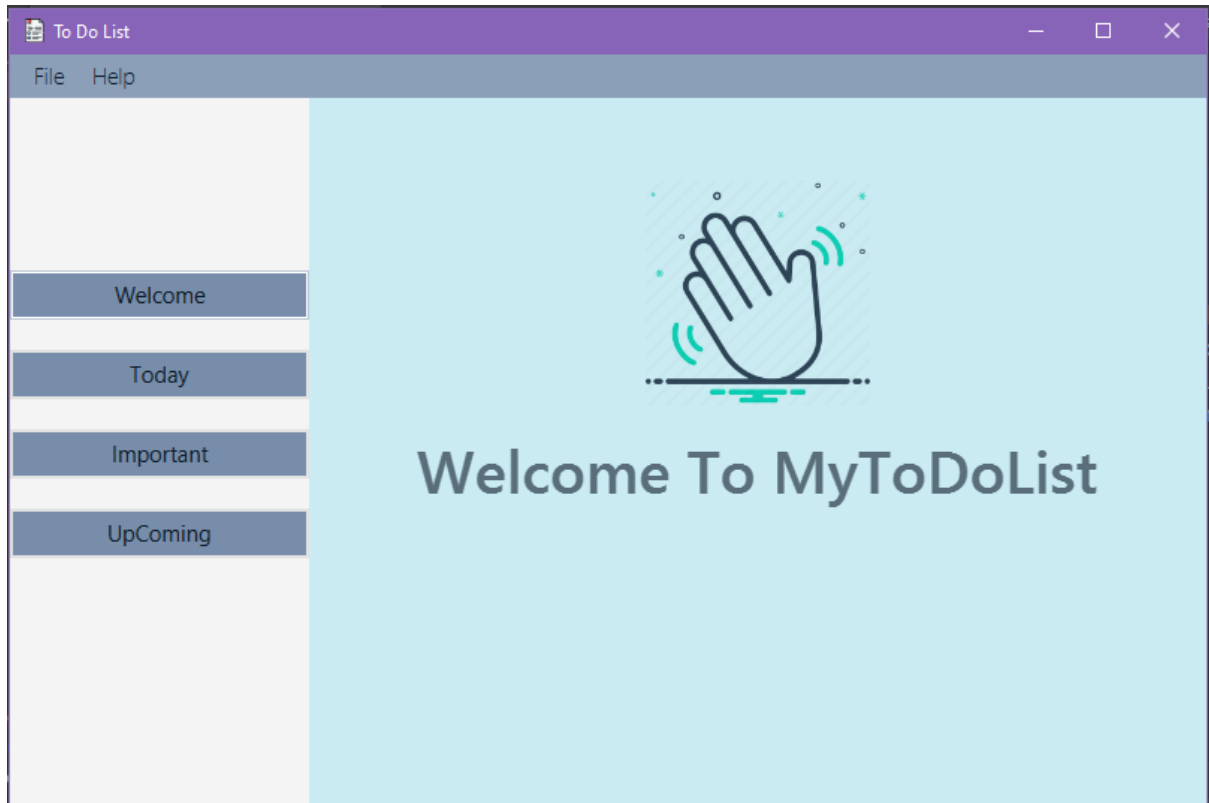


Image 1: Welcome Page

This page is a welcome page when user start the application it will straight away welcome user and they can select the beside buttons direct to Today Task Page, Important Task Page and UpComing Task Page

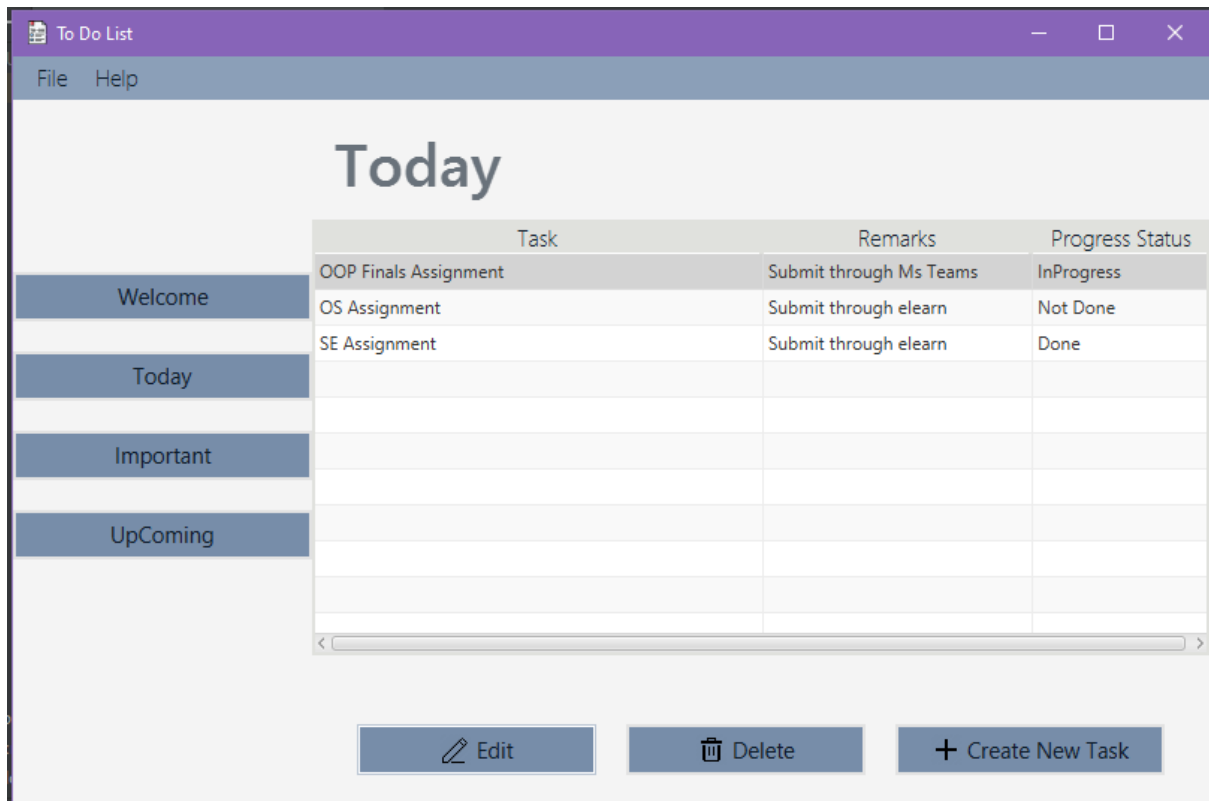


Image 2: Today Task Page

Today Task Page will show user all the today task that they have created. For example, task title, remarks and progress status. The 4 buttons on the left are direct user to Welcome page, Important Task Page and UpComing Task Page. Besides, the 3 buttons below are allowed user to edit exiting today task, delete exiting today task and create a new today task.

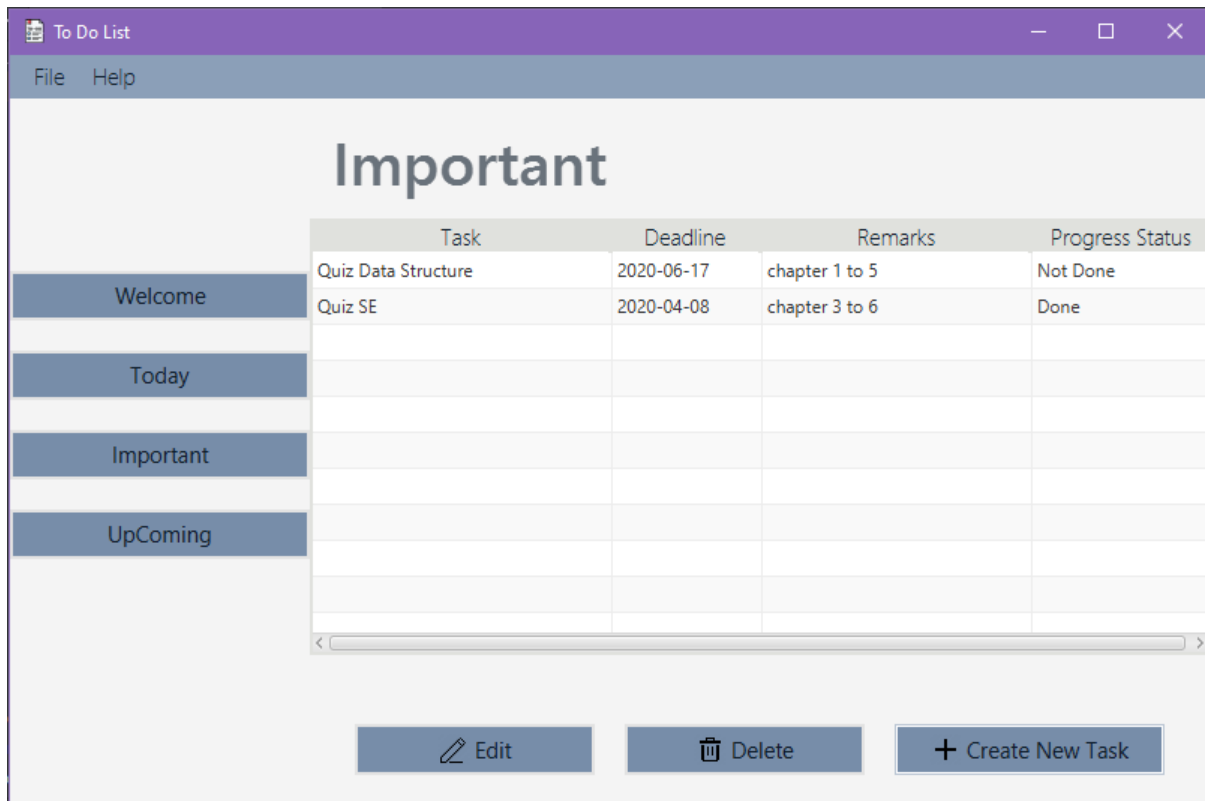


Image 3: Important Task Page

Important Task Page will show user all the Important task that they have created. For example, task title, deadline, remarks and progress status. The 4 buttons on the left are direct user to Welcome page, Today Task Page and UpComing Task Page. Besides, the 3 buttons below are allowed user to edit exiting important task, delete exiting important task and create a new important task.

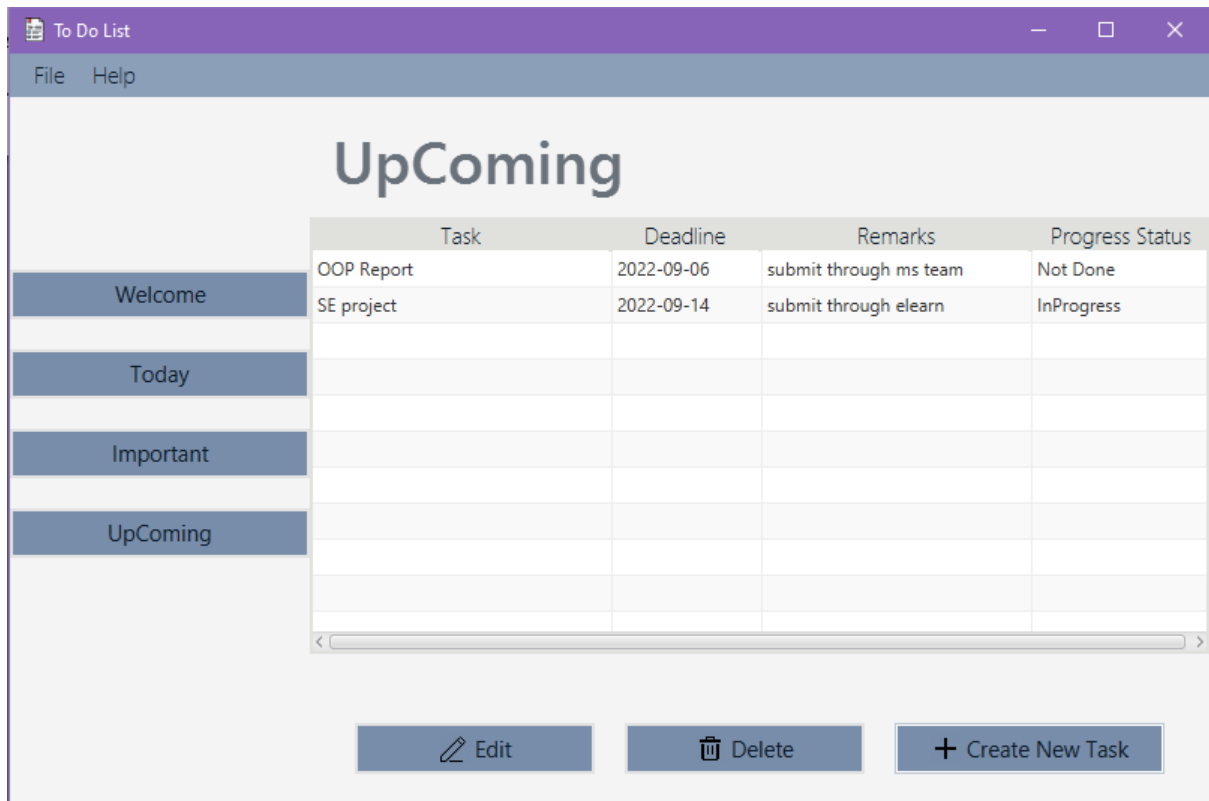
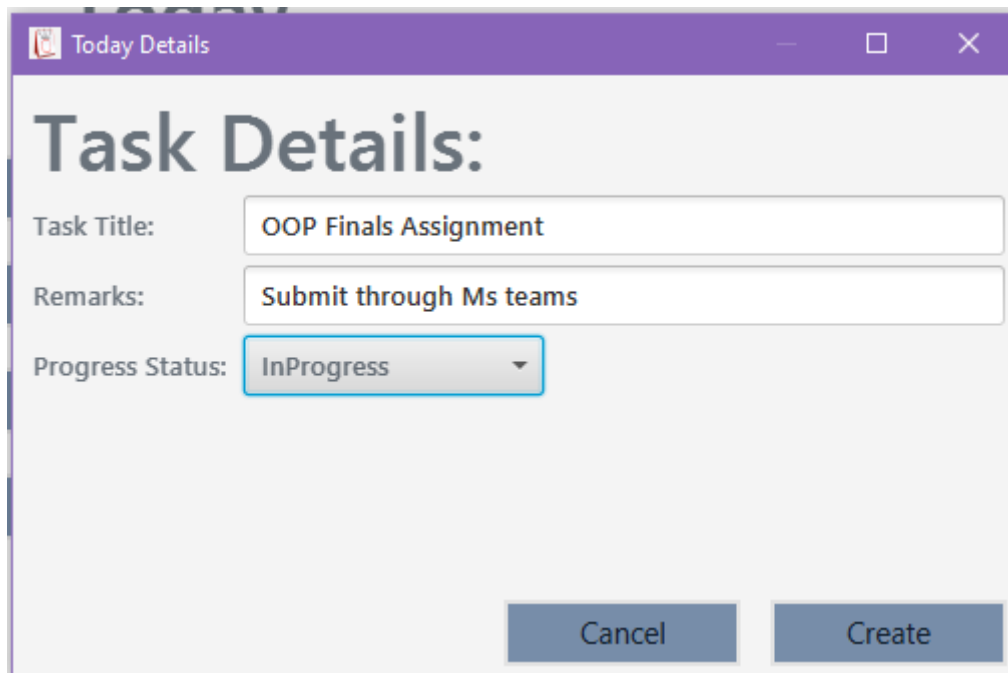


Image 4: UpComing Task Page

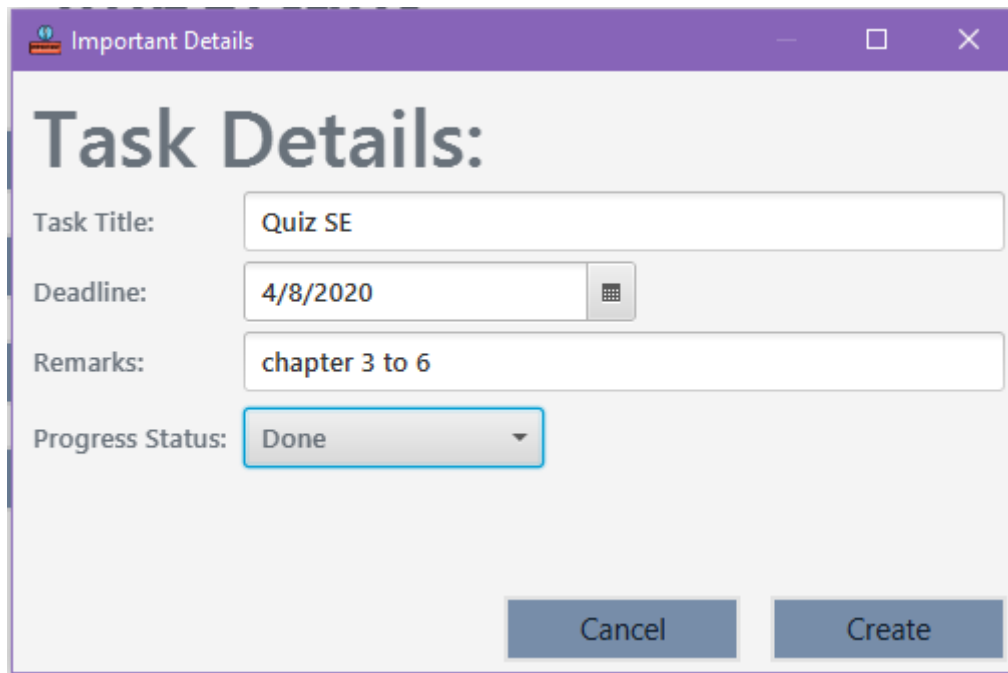
UpComing Task Page will show user all the UpComing task that they have created. For example, task title, deadline, remarks and progress status. The 4 buttons on the left are direct user to Welcome page, Today Task Page and Important Task Page. Besides, the 3 buttons below are allowed user to edit and delete exiting UpComing task and create a new UpComing task.



The image shows a software window titled "Today Details" with a purple header bar. Inside the window, the title "Task Details:" is displayed in a large, bold font. Below the title, there are three input fields: "Task Title:" with the text "OOP Finals Assignment", "Remarks:" with the text "Submit through Ms teams", and "Progress Status:" with a dropdown menu showing "InProgress". At the bottom right of the window, there are two buttons: "Cancel" and "Create".

Image 5: Today Task Details Page

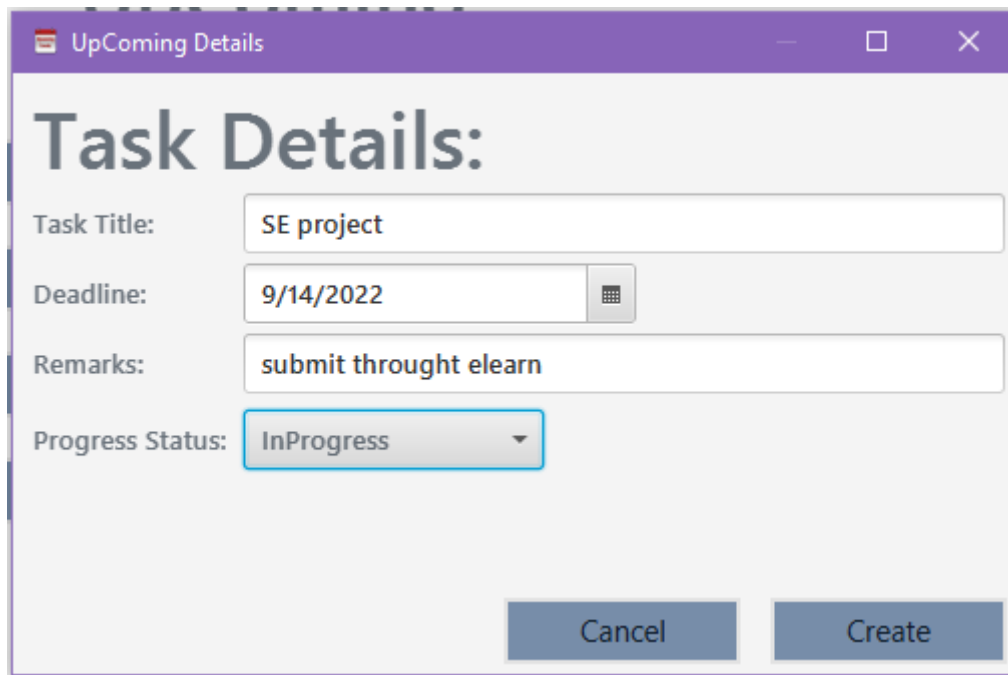
Today Task Details Page is to allow user to enter their today task details. For example, task title, remarks and progress status. Progress Status field is a choice box which allow user to choose their status either “Done”, InProgress” or “Not Done”. When user clicks the create new button on today task page and it will direct them to this empty form for them to enter their today task details. Moreover, if user clicks on edit button it will show them the selected today task’s details and allow user to make changes. After user have enter their today task details and click the enter button it will close the dialog box. If user does not want to create new today task, they may click the cancel button.



The image shows a software window titled "Important Details" with a purple header bar. Inside the window, the title "Task Details:" is displayed in a large, bold font. Below the title, there are four input fields arranged vertically. The first field is labeled "Task Title:" and contains the text "Quiz SE". The second field is labeled "Deadline:" and contains the date "4/8/2020", with a small calendar icon to its right. The third field is labeled "Remarks:" and contains the text "chapter 3 to 6". The fourth field is labeled "Progress Status:" and is a dropdown menu currently showing "Done". At the bottom right of the window, there are two buttons: "Cancel" and "Create".

Image 6: Important Task Details Page

Important Task Details Page is to allow user to enter their Important task details. For example, task title, deadline, remarks, and progress status. Deadline field is a date picker which allow user to choose the deadline. Progress Status field is a choice box which allow user to choose their status either “Done”, InProgress” or “Not Done”. When user clicks the create new button on Important task page and it will direct them to this empty form for them to enter their important task details. Moreover, if user clicks on edit button it will show them the selected important task’s details and allow user to make changes. After user have enter their important task details and click the enter button it will close the dialog box. If user does not want to create new important task, they may click the cancel button.

A screenshot of a software dialog box titled "UpComing Details". The dialog box has a purple header bar with a close button (X) in the top right corner. Below the header, the title "Task Details:" is displayed in a large, bold, dark grey font. The form contains four input fields: "Task Title:" with the text "SE project", "Deadline:" with the date "9/14/2022" and a small calendar icon to its right, "Remarks:" with the text "submit through elearn", and "Progress Status:" with a dropdown menu showing "InProgress". At the bottom right of the dialog box, there are two buttons: "Cancel" and "Create".

UpComing Details

Task Details:

Task Title: SE project

Deadline: 9/14/2022

Remarks: submit through elearn

Progress Status: InProgress

Cancel Create

Image 7: UpComing Task Details Page

UpComing Task Details Page is to allow user to enter their UpComing task details. For example, task title, deadline, remarks, and progress status. Deadline field is a date picker which allow user to choose the deadline. Progress Status field is a choice box which allow user to choose their status either "Done", InProgress" or "Not Done". When user clicks the create new button on UpComing task page and it will direct them to this empty form for them to enter their UpComing task details. Moreover, if user clicks on edit button it will show them the selected UpComing task's details and allow user to make changes. After user have enter their UpComing task details and click the enter button it will close the dialog box. If user does not want to create new UpComing task, they may click the cancel button.

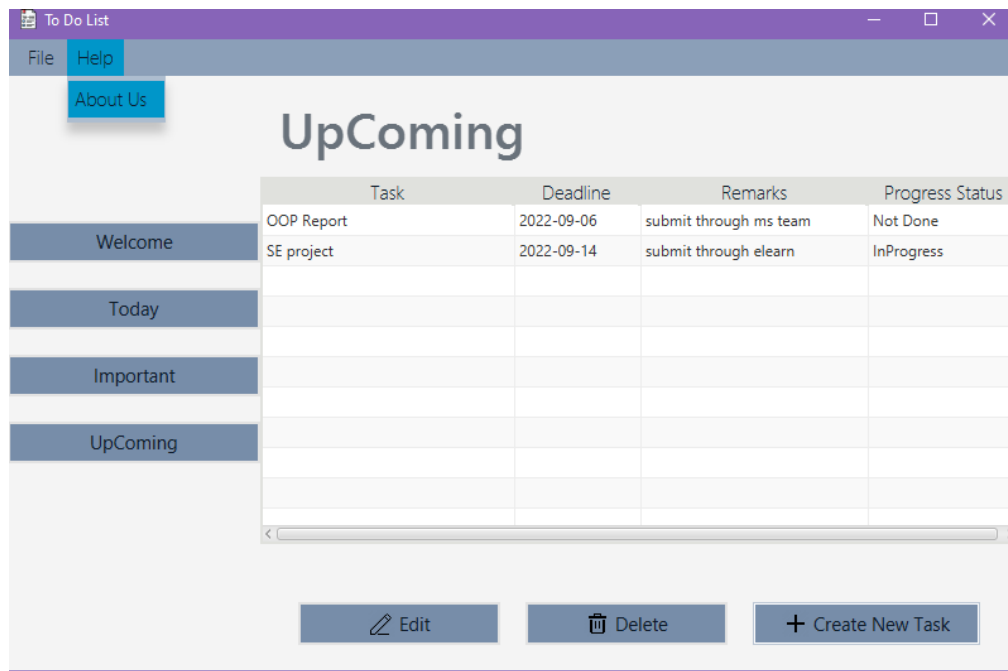


Image 8: About Us Button

User is able to click the About Us Menu Bar Button and it will direct them to About Us Page.

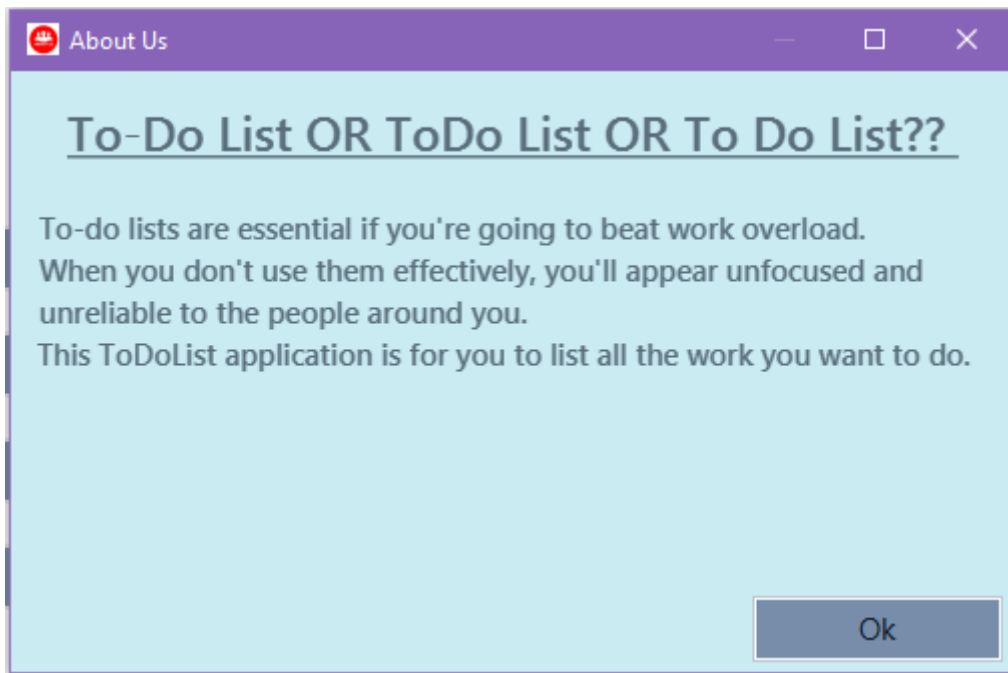


Image 9: About Us Page

About Us Page is used to show user about this to-do list. User may click about us menu bar button in order to direct them to this page. After user have read finish, they may click on Ok button to close the dialog.

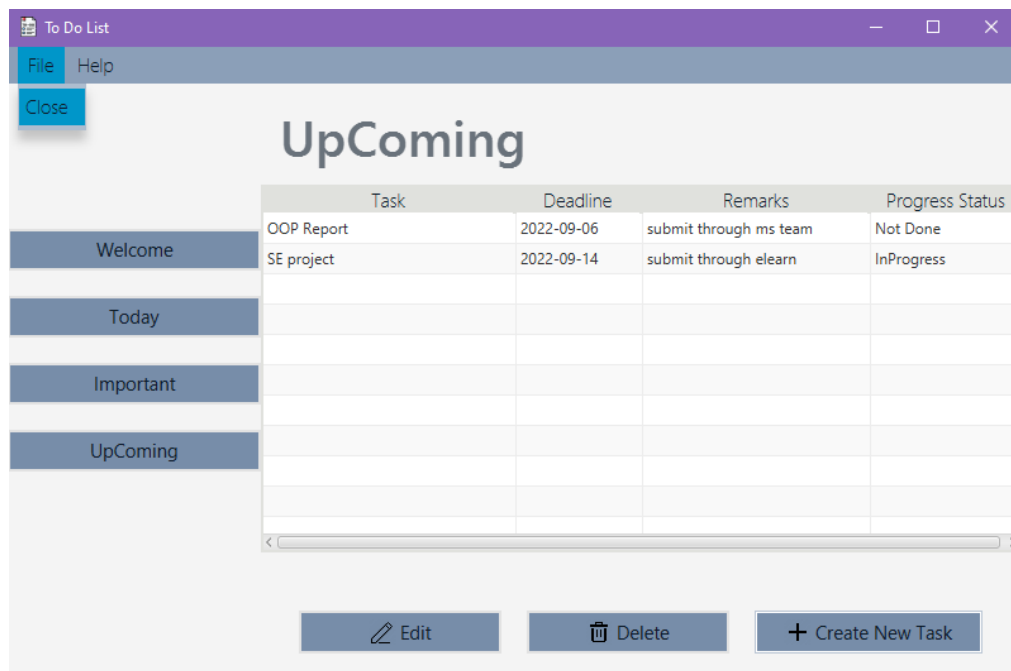


Image 10: Close Button

User is able to click the Close Menu Bar Button and it will end the whole to-do list system.

Personal Reflection

In this assignment I have applied object-oriented concepts that I had learnt during this semester. For example, polymorphism, inheritance, and collections. Besides, I had added database in my to-do list so that it is able to store all the task information into the database when user had saved their task details into the system. There are few problems that I encountered during this assignment. Firstly, I had encountered implementing choice box function in my to-do list. This issue was resolved by Google, who displayed the solution in JavaFX, and I progressively changed it and successfully added it to my to-do list. Secondly, which is time management as all the assignments from other different subjects have the same due dates as this OOP assignment. So, I must use time management skills to manage my time effectively to finish all my assignments. Additionally, as I had never used APIs before, I found it quite difficult to learn how to use them and to identify between JavaFX and ScalaFX API. Lastly, although I used some of the tasks from the practical class as a reference, there were several parts I didn't understand, so I had to rewatch the recording to understand the ideas behind each function. The strength of my to-do list is that I had designed a variety of functions. For instance, user is able to create a new task, edit selected task and delete selected task. Moreover, I have implemented a choice box function so that user can just choose their progress status of their task. Besides, my to-do list is able to store and read the date when user create, edit, and delete their task. However, there are some weaknesses in this to do list that can be further improved. For instance, it can be improved by having a history function so that when user can find back their history when they had accidentally deleted their task. Besides, it can be improved by having a login and logout page so that user can have more than one account for this to-do list application. Furthermore, it can be improved by having an all-task summary function on homepage so that user can straight away see all the task on one page.

Reference

Dr Chin's practical class exercises: Address App