

ToDoList Java Programming Project

This is a project written in java to handle project tasks through command line interface. The application allow a terminal user to CRUD operations of tasks with some additional functionalities such as sorting, marking specific task to change the current status. The intuitive user interface provide simple and flexible methodology for an end user to manage the project tasks with convenience. Program consists of following functions as described below.

User Menu Options

1-Show Menu :

Displays the user with a menu items to be chosen to execute a task. Following task list is displayed to the user to choose an option.

```
Welcome to ToDoly !!!
You have total of 3 and 2 task to do

(1) Show Menu
(2) Add a task
(3) Remove a task
(4) Edit a task
(5) Show All tasks
(6) Mark a task completed
(7) Mark a task not completed
(8) Save current tasks
(9) Sort task by project
(10) Sort task by date
(0|Q|q) Quit

Enter your choice :
```

2-Add a Task :

User is able to add a new task to the list of tasks. User is given option to add the necessary details while validating the user input.

```
Welcome to ToDoly !!!
You have total of 3 and 2 task to do

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(4) Edit a task
(5) Show All tasks
(6) Mark a task completed
(7) Mark a task not completed
(8) Save current tasks
(9) Sort task by project
(10) Sort task by date
(0|Q|q) Quit

Enter your choice :
2
Enter Project Name
Project 1001
Enter Task
Task 23098
Enter date to be completed "dd/MM/yyyy"
2/2/2017
Entered date is already passed, Please enter a valid date !!!
23/8/2019
Error adding task to the list !!!
```

3-Remove a Task:

User is able to remove a task by providing task number. User is also given a option to enter a valid task number by providing number of tasks and this validates the user input until user enters a valid task from the task list.

Enter your choice :

- (1) Show Menu
- (2) Add a task
- (3) Remove a task
- (4) Edit a task
- (5) Show All tasks
- (6) Mark a task completed
- (7) Mark a task not completed
- (8) Save current tasks
- (9) Sort task by project
- (10) Sort task by date
- (0|Q|q) Quit

Enter your choice :

3

Enter the task number between (1-4)

46

Enter the task number between (1-4)

3

```
*****
TASK# PROJECT NAME    DUE DATE      STATUS      TASK NAME
*****
1      Project2       Sep 19, 2019  done       titel2
2      www           Sep 12, 2019  pending    ww
3      ww            Dec 23, 2037  pending    www
4      Project 1001   Aug 23, 2019  pending    Task 23098
Task number 3 removed !!!
```

4-Edit a Task:

This option gives user to edit existing task though the command line interface as shown in the screen capture below.

```

(1) Show Menu
(2) Add a task
(3) Remove a task
(4) Edit a task
(5) Show All tasks
(6) Mark a task completed
(7) Mark a task not completed
(8) Save current tasks
(9) Sort task by project
(10) Sort task by date
(0|Q|q) Quit

Enter your choice :
4
Enter task number between (1-3)
5
Enter task number between (1-3)
3
Update Project Name (Project 1001)
Update Task (Task 23098)
Task 30095
Update Task date "dd/MM/yyyy" (Aug 23, 2019)
6/8/2019

```

5-Show all tasks:

Use is shown all the task in the existing task list.

```

Enter your choice :

(1) Show Menu
(2) Add a task
(3) Remove a task
(4) Edit a task
(5) Show All tasks
(6) Mark a task completed
(7) Mark a task not completed
(8) Save current tasks
(9) Sort task by project
(10) Sort task by date
(0|Q|q) Quit

Enter your choice :
5
*****
TASK# PROJECT NAME    DUE DATE    STATUS    TASK NAME
*****
1      Proejct3        Jun 5, 2019  pending   Task 5
2      Project 3          Sep 8, 2019  pending   Task 304

```

6-Mark a task completed

User is able to change the task status to “Done” using this option.

```
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(3) Remove a task
(4) Edit a task
(5) Show All tasks
(6) Mark a task completed
(7) Mark a task not completed
(8) Save current tasks
(9) Sort tasks by project
(10) Sort tasks by date
(0|Q|q) Quit

Enter your choice :
6
Enter the task number :
1
Task number 1 has been marked as Done !!! !!!
```

7-Mark a task not completed

User is able to change the task status to “Pending” using this option.

```
Welcome to ToDoly !!!
You have total of 3 and 2 task to do

(1) Show Menu
(2) Add a task
(3) Remove a task
(4) Edit a task
(5) Show All tasks
(6) Mark a task completed
(7) Mark a task not completed
(8) Save current tasks
(9) Sort tasks by project
(10) Sort tasks by date
(0|Q|q) Quit

Enter your choice :
6
Enter the task number :
1
Task number 1 has been marked as Done !!! !!!
```

8-Save current tasks

User is able to save all current tasks to persistent storage to be used later.

9-Sort tasks by project

User is able to sort existing task list by project name.

10-Sort tasks by date

User is able to sort existing task list by task completion date.

0-Quit

Program exists gracefully after saving the current task list to persistent storage.