

TO-DO LIST SPECIFICATIONS

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SPECIFICATIONS

INTRO

My application is a basic day to day to do list made with java. It will allow users be able to easily interact with a simple interface.

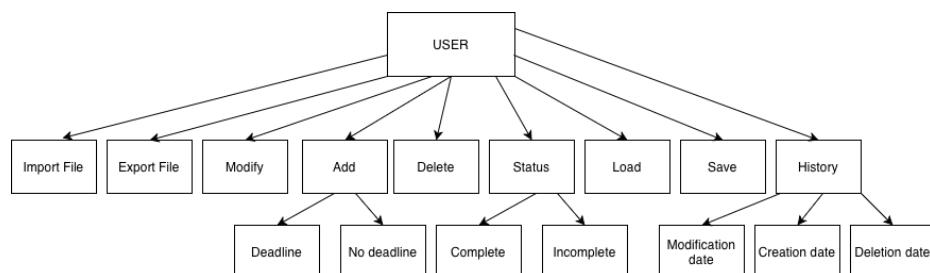
OVERVIEW

The application will make it possible to add your data, delete your data and modify existing data. It will be able to accept tasks with deadlines and without deadlines and appropriately handle these. When a task is completed, you will be able to mark it as completed. The to-do list will be able to track the dates by keeping a history of the modification, creation and completion dates. The to-do list application will be able to filter what task has been completed and what task hasn't. And finally you will be able to export the already created to-do list as well as import preexisting to-do list files.

The application will make use of a Swing-based GUI for the low-level graphics and will include a Jtable class and a menu bar. The collections framework will be used to store and manage the memory used by the tasks. Serialization will be used for file output and input.

Unit tests will also be created in order to test the key functionality of the program. Such as if the application is able to save and delete or if it is able to handle dates and deadlines.

USE-CASE DIAGRAM



DESCRIPTION

Import File: Imports an external file which was created previously using the application and allows it to be edited.

Export File: Saves the file as an external document to be saved.

Modify: Allows the user to change the description, deadline date(if added).

Add: The user creates a new task by inputting the task name, and deadline if they need it. The system records but needs the save function to be called to be able to store it in the database.

Delete: Deletes a task permanently from the application.

Status: Checks whether a task has been completed or not.

Load: Loads the data from an existing file.

Save: Saves the data within the application.

History: Lists the modification, creation or deletion dates of tasks added to the to-do list.

DESCRIPTION ABOUT HOW THE TASK WILL BE SOLVED

I will use a basic layer structure with 3 layers.

1. Data Layer: for storage.

I will have one class(Task) with the deadline, status, creation/modification/deletion dates.

Serialization to export and import to a file.

2. Logic Layer: for business Rules.

I will have simple methods like addTask(), removeTask(), markComplete()

There will be validation checks, to check for valid dates, empty tasks, etc.

3. GUI Layer: user interface

I will include a Jtable to display tasks in rows and columns

A menu bar for add, delete and edit options.