Taskflow Software Design Document

# Description

Taskflow is a work flow manager that has hierarchical tasks ending with work items.

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| **ToDoList** |
| + projects : List<Project>  + resources : List<Resource> |

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| --- |
| **Project** |
| + tasks : List<Task>  + name : String  + description : String |

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| --- |
| **Task** |
| + name : String + description : String  + assignedTo : String + subtasks : List<Task> |
| + isOpen() : boolean  + getEstimate() : int  + getActual() : int |

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| --- |
| **TaskInfo** |
| + estimate : int  + actual : int  + status : TaskStatus |

|  |
| --- |
| **TaskStatus** |
| PLANNED  IN\_WORK  REJECTED  FINISHED |

# Features

* Personal Estimation Metrics – These metrics relate how well you are estimating your tasks.
  + Estimation Factor – Do you want to estimate more accurately? Keep thinking the same way, but multiply that number by this factor before telling others.
  + Estimation Consistency – Are some of your estimates just wildly incorrect while most others are spot on?

How many times have you wished you had a clear, concise way to keep up with what you’ve done and what you need to do? I’ve often wanted simple way to jot down notes and ideas about the things I’m working on. Also, it would be great to be able to print out a list of my activities/ accomplishments for a given time rather than just thinking, “Well, I just did a bunch of stuff… You know, work…”

The objective of 2Dls is to solve these problems for you. Or rather, provide you with an application to help you solve them yourself. In short 2DLs allows the user to

* create one or more ToDo Lists,
* add/delete/modify Projects to these lists,
* log/delete/modify Status Updates for Projects,
* add/delete/modify Notes to Projects,
* create Pending Reports to delineate all ongoing tasks,
* create Status Reports to summarize activity, and
* create Project Reports to capture ALL project activity.

# Functionality

We are all very busy people in life. We need a central location to store our thoughts, actions, accomplishments, and goals. 2DLs provides a complete solution to these problems.

The most applications which are enjoyable to use are those whose interface is straightforward. These applications are usually quite simple and serve a very narrow purpose. As the developer adds more and more "cool" features to a product, he adds greater complexity, which can lead to a complex user interface and user isolation due to interface implementation. For these reasons, 2DLs is as "lite" as possible.

## Conceptual Model:

I speak of a conceptual model here only to make the following sections make a little more sense. 2DLs manages a collection of "To-do" lists. Each list is made up of a collection of tasks. Tasks, in turn, are a collection of notes, updates, and other tasks (subtasks).

Notes are snippets of information about a task. They bear no consequence to status reports.

Updates are intended to relate one's progress on a certain task.

Startup:

When started, 2DLs will display the home screen. If available, the application will add an icon to the system tray for ease of use.

When automatically started, the "-iconify" option is passed on the command line. The splash screen will be displayed but the main screen will not. Instead, the system tray icon will appear. If the system tray is not available, a warning will be displayed followed by the home screen.

# User Interface

The display is split vertically into a navigation pane on the left and an editor pane on the right.

The navigation pane allows the user to change the item displayed in the editor pane by clicking on the item of interest. The user may change the current context of the navigation pane by double-clicking an item or by clicking the "Up to ..." button. The tool tip text for this button will change depending on the current context.

# Use cases

## Use Case #1

As any good security officer would, Worf started his day by reviewing what he needs to do. After making sure no one is around he whips out his favorite pink tricorder and starts 2DLs. He reads the lists from the navigation pane carefully before selecting one:

* Alexander
* Training
* Work
* Fun

"Wait! Fun?" he thinks. Worf quickly looks around again to confirm that he is alone. After a moment he remembers a couple of nights back that consisted of too much blood wine.

He quickly deletes this task by right-clinking on it and selecting "Delete". After a brief pause he begins to wonder what in the Klingon Homeworld could he possibly consider fun. He clicks undo at the top of the screen and clicks the now visible task "Fun" to read its description.