

# ToDo Application

The ToDo application introduces organization in day-to-day tasks. It is a great performance booster for organizations and individuals, working on multiple projects.

## 1. Assignment Goals

1. Development of ToDo application for management ToDo lists;
2. Development of machine usable CLI tool for access to core system functionality.

## 2. Assignment Description

### 2.1 Required Tasks

#### Authentication

**Story 1.** As a User I need to be able to log into the ToDo application with my username and password. If this is the first execution of the application and there are no users in the database I need to be able to log-in with the following user:  
Username: admin

Password: adminpass

**Story 2.** As a User without administrative privileges my access to the Users Management View needs to be restricted.

#### Users Management

**Story: 3.** As a User with administrative privileges I need to be able to access the Users Management View where I can list all users, create, edit and delete a user.

**Story: 4.** As a User with administrative privileges I need to be able to create a user and persist the following information: Id Username Password First Name Last Name Date of creation Id of the creator Date of last change Id of the user that did the last change

**Story: 5.** As a User with administrative privileges I need to be able to delete a user by Id

**Story: 6.** As a User with administrative privileges I need to be able to edit a user by Id by providing the following information: Username Password First Name Last

Name Date of creation and Id of the creator remain unchanged Date of last change and Id of the user that did the last change are updated automatically

## ToDo Lists Management

**Story: 7.** As a User I need to be able to access the ToDoLists Management View where I can access all ToDo lists that are created by me or are shared with me -list all ToDo lists, create, edit and delete a ToDo list.

**Story: 8.** As a User I need to be able to create a ToDo list and persist the following information:IdTitleDate of creationId of the creatorDate of last changeId of the user that did the last change

**Story: 9.** As a User I need to be able to delete a ToDo list by Id. If the ToDo list is not created by me (is shared with me by another user) then the delete action removes the share.

**Story: 10.** As a User I need to be able to edit a ToDo list by Id by providing the following information:IdTitle(Date of creation and Id of the creator remain unchanged)(Date of last change and Id of the user that did the last change are updated automatically)

**Story: 11.** As a User I need to be able to share a ToDo list with other users.

## Task Management

**Story: 12.** As a User I need to be able to access the Tasks Management View where I can access all Tasks from a single ToDo listthat is either created by me or is shared with me. I should be able to list all Tasks in the ToDo list, create, edit and delete a Task in the ToDo list.

**Story: 13.** As a User I need to be able to create a Task in a ToDo list and persist the following information:IdId of the List (the Id of the ToDo list that the Task belongs to)TitleDescriptionIsCompleteDate of creationId of the creatorDate of last changeId of the user that did the last change

**Story: 14.** As a User I need to be able to delete a Task by Id.

**Story: 15.** As a User I need to be able to edit a Task by Id by providing the following information:IdTitleDescriptionIsComplete(Date of creation and Id of the creator remain unchanged)(Date of last change and Id of the user that did the last change are updated automatically)

**Story: 16.** As a User I need to be able to assign a Task to one or more Users in the system that have access to the ToDo list that the Task belongs to.

**Story: 17.** As a User I need to be able to complete a Task by Id through a fast access menu in the Task Management View.

## Task Management

**Story: 28.** As a User I need to be able to access through the CLI tool all data related to Tasks from a given ToDo list that is either created by me or is shared with me. I should be able to list all Tasks in the ToDo list, create, edit and delete a Task in the ToDo list.

**Story: 29.** As a User I need to be able to create a Task in a ToDo list through the CLI tool and persist the following information: Id of the List (the Id of the ToDo list that the Task belongs to) Title Description IsComplete Date of creation Id of the creator Date of last change Id of the user that did the last change

**Story: 30.** As a User I need to be able to delete a Task by Id through the CLI tool.

**Story: 31.** As a User I need to be able to edit a Task by Id through the CLI tool by providing the following information: Id Title Description IsComplete (Date of creation and Id of the creator remain unchanged) (Date of last change and Id of the user that did the last change are updated automatically)

**Story: 32.** As a User I need to be able to assign a Task through the CLI tool to one or more Users in the system that have access to the ToDo list that the Task belongs to.  
**Story: 33.** As a User I need to be able to complete a Task by Id through the CLI tool using a fast access command argument.

## 2.2. Extra Credit

### User Management CLI tool

**Story: 18.** As a User I need to be able to access all the features of the ToDo application through the CLI tool by providing my username and password as arguments to the CLI tool.

**Story: 19.** As a User with administrative privileges I need to be able to access all User related data in the ToDo application through the CLI tool.

**Story: 20.** As a User with administrative privileges I need to be able to create a user through the CLI tool and persist the following information: Id Username Password

First Name Last Name Date of creation Id of the creator Date of last change Id of the user that did the last change

**Story: 21.** As a User with administrative privileges I need to be able to delete a user by Id through the CLI tool.

**Story: 22.** As a User with administrative privileges I need to be able to edit a user by Id through the CLI tool by providing the following information: Username Password First Name Last Name Date of creation and Id of the creator remain unchanged Date of last change and Id of the user that did the last change are updated automatically

#### ToDo Lists Management CLI tool

**Story: 23.** As a User I need to be able to access through the CLI tool all data related to ToDo lists that are created by me or are shared with me -list all ToDo lists, create, edit and delete a ToDo list.

**Story: 24.** As a User I need to be able to create a ToDo list through the CLI tool and persist the following information: Id Title Date of creation Id of the creator Date of last change Id of the user that did the last change

**Story: 25.** As a User I need to be able to delete a ToDo list by Id through the CLI tool. If the ToDo list is not created by me (is shared with me by another user) then the delete action removes the share.

**Story: 26.** As a User I need to be able to edit a ToDo list by Id through the CLI tool by providing the following information: Id Title Date of creation and Id of the creator remain unchanged Date of last change and Id of the user that did the last change are updated automatically

**Story: 27.** As a User I need to be able to share a ToDo list with other users through the CLI tool.

### 3. Assignment Grading

In all the assignments, writing quality code that builds without warnings or errors, and then testing the resulting application and iterating until it functions properly is the goal. Here are the most common reasons assignments receive low points:

- Project does not build.
- One or more items in the Required functionalities section was not satisfied.
- A fundamental concept was not understood.



- Project does not build without warnings.
- Code Quality -Your solution is difficult (or impossible) for someone reading the code to understand due to:
  - Code is visually sloppy and hard to read (e.g. indentation is not consistent, etc.).
  - No meaningful variable, method and class namesoNot following Java code styleguidesoOver/under used methods, classes, variables, data structures or code comments.
  - Assignment is not submitted as per Assignment Submission section below.