

“ToDo Manager” PROJECT PROPOSAL AND DESCRIPTION

Our aim was to develop a computer “ToDo Manager” program (application) to help users to organise their daily routine and follow up their schedule. ToDo Manager is an indispensable app for daily task scheduling. With it, you can write down all your important tasks and plans.

The application will allow you to create a project and start working with it. Tasks in the application are especially easy to manage: in a few clicks you can create a description for them, select a priority level, change the status, and delete any task.

1. Beginning: user needs, brain storm, flow chart, software

To understand what are the most significant user’s needs, we began our work with a brain storm. We came to conclusion, that a program should be simple and functional and ability to create a separate individual account for each user is very significant, so that each user can manage his own data and keep them confidential and away from other people’s eyes. We also took into account human factor – the ability to forget things, make mistakes, to delete information accidentally, and that is why our “ToDo Manager” has the functions that allow user to edit data, move it to the archive and restore data from it, sort data by different parameters including task’s deadline date.

Creation of the flow chart (see – [Annex 1](#)) helped to understand the sequence of the actions and the way how the program will be working.

A program will be created in JetBrains IntelliJ IDEA (JAVA) environment in combination with MySQL Shell and for data storage we will use [db4free.net](#) database that provides a testing service for MySQL Server (free version that allows to store up to 200Mb of data).

2. Running the program

When user runs the program, the system asks user to choose one of three options that appear on the screen:

- (1) Sign up and start using the program;
- (2) Log in;
- (3) Close the program.

User can choose any of the above listed functions by pressing numbers “1”, “2” or “3” on the keyboard, and this approach of choosing an action is the same in all of the application body.

During registration system checks if the username is unique and stores user’s password. If user already has an account, he can login and see the main menu. Both registered and not registered users can use function “Close the program”.

3. Login and the main menu

If the login fails, or the new username is already taken by other user, the system notifies user by printing out “Unable to sign up. Username probably already exists. Please try again”. After successful login the system shows notification “Access is granted” and the main menu appears.

In the main menu user may choose any of functions listed there:

- (1) Go to task menu,
- (2) Go to task archive menu,
- (3) Log out and close the program.

4. Task menu

If user chooses to “Go to task menu” the table with all existing tasks appears and below it the message “What would you like to do next?”. User has to choose any of ten listed program functions by pressing number of the listed tasks:

1. To add a new task;
2. Edit existing task;
3. Delete a task;
4. Complete and archive a task;
5. Sort tasks by priority;
6. Sort tasks by category;
7. Sort tasks by status;
8. Sort tasks by deadline;
9. Return to the main menu;
10. Log out and close the program.

When user chooses to add a new task, program sequentially asks user to:

- a) Type in the task (max. 60 symbols);
- b) Enter the task priority number 1, 2 or 3, where priority number 1 - high importance, 2 - medium importance, or 3 - low importance.
- c) Enter a task category (any text, max. 20 symbols);
- d) Enter one of the task statuses 'Have to do', 'In progress' or 'Done';
- e) Enter the deadline date YYYY-MM-DD.

If task was successfully saved, notification "Task added successfully." appears. If user failed to add the task, notification “Failed to add the task. Please try again.” appears.

After choosing the functions from 2 to 10 the user has to enter the task ID which can be seen in the table above. If the chosen action was successful, the user sees notification about it, if the action fails - the user also is being informed by seeing notification on the screen.

5. Archive menu

If user chooses to “Go to task archive menu”, the table with the archived tasks appear and below it user can choose any of the listed options:

1. Return a task from archive
2. Clear all tasks from archive
3. Return to the main menu
4. Log out and close the program

If the user’s chosen action was successful, the user sees notification about it, if the action fails - the user also is being informed by seeing notification on the screen.

6. Log out and close the program

If user chooses to “Log out and close the program”, the notification “You have cancelled any further actions and closed the program.” appears and the program is closed.

*The “ToDo Manager” program was created in year 2021 by RigaTechGirls JAVA21 Group 6 team:
Kristīne Bērziņa, Žanna Jelatanceva and Jūlija Volkova.*

“ToDo Manager” flow chart

