# **Programming Project / C++**

-Todo List Management & Interaction System

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## I. Task Description

Student 1 (List Manager) is responsible for:

Creating new todo lists (create\_list)

Deleting existing lists (delete list)

Viewing all available lists (view\_lists)

Student 2 (Task Editor) is responsible for:

Adding tasks to lists (add task)

Marking tasks as complete (complete task)

Viewing tasks in a list (view tasks)

## II. Classes Used by the Team

The following classes will be used:

- 1. Task: int id, string task description, bool completion status,
- 2. TodoList: string name, vector<Task> collection, date Date
- 3 Date: int day, int month, int year

#### **III. File Structure**

The following files will be used:

```
1. index.txt
Stores all list names in the format:
<listname1>
<listname2>
Homework
Groceries
Shopping
2. lists/[list_name].txt
Stores tasks for each list in the format:
<date>
<id> - [<completion>] <taskname>
ex
21.11.2025
1 - [] Math problems
2 - [x] Buy milk
3 - [] Science report
```

# IV. Interacting with Executables

```
Application 1 (manager.exe) - List Management

./manager.exe create_list <list_name> <date> <task1> <task2> <task3>
./manager.exe delete_list <list_name>
./manager.exe view_lists
```

### Example:

./manager.exe create\_list Shopping 21.05.2025, creates the list shopping meaning a file named Shopping.txt is created and added in index.txt as Shopping with the <date> in the first line and then the tasks

./manager.exe delete\_list Homework, deletes the list Homework, meaning the deletion of the file Homework and removing Homework from index.txt

./manager.exe view\_lists , shows all lists meaning opening index.txt and printing all the listnames inside

```
Application 2 (editor.exe) - Task Interaction
```

./editor.exe add\_task <list\_name> "<task\_description>"
./editor.exe complete\_task <list\_name> <task\_id>
./editor.exe view\_tasks <list\_name>

## Example:

./editor.exe add\_task Shopping "Eggs", adds the task Eggs to the list

This makes the list "Shopping" look like

1-[] Eggs

./editor.exe complete\_task Shopping 1

This updates the list to

1 - [x] Eggs

./editor.exe view tasks Shopping to view the tasks in the list