To-Do List Application

Presented by:

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Introduction

- Built using Java in the console
- Helps users organize their daily work
- Uses basic programming concepts like loops, arrays, input/output
- A simple task management system
- Encourages writing clean, modular code using methods
- Provides an interactive menu-driven user interface
- Runs without any external libraries or dependencies

Objectives

- To provide users with a simple and efficient way to manage daily tasks
- To allow users to add, view, mark as complete, and delete tasks easily
- To help users improve productivity and stay organized
- To practice fundamental programming concepts such as loops, arrays/ArrayLists, methods, and user input handling
- To build a menu-driven, interactive console application for better user experience

Modules

- User Interface Module
- Task Management Module
- Add Task Module
- View Tasks Module
- Mark Task as Complete Module
- Delete Task Module
- Program Control Module

Flow of The Project

1. Start the Application

Program execution begins from the main() method.

2. Display Menu

The menu is printed to the console with options:

- Add a Task
- View All Tasks
- Mark a Task as Complete
- Delete a Task
- Exit

3. Accept User Input

The program waits for the user to input a choice (1–5)

4. Process User Choice (Switch-Case)

Depending on the input:

- Case 1: Call add Task() to enter and save a new task.
- Case 2: Call view Tasks() to display all current tasks.
- Case 3: Call mark Task Complete() to update a task's status.
- Case 4: Call delete Task() to remove a task.
- Case 5: Exit the program.

5. Return to Menu (Except Exit)

- After completing any task, the menu is shown again.
- This loop continues until the user selects Exit (5)

6. Exit

• On selecting 5, the program displays a goodbye message and ends execution

Output Screenshot

```
■ Console X
<terminated> ToDoList [Java Application] C:\Users\-Bavatharani-\Downloads\spring-tool-suite-4-4.29.1.RELEASE-e4.35.0-win32.win32.x86_64\sts-4.29.1.RELEASE\plugins\org.eclipse.justj.openjdk.hotspi
---To-Do List Menu---
1.Add a Task
2. View All Tasks
3.Mark a Task as Complete
4.Delete a Task
5.Exit
Enter your choice:
Enter the Task:
i have read a book
Task added successfully
---To-Do List Menu---
1.Add a Task
2. View All Tasks
3.Mark a Task as Complete
4.Delete a Task
5.Exit
Enter your choice:
---Your tasks---
1.i have read a book
---To-Do List Menu---
1.Add a Task
2.View All Tasks
3.Mark a Task as Complete
4.Delete a Task
5.Exit
Enter your choice:
---Your tasks---
1.i have read a book
Enter the task number to mark as complete:
```

```
Cansole X
 <terminated> ToDoList [Java Application] C:\Users\~Bavatharani~\Downloads\spring-tool-suite-4-4.29.1.RELEASE-e4.35.0-win32.win32.x86_64\sts-4.29.1.RELEASE\plugins
... 2.View All Tasks
 3.Mark a Task as Complete
  4.Delete a Task
  5.Exit
  Enter your choice:
  ---Your tasks---
  1.i have read a book
  Enter the task number to mark as complete:
  Task marked as complete!
  ---To-Do List Menu---
  1. Add a Task
  2. View All Tasks
  3.Mark a Task as Complete
  4.Delete a Task
  5.Exit
  Enter your choice:
  ---Your tasks---
  1.i have read a book[completed]
  Enter the task number to delete:
  task deleted successfully.
  ---To-Do List Menu---
  1.Add a Task
  2. View All Tasks
  3.Mark a Task as Complete
  4.Delete a Task
  5.Exit
  Enter your choice:
  Exiting...Goodbye!
```

Conclusion

- Successfully built a basic to-do list manager
- Learned how to structure console applications
- Practiced key Java programming concepts
- Ready for extending it to GUI or mobile app in future

Thank You