**Task Management Application Specification**

**1. Introduction**

The Task Management Application is a simple command-line tool designed to help users manage their tasks effectively. Users can add, view, edit, delete, and mark tasks as complete using this application.

**2. Functionalities**

2.1 Adding a Task

* **Description**: Allows users to add a new task with specified details.
* **Input**:
  + Title: Title of the task (String)
  + Description: Description of the task (String)
  + Due Date: Due date of the task (String in the format "YYYY-MM-DD")
  + Priority: Priority of the task (String: "High", "Medium", "Low")
* **Behavior**:
  + A new task is created with the provided details.
  + The task is added to the list of existing tasks.
* **Error Conditions**:
  + Invalid due date format.
  + Invalid priority value.

2.2 Viewing Tasks

* **Description**: Allows users to view the list of tasks along with their details.
* **Input**: None
* **Behavior**:
  + Displays a list of all tasks currently stored in the application, including their title, description, due date, priority, and completion status.
* **Error Conditions**: None

2.3 Editing a Task

* **Description**: Allows users to edit the details of an existing task.
* **Input**:
  + Index: Index of the task to be edited (Integer)
  + Updated Title: New title of the task (String)
  + Updated Description: New description of the task (String)
  + Updated Due Date: New due date of the task (String in the format "YYYY-MM-DD")
  + Updated Priority: New priority of the task (String: "High", "Medium", "Low")
* **Behavior**:
  + Updates the details of the specified task with the provided values.
* **Error Conditions**:
  + Invalid index.
  + Invalid due date format.
  + Invalid priority value.

2.4 Deleting a Task

* **Description**: Allows users to delete an existing task.
* **Input**:
  + Index: Index of the task to be deleted (Integer)
* **Behavior**:
  + Removes the specified task from the list of tasks.
* **Error Conditions**:
  + Invalid index.

2.5 Marking a Task as Complete

* **Description**: Allows users to mark an existing task as complete.
* **Input**:
  + Index: Index of the task to be marked as complete (Integer)
* **Behavior**:
  + Sets the completion status of the specified task to "Completed".
* **Error Conditions**:
  + Invalid index.

**3. Sample Usage**

Task Management Menu:

1. View tasks

2. Add task

3. Edit task

4. Delete task

5. Mark task as complete

6. Exit

Enter your choice: 2

Enter task title: Complete assignment

Enter task description: Finish the software testing assignment

Enter due date (YYYY-MM-DD): 2024-04-10

Enter priority (High/Medium/Low): High

Task added successfully.

Enter your choice: 1

Tasks:

Title: Complete assignment

Description: Finish the software testing assignment

Due Date: 2024-04-10

Priority: High

Status: Not Completed

Enter your choice: 5

Enter index of task to mark as complete: 0

Task marked as complete.

Enter your choice: 1

Tasks:

Title: Complete assignment

Description: Finish the software testing assignment

Due Date: 2024-04-10

Priority: High

Status: Completed

**4. Error Handling**

* The application should provide informative error messages for invalid inputs or operations**.**

**5. Assumptions**

* Users interact with the application through a command-line interface.
* Input validation is limited to basic checks (e.g., date format, priority values).