Terminal Application

Task List

Feature Breakdown

Purpose

The purpose of the terminal application was to create a useable Task List. Within this application, you can:

- Create lists (multiple lists)
- Add tasks to a specific list
- Edit tasks
- Delete tasks
- Delete lists

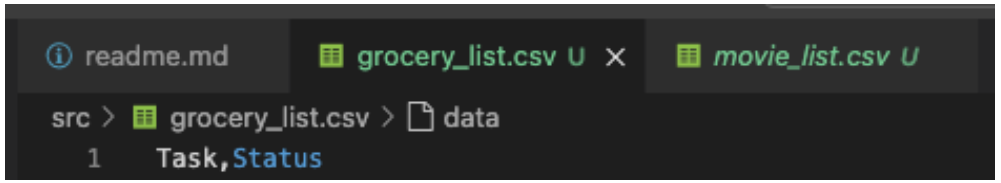
Create Task List

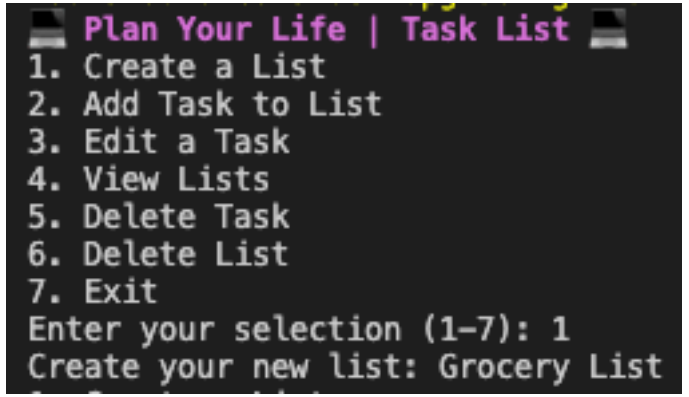
Within this function, you can create your List/s. The lists can be created for anything (e.g. Grocery List, Movie List, Reading List)

- String:
  - '.lower() – Converts the name of the list being created (standardising the file name)
  - '.replace(" ", "_") – To ensure the CSV file is valid, all spaces are replaced with an underscore
- Variables:
  - File_name – various uses of the file-name
    - Create the file in csv (your task list) (as this has not been created as yet)
- File handling
  - 'w' – Write Only: Creates the name of the list, only.

```python
# creating the task list

def create_task_list(file_name):
    list_name = input("Create your new list: ")
    file_name = list_name.lower().replace(" ", "_") + ".csv"
    with open(file_name, 'w', newline='') as f:
        writer = csv.writer(f)
        writer.writerow(["Task", "Status"])
```





Adding a Task to Your List

Within this function, you can create your List/s. The lists can be created for anything (e.g. Grocery List, Movie List, Reading List)

- String:
  - '.lower() – Converts the name of the list being created (standardising the file name)
  - '.replace(" ", "_") – To ensure the CSV file is valid, all spaces are replaced with an underscore
- Variables:
  - File_name – various uses of the file-name
    - Connects to the csv file that was previously created to add the task to the list
- File handling
  - 'a' – Append: Allows the user to amend the open file (add the task to your list)
  - 'newline='' – the task is added to a new line
  - Writer.wroterrow([task_name, "Pending"]) – writes that task to a row within a csv file and sets the staus as pending

```python
# Adding a task to a list
def create_add_task(file_name):
    list_name = input("Enter the name of the Task List: ")
    file_name = list_name.lower().replace(" ", "_") + ".csv"
    task_name = input("Add the task to your list: ")
    with open(file_name, 'a', newline='') as file:
        writer = csv.writer(file)
        writer.writerow([task_name, "Pending"])
```


```
1. Create a List
2. Add Task to List
3. Edit a Task
4. View Lists
5. Delete Task
6. Delete List
7. Exit
Enter your selection (1-7): 2
Enter the name of the Task List: grocery_list
Add the task to your list: Milk
1. Create a List
2. Add Task to List
3. Edit a Task
4. View Lists
5. Delete Task
6. Delete List
7. Exit
Enter your selection (1-7): 2
Enter the name of the Task List: movie_list
Add the task to your list: The Fall Guy
1. Create a List
2. Add Task to List
3. Edit a Task
4. View Lists
5. Delete Task
6. Delete List
7. Exit
Enter your selection (1-7): 2
Enter the name of the Task List: movie_list
Add the task to your list: Star Wars
1. Create a List
2. Add Task to List
3. Edit a Task
4. View Lists
5. Delete Task
6. Delete List
7. Exit
Enter your selection (1-7): 2
Enter the name of the Task List: movie list
Add the task to your list: Jurassic Park
```

Retrieving a List to edit a Task

Within this function, you can create your List/s. The lists can be created for anything (e.g. Grocery List, Movie List, Reading List)

- Loops:
  - ‘for task in task’ – used to iterate over the tasks listed within the csv file
- Conditional Control:
  - If statement:
    - Checks if the requested task, matches the user input. If there is a match the status of the task is updated
- Variables:
  - File_name – various uses of the file-name
    - Connects to the csv file that was previously created to add the task to the list
- File handling
  - ‘r’ – Read mode: Opens the lists to view or read only
  - ‘w’ – Write Only: Allows the user to amend the status of the task (pending to purchased or watched – in the examples below.)
  - ‘newline=’’ – the task is added to a new line
  - Writer.wroterrow([task_name, “Pending”]) – writes that task to a row within a csv file and sets the staus as pending

```python
# retrieving the list to edit a task
def create_edit_task(file_name):
    list_name = input("Enter the name of the task list:")
    file_name = list_name.lower().replace(" ", "_") + ".csv"
    task_name = input("Enter the task to edit: ")
    new_status = input("Enter the new status: ")
    print("edit_task")


    # Read and update a specified task
    tasks = [file_name]
    with open(file_name, 'r', newline= '') as file:
        reader = csv.reader(file)
        tasks = [row for row in reader]
    with open(file_name, 'w', newline='') as file:
        writer = csv.writer(file)
        for task in tasks:
            if task[0] == task_name:
                task[1] = new_status
            writer.writerow(task)
```

```
1. Create a List
2. Add Task to List
3. Edit a Task
4. View Lists
5. Delete Task
6. Delete List
7. Exit
Enter your selection (1-7): 3
Enter the name of the task list:grocery list
Enter the task to edit: toothpaste
Enter the new status: purchased
edit_task
1. Create a List
2. Add Task to List
3. Edit a Task
4. View Lists
5. Delete Task
6. Delete List
7. Exit
Enter your selection (1-7): 3
Enter the name of the task list:movie list
Enter the task to edit: Star Wars
Enter the new status: Watched
edit_task
```

readme.md | grocery_list.csv U | movie_list.csv U | tasklist_functio

src > grocery_list.csv > data

```
1  Task,Status
2  Milk,Pending
3  toothpaste,purchased
4
```

src > movie_list.csv > data

```
1  Task,Status
2  The Fall Guy,Pending
3  Star Wars,Watched
4  Jurassic Park,Pending
5
```

View Tasks in a List

```python
# function to view tasks in a list
def create_view_tasks(file_name):
    list_name = input("Enter the name of the task list: ")
    file_name = list_name.lower().replace(" ", "_") + ".csv"
    with open(file_name, 'r', newline='') as file:
        reader = csv.reader(file)
        for row in reader:
            print(f"{row[0]} - Status: {row[1]}")
```

Within this function, you can create your List/s. The lists can be created for anything (e.g. Grocery List, Movie List, Reading List)

- Variables:
  - File_name – various uses of the file-name
    - Connects to the csv file that was previously created to add the task to the list
  - List_name – The list name the user inputs into the terminal selection
- File handling
  - ‘r’ – Read mode: Opens the lists to view or read only

```
1. Create a List
2. Add Task to List
3. Edit a Task
4. View Lists
5. Delete Task
6. Delete List
7. Exit
Enter your selection (1-7): 4
Enter the name of the task list: grocery List
Task - Status: Status
Milk - Status: Pending
toothpaste - Status: purchased
1. Create a List
2. Add Task to List
3. Edit a Task
4. View Lists
5. Delete Task
6. Delete List
7. Exit
Enter your selection (1-7): 4
Enter the name of the task list: movie list
Task - Status: Status
The Fall Guy - Status: Pending
Star Wars - Status: Watched
Jurassic Park - Status: Pending
```

Deleting Tasks for a Specific List

Within this function, you can create your List/s. The lists can be created for anything (e.g. Grocery List, Movie List, Reading List)

- Loops:
  - 'for task in task' – used to iterate over the tasks listed within the csv file
- Variables:
  - File_name – various uses of the file-name
    - Connects to the csv file that was previously created to add the task to the list
  - List_name – The list name the user inputs into the terminal selection
- File handling
  - 'r' – Read mode: Opens the lists to view or read only

```python
# Deleting tasks from a specified list
def create_delete_task(file_name):
    list_name = input("Enter the name of the task list: ")
    file_name = list_name.lower().replace(" ", "_") + ".csv"
    task_name = input("Enter the task to delete:")

    # Read and delete a specified task
    tasks = [file_name]
    with open(file_name, 'r', newline='') as file:
        reader = csv.reader(file)
        tasks = [row for row in reader if row[0] != task_name]

    with open(file_name, 'w', newline='') as file:
        writer = csv.writer(file)
        for task in tasks:
            writer.writerow(task)
```

```
1. Create a List
2. Add Task to List
3. Edit a Task
4. View Lists
5. Delete Task
6. Delete List
7. Exit
Enter your selection (1-7): 5
Enter the name of the task list: movie list
Enter the task to delete:star wars
```