Todo List Management System

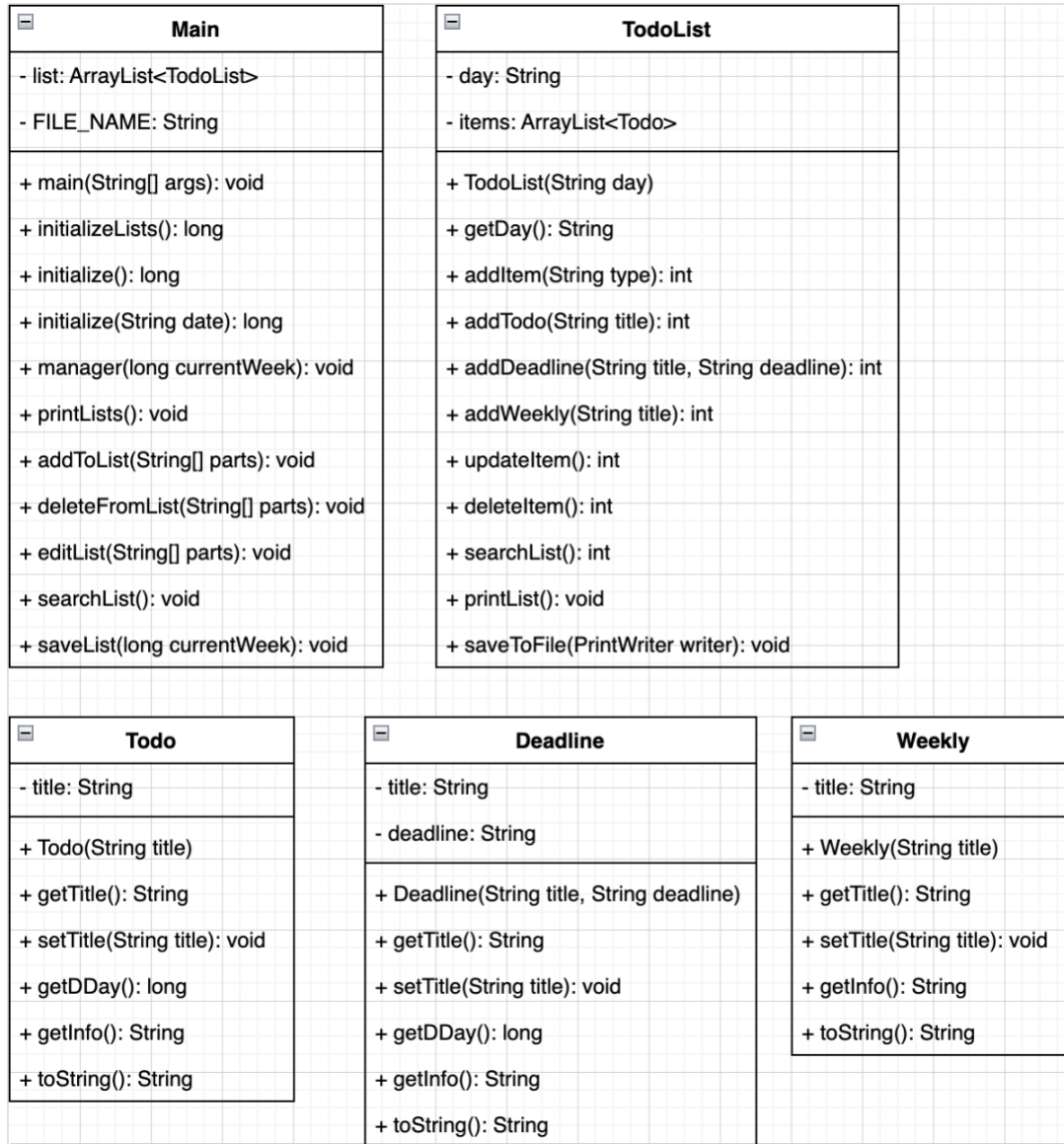22000481 Yohan Yoon

Description:

I implemented a Java program that can manage my schedule for the whole week. To achieve this, I made 8 to-do lists for deadline, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday so that I could add a schedule for a specific day.

The first time you initialize the program, it asks you for the first day of the semester and it automatically calculates the number of weeks you are in and displays it on the screen. Then you can add a todo or a deadline or a weekly schedule which has different features each. Deadline and weekly are children of todo, and they all share the same interface. You can also edit or delete the list items and save them to a text file so that whenever you run the program, your previous actions would be there. There is also a search feature that helps you search for the deadline for a specific schedule.

Utilizing this program, you can efficiently manage your schedule and keep track of things you did and have to do.

Github link: https://github.com/yoyohanyy/FinalProject.git

UML diagram:

Main

- list: ArrayList<TodoList>
- FILE_NAME: String

+ main(String[] args): void
+ initializeLists(): long
+ initialize(): long
+ initialize(String date): long
+ manager(long currentWeek): void
+ printLists(): void
+ addToList(String[] parts): void
+ deleteFromList(String[] parts): void
+ editList(String[] parts): void
+ searchList(): void
+ saveList(long currentWeek): void

TodoList

- day: String
- items: ArrayList<Todo>

+ TodoList(String day)
+ getDay(): String
+ addItem(String type): int
+ addTodo(String title): int
+ addDeadline(String title, String deadline): int
+ addWeekly(String title): int
+ updateItem(): int
+ deleteItem(): int
+ searchList(): int
+ printList(): void
+ saveToFile(PrintWriter writer): void

Todo

- title: String

+ Todo(String title)
+ getTitle(): String
+ setTitle(String title): void
+ getDDay(): long
+ getInfo(): String
+ toString(): String

Deadline

- title: String
- deadline: String

+ Deadline(String title, String deadline)
+ getTitle(): String
+ setTitle(String title): void
+ getDDay(): long
+ getInfo(): String
+ toString(): String

Weekly

- title: String

+ Weekly(String title)
+ getTitle(): String
+ setTitle(String title): void
+ getInfo(): String
+ toString(): String

User's guide:

Initialization

```
Enter the date of the first day of the semester in yyyymmdd format: 20240304
```

```
====================================
WEEK 15

Deadline

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Sunday

====================================
>
```

Add

```
> add todo Monday
Enter the title: Submit java presentation ppt
item added.
```

```
> add deadline
Enter the title: Java presentation
Enter the deadline: 0613
item added.
```

```
> add weekly Thursday
Enter the title: Saesae Bapgo
item added.
```

Edit

```
> edit Thursday
Enter the title of the item to edit: DB offline
Enter the change: DB online
item updated.
```

Delete

```
> delete from Thursday
Enter the title of the item to edit: DB online
item deleted.
```

Search

```
> search
Enter the title of the item to search: OS assignment
The number of days left until OS assignment 's deadline is 5 days
```

Save

```
> save
Data saved successfully.
```

Result

```
======================================
WEEK 15

Deadline
- Java Presentation (0613) D-0
- OS assignment (0618) D-5
- DB team project (0621) D-8

Monday
- Submit java presentation ppt

Tuesday
- Print signature paper

Wednesday

Thursday
- Saesae Bapgo  (weekly)
- Calculus tutoring 19:00
- DB offline

Friday
- No calculus class
- Interview 17:00

Saturday
- Programming Studio Assignment

Sunday

======================================
>
```

todolist.txt

```
20240304
Deadline Java Presentation  0613
Deadline OS assignment  0618
Deadline DB team project  0621
Monday Submit java presentation ppt
Tuesday Print signature paper
Thursday Saesae Bapgo  (weekly)
Thursday Calculus tutoring 19:00
Thursday DB offline
Friday No calculus class
Friday Interview 17:00
Saturday Programming Studio Assignment
```