TIC2002

INTRODUCTION TO SOFTWARE ENGINEERING

AY19/20 Semester 1

Duke Project Report

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User Stories

1. Duke task checklist supports multiple users to use the application;

2. As users who prefer faster entries, it would be a great fit for this kind of audience to be able to quickly note down and manipulate tasks using various commands, which are triggered by a few key strokes. It's faster than clicking buttons by mouse in GUI;

3. When the next time users start the program, Duke should still remember the tasks that users had left from last time;

4. There are different types of task that fit in different use cases;

5. There are commands that mark task status such as completion and provide views of list of tasks;

6. System should be fast, reliable and provide message to guide correct user behaviour.

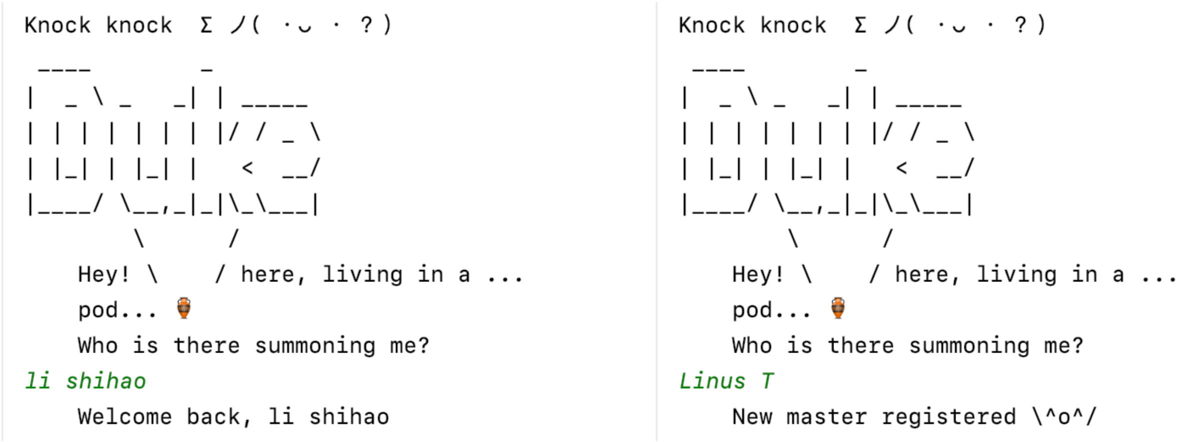
Non-functional requirements

1. Message from the system should be fun and intimate;

2. The system should be smart to guide the users with meaningful alert of what to do rather than just exit;

3. Minimum visual elements/clusters which create distraction for users want to be fast. The aesthetic aims for simplicity and tidiness.

Level-1 The output Duke shows when launching the program

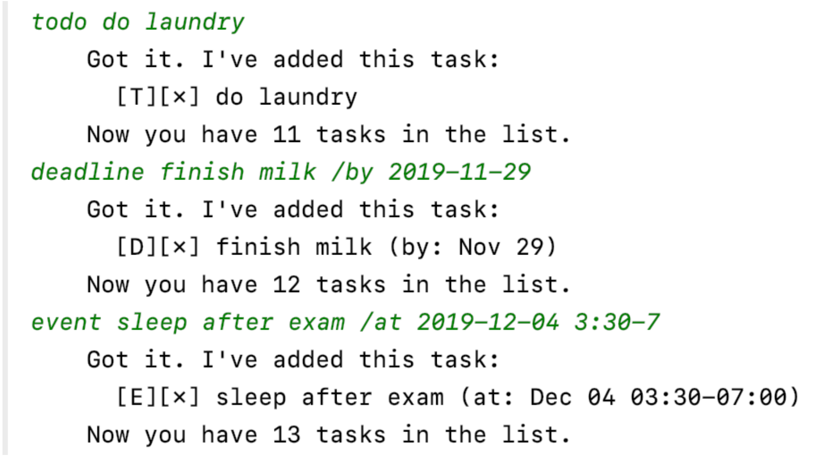


```
Knock knock  Σ ノ( ・ᴗ ・ ? )
 ____        _
|  _ \ _   _| | _____
| | | | | | | |/ / _ \
| |_| | |_| |   <  __/
|____/ \__,_|_|\_\___|
        \      /
    Hey! \    / here, living in a ...
    pod... 🏺
    Who is there summoning me?
li shihao
    Welcome back, li shihao
```

```
Knock knock  Σ ノ( ・ᴗ ・ ? )
 ____        _
|  _ \ _   _| | _____
| | | | | | | |/ / _ \
| |_| | |_| |   <  __/
|____/ \__,_|_|\_\___|
        \      /
    Hey! \    / here, living in a ...
    pod... 🏺
    Who is there summoning me?
Linus T
    New master registered \^o^/
```

Figure 1: Screenshot - Start Greeting Page Existing/New User

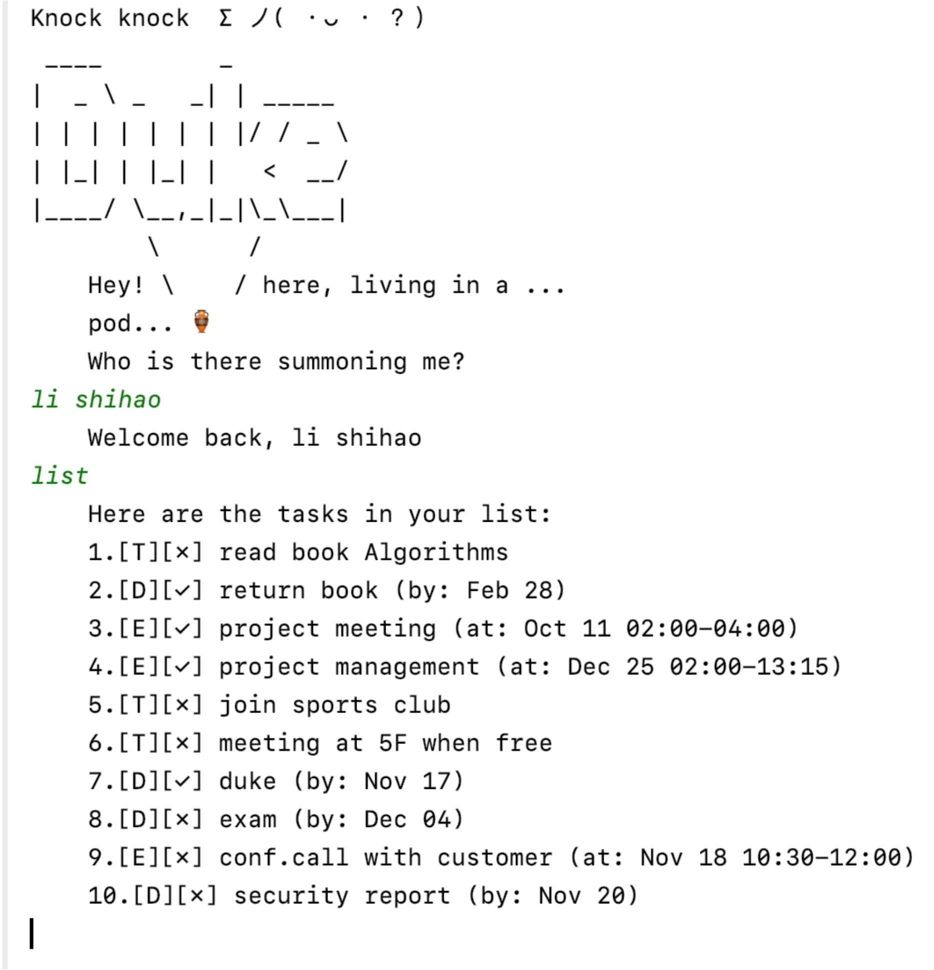
Level-4 Describe the commands for adding different types of tasks



```
todo do laundry
    Got it. I've added this task:
      [T][×] do laundry
    Now you have 11 tasks in the list.
deadline finish milk /by 2019-11-29
    Got it. I've added this task:
      [D][×] finish milk (by: Nov 29)
    Now you have 12 tasks in the list.
event sleep after exam /at 2019-12-04 3:30-7
    Got it. I've added this task:
      [E][×] sleep after exam (at: Dec 04 03:30-07:00)
    Now you have 13 tasks in the list.
```

Figure 2: Screenshot - `todo, deadline, event`

Level-2 Describe the commands for listing tasks

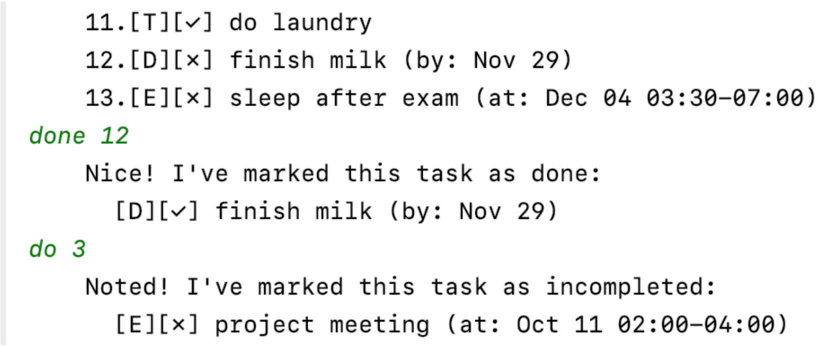


```
Knock knock  Σ ノ( ・ᴗ ・ ? )

 ____        _
|  _ \ _   _| | _____
| | | | | | | |/ / _ \
| |_| | |_| |   <  __/
|____/ \__,_|_|\_\___|
        \      /
    Hey! \    / here, living in a ...
    pod... 🏺
    Who is there summoning me?
li shihao
    Welcome back, li shihao
list
    Here are the tasks in your list:
    1.[T][×] read book Algorithms
    2.[D][✓] return book (by: Feb 28)
    3.[E][✓] project meeting (at: Oct 11 02:00-04:00)
    4.[E][✓] project management (at: Dec 25 02:00-13:15)
    5.[T][×] join sports club
    6.[T][×] meeting at 5F when free
    7.[D][✓] duke (by: Nov 17)
    8.[D][×] exam (by: Dec 04)
    9.[E][×] conf.call with customer (at: Nov 18 10:30-12:00)
    10.[D][×] security report (by: Nov 20)
|
```

Figure 3: Screenshot - `list`

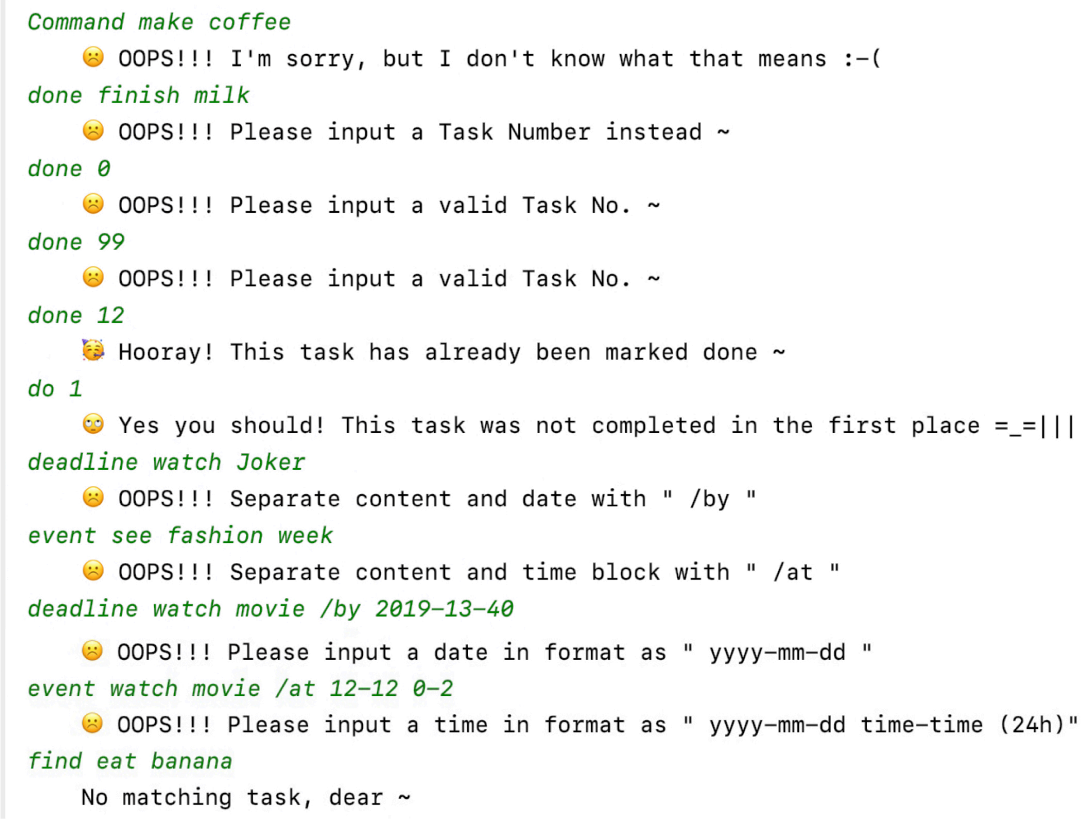
Level-3 Describe the commands for marking/unmarking tasks as done.



```
    11.[T][✓] do laundry
    12.[D][×] finish milk (by: Nov 29)
    13.[E][×] sleep after exam (at: Dec 04 03:30-07:00)
done 12
    Nice! I've marked this task as done:
      [D][✓] finish milk (by: Nov 29)
do 3
    Noted! I've marked this task as incompleted:
      [E][×] project meeting (at: Oct 11 02:00-04:00)
```

Figure 4: Screenshot - `done`, `do + task no.`

Level-5 Describe what kind of errors Duke can handle



```
Command make coffee
    😟 OOPS!!! I'm sorry, but I don't know what that means :-(
done finish milk
    😟 OOPS!!! Please input a Task Number instead ~
done 0
    😟 OOPS!!! Please input a valid Task No. ~
done 99
    😟 OOPS!!! Please input a valid Task No. ~
done 12
    🥳 Hooray! This task has already been marked done ~
do 1
    🙄 Yes you should! This task was not completed in the first place =_=|||
deadline watch Joker
    😟 OOPS!!! Separate content and date with " /by "
event see fashion week
    😟 OOPS!!! Separate content and time block with " /at "
deadline watch movie /by 2019-13-40
    😟 OOPS!!! Please input a date in format as " yyyy-mm-dd "
event watch movie /at 12-12 0-2
    😟 OOPS!!! Please input a time in format as " yyyy-mm-dd time-time (24h)"
find eat banana
    No matching task, dear ~
```

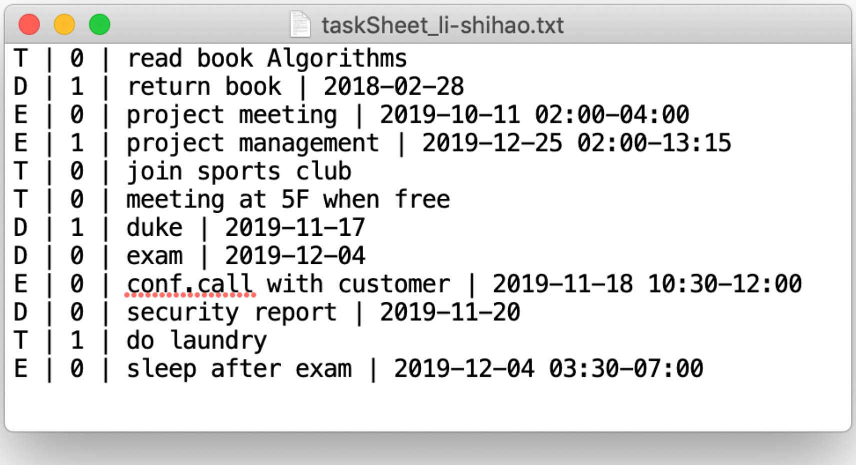
Figure 5: Screenshot - There are also error messages handling file access error

Level-6 Describe the commands for deleting tasks

```
delete 0
    ☹️ OOPS!!! Please input a valid Task No. ~
delete 12
    Noted. I've removed this task:
      [D][✓] finish milk (by: Nov 29)
    Now you have 12 tasks in the list.
```

Figure 6: Screenshot - `delete + task no.`

Level-7 Give a sample of the tasks as they are stored in the hard disk



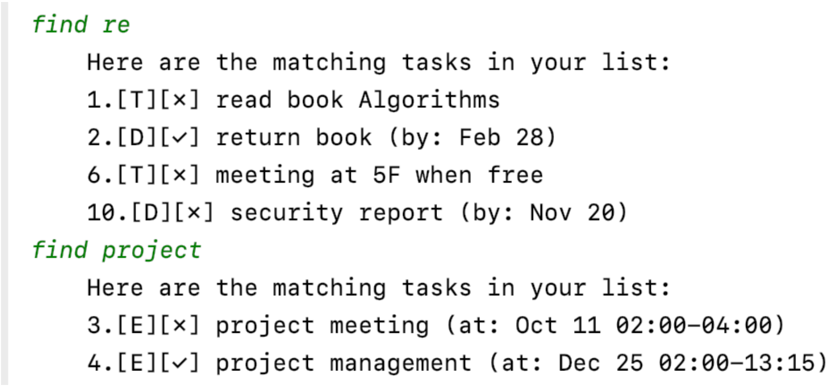
```
T | 0 | read book Algorithms
D | 1 | return book | 2018-02-28
E | 0 | project meeting | 2019-10-11 02:00-04:00
E | 1 | project management | 2019-12-25 02:00-13:15
T | 0 | join sports club
T | 0 | meeting at 5F when free
D | 1 | duke | 2019-11-17
D | 0 | exam | 2019-12-04
E | 0 | conf.call with customer | 2019-11-18 10:30-12:00
D | 0 | security report | 2019-11-20
T | 1 | do laundry
E | 0 | sleep after exam | 2019-12-04 03:30-07:00
```

Figure 7: Screenshot - File `taskSheet_user-name.txt`

Level-8 Explain how Duke uses dates/times

Date is a property for Deadline type of task, time is property for Event type of task. Date can be use to sort tasks of Deadline type in chronological order.

Level-9 Describe the commands for searching for tasks.

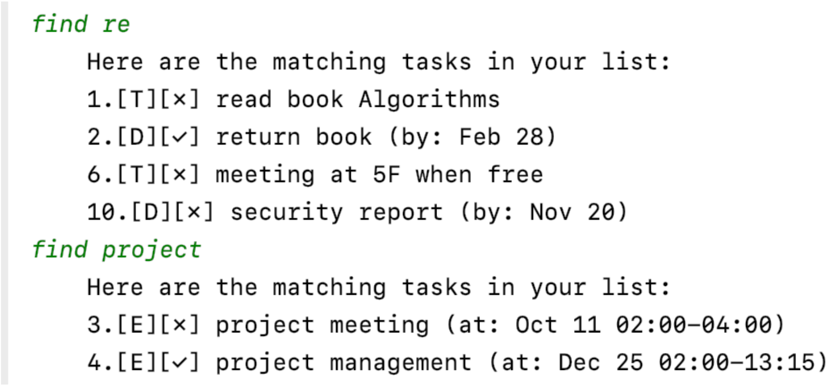


```
find re
    Here are the matching tasks in your list:
    1.[T][×] read book Algorithms
    2.[D][✓] return book (by: Feb 28)
    6.[T][×] meeting at 5F when free
    10.[D][×] security report (by: Nov 20)
find project
    Here are the matching tasks in your list:
    3.[E][×] project meeting (at: Oct 11 02:00-04:00)
    4.[E][✓] project management (at: Dec 25 02:00-13:15)
```

Figure 8: Screenshot - Search tasks (notice that the task no. is correct)

Level-10 Individual feature: If you implemented an individual feature, describe that feature

Sort Deadline tasks in order that oldest date on the top:



```
find re
    Here are the matching tasks in your list:
    1.[T][×] read book Algorithms
    2.[D][✓] return book (by: Feb 28)
    6.[T][×] meeting at 5F when free
    10.[D][×] security report (by: Nov 20)
find project
    Here are the matching tasks in your list:
    3.[E][×] project meeting (at: Oct 11 02:00-04:00)
    4.[E][✓] project management (at: Dec 25 02:00-13:15)
```

Figure 9: Screenshot - File `taskSheet_user-name.txt`

Other features Describe other features you implement

A-MoreOOP Give a class diagram to match your code

A-MoreOOP Give at least one object diagram illustrating the state of your program at some point

A-MoreOOP Give at least one sequence diagram illustrating an object interaction in your product

A-JavaDoc: Give at least 2 javadoc comments from you code

A-JUnit: Give 2-3 JUnit test methods from your code

A-Assertions: Give at least 2 code segments that contain assertions you added to your code

Suggested test commands Give a list of commands a tester can execute in sequence to examine your product. Cover all features in a reasonable order: