### 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 \Sigma \mathcal{I}(\cdot \cdot \cdot ?)
                                                       Knock knock \Sigma / (\cdot \cdot \cdot ?)
   _ \ _ _ | | _____
                                                                   _| | | _____
| | | | | | | | / / _ \
                                                       | | | | | | | | / / _ \
| | | | | | | | | | | | | |
                                                       | | | | | | | | | | | |
|____/ \__,_|_|\_\___|
                                                       |____/ \__,_|_|\_\___|
                / here, living in a ...
                                                                       / here, living in a ...
    Hey! \
                                                            Hey! \
    pod... 🏺
    Who is there summoning me?
                                                            Who is there summoning me?
li shihao
                                                       Linus T
                                                            New master registered \^o^/
    Welcome back, li shihao
```

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

Figure 3: Screenshot - list



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

Level-5 Describe what kind of errors Duke can handle. E.g., give different types of incorrect commands it can handle

Level-6 Describe the commands for deleting tasks

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

Level-8 Explain how Duke uses dates/times

Level-9 Describe the commands for searching for tasks.

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

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: