

# Criterion A- Planning

## Problem Statement

Andrew Eng struggles with managing his time outside of his work life. He finds difficulty keeping tabs on his activities and tasks throughout the day.

Word Count: 26

## Description of Scenario

The client, Andrew Eng, states in the initial interview<sup>1</sup> that he is a computer engineer working in the US government. He further explains how he has a variety of tasks he likes to do during his free time outside of working hours. His time is often spent on activities such as programming, reading, security research networking, and going to the gym. However, on some days he has a different set of tasks he needs to complete and gets them mixed up because he struggles in keeping track of what activities he needs to do and how much time it will take.

Word Count: 101

## Rationale for the Proposed Product

A program that keeps track of Mr. Eng's daily tasks that can be updated when completed which can help him visualize his responsibilities on a given day. This enables him to have an organized stimuli to maximize his efficiency and productivity by keeping him in check considering he explained<sup>2</sup> that he does not plan out his day. With a busy lifestyle, keeping tabs on every task- small and big may cause him to forget to do something. Thus, this program will display everything that needs to get done throughout his day.

The graphical user interface (GUI), Java Netbeans, allows me to program with a software and language I am most familiar with. Working with Java, object oriented programming (OOP) handles the complexity of applications in the real world. Netbeans allows the implementation of OOP, thus, it is convenient for me to use.

This program can be useful for everyone, despite this Internal Assessment (IA) is fabricated directly for Mr. Eng. It can work in different environments and will be easy for my client to use considering he always has a device in hand, as stated in the interview<sup>3</sup>.

Word Count: 192

---

<sup>1</sup> Andrew Eng, interview #1 by Kaila Eng, Bangkok, November 23, 2019, audio recording 00:25, Appendix

<sup>2</sup> Andrew Eng, interview #1 by Kaila Eng, Bangkok, November 23, 2019, audio recording 02:00, Appendix

<sup>3</sup> Andrew Eng, interview #1 by Kaila Eng, Bangkok, November 23, 2019, audio recording 02:30, Appendix

Prototype + Annotations:

Date

This screenshot shows a task input form with the following fields and annotations:

- Menu: File Edit Help
- Navigation: To Do List Display | **Input Task** | Task to Search For
- Form Fields:
  - How many tasks do you wish to complete? (Dropdown: 1)
  - Task name (Text input)
  - Detail description of task (Text input)
  - Time you wish to spend on each task (hours) (Text input)
  - Have you completed any task? (Radio buttons: Yes, No)
  - What task have you completed? (Text input)
- Annotations:
  - A red box around the 'Detail description of task' field contains the handwritten text 'OK'.
  - A red circle highlights the 'Have you completed any task?' radio buttons.
  - A red arrow points from the 'Date' annotation to the 'Have you completed any task?' field.
  - A red box highlights the 'What task have you completed?' field.

Show the diff of est. time vs. actual time

This screenshot shows a task list display with the following elements and annotations:

- Menu: File Edit Help
- Navigation: **To Do List Display** | Input Task | Task to Search For
- Table:
 

Time Completed	Task 1	Task 2	Task 3	Task 4	Task 5
- Buttons: Refresh
- Text: Progress of completion of tasks
- Progress Bar: A horizontal bar below the text.
- Annotations:
  - A red arrow points from the 'Date' annotation to the 'Time Completed' column header.
  - A red arrow points from the 'Date' annotation to the progress bar.

If complete the  $<$  = est time =  $\checkmark$  else. Red.

This screenshot shows a task search form with the following elements and annotations:

- Menu: File Edit Help
- Navigation: To Do List Display | Input Task | **Task to Search For**
- Form Fields:
  - Task to search for (Text input)
  - Time (Dropdown)
- Buttons: OK
- Annotations:
  - The word 'Date' is written in red at the bottom left of the form.

$\checkmark$

## Success Criteria:

### a. What the Program Will Do

- ❖ Track time spent on activities/ tasks for each day
- ❖ Display a visual representation of all tasks and the time it takes to complete
- ❖ Show activities that are incomplete/ completed
- ❖ Display a graph/ progress bar of time spent on certain activities

### b. User Friendly Features

- ❖ User documentation
- ❖ Easy to read labels
- ❖ GUI elements such as combo boxes and radio buttons
- ❖ Search tab where the user can search for specific tasks and view the details

### c. Error/exception Handling

- ❖ Not pressing “OK” after every time that is inputted
- ❖ Leaving text fields empty such as “task name”
- ❖ Inputting a String in the text field requiring only integers

### d. Program Efficiency

- ❖ Program can run on any device such as a phone, laptop or smart watch (a specific maximum amount of storage memory the program may use).<sup>4</sup>
- ❖ This program can be applied to anyone

Word Count: 144

---

<sup>4</sup> Andrew Eng, interview #1 by Kaila Eng, Bangkok, November 23, 2019, audio recording 05:30, Appendix