

Project Name: Taskmaster

Problem: Massive influx of unproductivity, procrastination and loneliness

Objectives:

- I. To be able to log tasks and create a digital clock to count down;
- II. Code a reciprocation system to reward players for completing tasks
- III. Account system and recording of playerdata
- IV. Simple turn based combat system

Planned Features:

- I. Log up to 12 tasks at a time and send reminders to complete them
- II. Chatbox
- III. Reminder system
- IV. Point system where it gives you points to spend on the in game items
- V. A turn based battle game
- VI. A shop system for the in game battle game

Expected User Input

- I. Task to be done
  - A. Whether or not it is done
  - B. When the task is to be done
- II. Item purchased in the in game shop
- III. Action in the turn based battle game part of the program

Outputs:

- I. A set amount of in game currency
- II. A reminder sent when the task is to be completed
- III. If you have enough in game currency to buy an item or not
- IV. The result of your actions in the turn based battle game

Pseudocode:

START PROGRAM

IMPORT random number generator

INITIALIZE empty list tasks

SET player\_health = 100

SET computer\_health = 120

DISPLAY menu:

1. Add Task
2. Delete Task
3. Edit Task name
4. Complete Task
5. Fight
6. Exit Taskmaster

```
INPUT choice
WHILE choice is not 7 OR choice is outside range 1 to 6
    IF choice == 1 THEN
        PROMPT user to enter a task or "0" to stop
        WHILE task is not "0" OR number of tasks < 12
            IF task == "0"
                EXIT loop
            ELSE
                ADD task to task list
                DISPLAY all tasks with numbering
                PROMPT for another task
            ENDIF
        ENDWHILE
    ELSE IF choice == 2 THEN
        DISPLAY all tasks with numbering
        PROMPT user to enter task number to remove or 0 to stop
        WHILE remove is within task list OR task list is not empty
            IF remove == 0
                EXIT loop
            ENDIF
            DISPLAY removed task
            DELETE selected task from list
            DISPLAY updated task list
            PROMPT for another task number
        ENDWHILE
    ELSE IF choice == 3 THEN
        DISPLAY all tasks with numbering
        PROMPT user to enter task number to edit or 0 to stop
        WHILE edit number is valid
            PROMPT for new task name
            UPDATE selected task
            DISPLAY updated task list
            PROMPT for another task number
        ENDWHILE
    ELSE IF choice == 4 THEN
        DISPLAY all tasks with numbering
        PROMPT user to enter completed task number or 0 to stop
        WHILE completed task number is valid
            DISPLAY task accomplished message
            REMOVE task from list
            DISPLAY updated task list
            PROMPT for another completed task
```

```
ENDWHILE
ELSE IF choice == 5 THEN
    PROMPT player to choose attack:
        1 = Blade
        2 = Bow
        3 = Shield
    WHILE computer_health > 0 OR player_health > 0
        SET attacks = ["Blade", "Bow", "Shield"]
        GENERATE random computer attack (0 to 2)
        IF player attack equals computer attack
            BOTH lose 5 health
        ENDIF
        IF player wins matchup
            PLAYER loses 10 health
        ENDIF
        IF computer wins matchup
            COMPUTER loses 10 health
        ENDIF
        DISPLAY both health values
        IF computer_health == 0
            DISPLAY "Player wins!"
            EXIT loop
        ELSE IF player_health == 0
            DISPLAY "Computer wins!"
            EXIT loop
        ENDIF

        PROMPT player for next attack
    ENDWHILE
ENDIF
PROMPT user for menu choice again
ENDWHILE
DISPLAY "Goodbye, user!"
END PROGRAM
```