326 Final Project Report

Purpose of each file in your repository:

tasks.text: a text file containing tasks for a kanban board with 5 tasks.

- [1, generate idea for project, 12/10, done
- 2, define methods, 12/10, done
- 3, create gui, 12/10, in progress
- 4, debug, 12/10, in progress
- 5, write docstrings, 12/10, to do]

test_kanban: test script for kanban.py that tests four methods of the program. (clear_board, edit_task, colm_movement, Task __init__)

<u>Instructions on how to run your program from the command line:</u>

Type in terminal to run program - python3 kanban.py

Welcome Screen

When the Kanban board runs the user should be met with a greeting message in the command line. The board should meet you with the message "Welcome to the kanban board! Lets begin!"

Path to Options Menu

The board will give you the option to add different tasks to your board or import tasks from a file. If you do not wish to add a new task to your board you will be prompted to the options menu

Insert a .txt File with Tasks

If you do wish to add a file with tasks you can type "file" into the command line. From this step, you will add the name of the file in this format, "examplefile.txt" From this step you will be met with the options menu.

Manually Adding Tasks

If you do not wish to add a file you will be able to just add your own task by answering "yes" which will prompt you with the option to add a task id which should be an integer ("45"). Additionally, it will ask you for a task description that will be associated with the task id in this case of "45". The task description the user inputs such as "write docstrings" will be stored as a string associated with the task id. You will also add a due date that is a string that is associated with the task_id. From this step you will be able to add another task by answering "yes" to "Do you have another task to add to your board? Yes or No" which will repeat the steps above. If

answered "no" the user will be prompted to the options menu. (Tip: Remember to add all of your tasks in the beginning. You will not be able to add new tasks after answering "no" to this question in the command line.)

Edit Task

To edit a task that is currently stored, enter "edit task" on the options menu into the command line. You will be prompted to enter the task id (INT) of the said task that you would like to edit ("45"). The task id will remain constant but you will be able to change the description and the new due date for the edited task. After changing the due date you will be prompted back to the options menu.

Moving Tasks

To move tasks from one column or another you will call this option in the options menu (What would you like to do next with your board? Options: edit task, move task, display board, display board to csv, clear board, done edit task) by inputting "move task" into the command line. You will then enter the task id (INT) that you would like to move to another column ("45"). You have the option to move the task from any column ("to do", "in progress", and "done") to any other column. If your task is in "to do" when it asks "Enter the column you want to move the task to" the user is able to input "in progress" or "done" to move this task to that specific column.

Displaying the Board

To display the board, on the options menu the user will input "display board" into the command line. The entire board with all of the columns and tasks will be printed.

Clearing the Board

To clear the entire board of tasks to an empty Kanban board, at the options menu, the user will input "clear board" into the command line.

Finish with the Board

If you wish to be done with the board simply input "done" on the options menu.

<u>Instructions on how to use your program and/or interpret the output of the program, as applicable:</u>

This program is built for programmers working on projects. It is a kanban board that helps a programmer keep track of all the work they have to do. The kanban board has 3 columns, to do, in progress and done. You have the option of loading in your tasks from a text file or manually typing them into the terminal. The programmer is able to move their tasks from column to column. They are also able to edit tasks, display their board, and clear their boards. When the

board is displayed, you are able to read all the tasks in each column of the board. You will be able to see the id, description and due date of each task. This will help you stay organized and have a clear understanding of how you need to manage your time. You can think of this board as a virtual agenda book. When you are done with a project, you can write "done" into the terminal and start another project.

The output of the display board will look something like this-

```
{'to do': [{'1': ['fix errors', '12/5'}, {'2': ['fix doc strings', '12/5']}]}
{'in progress': []}
{'done': []}
```

Here you can see that there are 2 tasks that the programmer needs to do in the to do column, and no tasks in the in progress and done columns. With this board a programmer can decide the next steps they need to take to finish their project.

Annotated Bibliography

devanshigupta1304. "How to Remove an Item from the List in Python?" *GeeksforGeeks*, 29 Aug. 2020, <u>www.geeksforgeeks.org/how-to-remove-an-item-from-the-list-in-python/.</u>

"In order to continue making progress on our project we needed some guidance for our clear_board() method. This source helped us to find the best way to remove items from a list which in result helped us complete this method."

"List Methods in Python: Set 2 (Del, Remove(), Sort(), Insert(), Pop(), Extend()...)."

**GeeksforGeeks*, 18 Sept. 2018,

www.geeksforgeeks.org/list-methods-in-python-set-2-del-remove-sort-insert-pop-extend/

"In order to continue making progress on our project we needed some guidance for our remove() function in our colm_movements method and this link helped lead us in the right direction. We used this source in order to figure out errors in our code and help us finish this specific function in our method."

pawan_asipu. "Append() and Extend() in Python." *GeeksforGeeks*, 1 Apr. 2020, www.geeksforgeeks.org/append-extend-python/?ref=leftbar-rightbar.

"In order to continue making progress on our project we needed some guidance for our append() function in our colm_movements method and this link helped lead us in the right direction. We used this source in order to figure out errors in our code and help us finish this specific function in our method."

Weber, Brian. "Defining Main Functions in Python." *Real Python*, Real Python, 3 Oct. 2020, https://realpython.com/python-main-function/

"Our group was still learning and getting used to the purpose of a main function. This source helped us better understand how to write one and the purpose behind it."