1. Title:

Todo list: be ahead of due dates

2. Problem:

Some times the work is to much and it requires a to do list to help me to arrange my time, so that I will not miss any assignment. My Todo list will serve as a calendar and save all of assignments and the due date.

3. Primary stakeholders:

The primary stake holders are all students as long as they have any assignment. Actually, it can be used by anyone because as long as you are a human, you have a horrible thing that is chasing you, which is normally called "due date". User can set the category/subject of the event/assignment, the due date for that event, the priority, a introduction for the assignment and category and predicted time finish it.

4. Graphical user interface:

| Delete event | |
|---|----------------|
| Out put | |
| | |
| add event | Change event |
| * Must fill in something Name * Intro | Name of event* |
| Due date * How important 0 1 2 3 4 5 0: trivia Predicted time to finish | |
| ALEQUICATOR CIMIC TO JUNISH | Out prt |
| Delete event | |

5. Data Structure:

The user should be able to input the data from the console. Also, the user can have the input in form of csv file. I will use list ADT (implement linked list). I use it because I think the event are connected together. Once you have finished one assignment, you can just cross it out and start the next one. Also, I will probably use priority queue to have a separate to do list specifically for things that has priority. I will use a inner class to hold all the information of the object. private int dueDate;

private int priority;

private String assignmentName;

private String assignmentIntro;

private String predictFinishTime;

6. Input Data File Format

Input type 1: type the information (such as due date, event name, priority) from the GUI and the program will store the data.

Input type 2: the program should be able to read from a .csv file

The Sample.csv file should include content like the following images:

| Name | Due date | Introduction | Priority | Predicted time to finish |
|------------------|------------|--------------|----------|--------------------------|
| X5 team proposal | 11.20.2019 | CS 400 | 2 | 1H |
| HW 5 | 11.1.2019 | Math 340 | 3 | 2H |
| HW 11.5 | 11.20.2019 | Math234 | 4 | 1.5H |

7. Output Example

Case 1: the program directly tell you what you need to do next:

Case 2: The program will provide a csv file that includes all the events and the information in the correct order. (sort the events based on due dates, then the priority.)

due at: 11.1.2019

For example:

If the content of input csv file is:

| Name | Due date | Introduction | Priority | Predicted time to finish |
|------------------|------------|--------------|----------|--------------------------|
| X5 team proposal | 11.20.2019 | CS 400 | 2 | 1H |
| HW 5 | 11.1.2019 | Math 340 | 3 | 2H |
| HW 11.5 | 11.20.2019 | Math234 | 4 | 1.5H |

The content of output csv file should be:

| Order | Name | Due date | Introductio n | Priority | Predicted time to finish |
|-------|---------------------|------------|------------------|----------|--------------------------|
| 1 | HW 5 | 11.1.2019 | Math 340 | 3 | 2H |
| 2 | HW 11.5 | 11.20.2019 | Math234 | 4 | 1.5H |
| 3 | X5 team proposal | 11.20.2019 | CS 400 | 2 | 1H |