Memory Tracker (Version 1.0.0)

**Description:** The Memory Tracker program is made to help a caretaker keep track of a patient’s overall health who has a form of dementia, while also keeping track of the patients’ memories that he or she may have forgotten, and reminding them of these memories, as their overall health continues to decline. The idea for this program was made when a recent event happened in my extended family, which could change my life and my families forever. As of April 2021, I found out that one of my grandfather’s was informally diagnosed with Lewy Body dementia. This form of dementia can be best described as when “Protein deposits, called Lewy bodies, develop in nerve cells in the brain regions involved in thinking, memory and movement (motor control)”- Mayo Clinic. Like other forms of dementia, a person with this form can lose their memory anywhere between very sudden, to a 10-year time span. Like with many forms of dementia, a person with this form can enter a rapid state of decline in their overall health without warning, and this in turn could cause my grandfather to forget who his family is and who his grandsons are, one of them being me.

While I cannot stop the process of my grandfather’s memory loss completely, I had idea of a program that could not only help him regain some of his memory that he had lost in the short term, but also help a caretaker keep track of his overall health, as it continues to decline. The program that I am referencing is known as the Memory Tracker. The Memory Tracker program will have specific questions to conduct a daily analysis of the patient’s overall health. This program will also have a text box that is meant for the caretaker to type in any information he or she needs to share with the patient, including lost memories. Once the caretaker has typed in all the corresponding information into the program. He or she can then save the document in the form of the text file or .txt file, to be saved for a later date. Another thing to mention about the text file, is that each text file that is saved, will automatically have a time stamp on it. This in turn will help the caretaker keep a log of the patient’s overall health, memories the patient has forgotten, and how far their state of decline has progressed. While it is painful to see time stamps on how far the rapid state of decline is. The caretaker can use these time stamps to evaluate when the patient might need more medical care, as their state of decline continues to worsen.

While this program is designed for a caretaker, that patient may use this program freely, as long as their overall health is still intact. In the case of my grandparents, my grandmother would be the caretaker of my grandfather, and she would be the primary user for this program.

**Requirements:** The requirements for this program are the following:

* The primary requirement for this program, is to give a tool for a caretaker that has built in questions for the caretaker to answer. These questions include the following.
  + How is the Patients Physical Health?
  + How is the Patients Emotional Health?
  + How is the Patients Mental Health?
  + Are their any Memories that the Patient has forgotten?
  + List of Medications the Patient is Taking
  + Symptoms and Response to Medications.
* The Program will also have a text box that the user can write freely any recommendations or memories to tell the patient that they may have forgotten. In case of the patient, this servers as a reminder tool.
* A shortcut method will be needed for the user to quickly type in medications, without having to write the full name of the medication listed again.
* An External Help Manual will be needed that is optional for the user to learn and see what certain buttons and menu tabs do inside the program.

**Specifications:** The specifications for this program are the following:

* Menu Tabs
  + A Help Menu Tab will be needed to give the user a quick starter guide on how the program functions.
  + An About Menu Tab will be needed to inform the user the version of this program, along with contact information, in case the user wants any changes or updates made to the program.
  + A Save As Menu Tab will be needed for the user’s his or her text file, onto to his or her PC, in the file location of his or her own choosing. The Save As Menu Tab will also need three different save options:
    - Save All: The Save All option will allow the user to save all of the information in the program.
    - Save Info for Doctor: The Save Info for Doctor option will allow the user to save only the information that is needed for a medical doctor.
    - Save Info to Tell Patient: The Save Info to Tell Patient option will allow the user to save only the Information that is needed to be given to the patient.
* Buttons
  + A Clear Button will be needed in order to clear the entire program for the user.
  + A Restore File Button will be needed to restore the file that has been cleared in case the user makes a mistake.
  + Medication Shortcut Buttons will be needed, for the user to quickly type in a medication that is referenced in the list, without having to type out the full medication name.
* Text Boxes
  + Each question will need a text box and a free text box will needed for the Information to Tell Patient section.