Documentation

* **Planning**
  + After looking over the document, features of the application were put into user stories, and split into 3 sprints based on the amount of work they’re estimated to take as well as their relationship to other user stories.
  + As there is about a week left at the time of writing this, the duration of each sprint should take no more than 2 days
  + For the most part, the requirements were pretty straight forward, but there are a few things that will need clarified for future reference.
    - If a user chooses to display files, are expected to display every file on the computer or simply the files in the current directory?
    - When adding, deleting, or searching for a file it is unclear whether or not case sensitivity is a requirement or merely a suggestion.
* **Sprint 1**
  + The majority of sprint 1 was actually setting up and dealing with documentation which took longer than expected.
  + All of the stories were completed fairly quickly. In hind sight, these stories probably weren’t worth a full point each, but rather a half or even a quarter of a point.
  + In hindsight a lot more could have gotten done in a single sprint
* **Sprint 2**
  + Like the stories in sprint 1, creating another menu as well as a way to get back to the main menu was made quickly without any issues.
  + Story #3 proved to be a bit more challenging. Not only was there a lot more coding involved, but a lot of moving parts as well as some functions I had to familiarize myself with. To save myself some time, I ended up reusing parts of the merge sort algorithm I created in a previous program to sort files for this program.
  + I also had to remind myself to keep functions contained within their own methods. Having a method with multiple functionalities creates dependencies and is overall a bad practice
* **Sprint 3**
  + With the beginning of a new work week, I was able to complete the first story much quicker than I expected. Overall, I’ve found out that working with files is much easier than I expected which has made many of the user stories throughout this entire project a lot more manageable.
  + For now, user story 5 ignores case sensitivity, but this can be changed later if desired.
  + User story 6 is similar to story 5 in a lot of ways so a lot of code could be reused.
  + I also changed both methods to return to the secondary menu regardless of whether or not the operation was successful. This is because I didn’t want users to be stuck adding/deleting files they didn’t intend to add/delete if the file had already been added/deleted
* **Reflection**
  + Overall, the project was very successful. All stories were completed within their given sprints. This can be attributed to amount of time we were given and the difficulty of each individual issue.
  + I overestimated the amount of time needed for the issues, but I still feel that each story was placed in an appropriate sprint and that much I wouldn’t change.
  + I would say that most of the time sprint throughout this project was mostly spent on analyzing, planning, and reflecting on the features needed for this project. This is probably due to having less experience with agile/scrum portion of working on a project or simply because time doesn’t fly as fast as it does while coding.
  + This also means that this is the area that needs the most improvement. I expect that not every detail I’ve written is necessary and there might be some details that I failed to mention.
* **Enhancements**
  + My first recommendation for this application is to get rid of the secondary menu. In order to add/delete/search for a file, you first have to navigate to a second menu. This might make sense if there were more options on the main menu, but as of right now the only other options are show directory and exit program. I believe it would also benefit the user since they might not initially know where they need to navigate in order to add/delete/search for files.
  + Another change I would make would be improving the usefulness of searching for files. As of right now, searching for files only yields whether or not that file is in the current directory. This may be an issue for users trying to find a file in a sub-directory.
    - In addition to this change I believe that the search method should also be able to show you where the file is located in a (sub-)directory.
  + Finally, I believe it would be beneficial to add a feature that allows for users to move forward and backwards between directories. Most of the functions of this program can only be operated in a single directory. If the user could move between directories, they would get more use out of the application