

PHASE 1 PROJECT - VIRTUAL KEY FOR YOUR REPOSITORIES

COMPANY: LOCKERS PVT.LTD

DESIGNED & DEVELOPED BY: ASWINI PALANI

Link to GitHub repository:

https://github.com/Aswini88Palani/Locked_Me_Project.git

Sprint 1:

1. Design Flow of the program
2. Decide Classes and Methods
3. Create Project Structure
4. Code Welcome Screen
5. Code Main Menu
 - List Files
 - Manage Files
 - Exit the program

Sprint 2:

1. Code Business Level Operations
 - Add a File Method
 - Delete a File Method
 - Search a File Method
 - Exit to Main Menu
2. Code to display result on successful & unsuccessful operation
3. Use appropriate concepts to display the output in a standard manner

Algorithm:

- 1) Start
- 2) Print Options to list files, manage files and exit the program
- 3) If choice is 1
 - a) Read all files in the directory
 - b) Sort files in ascending order
 - c) Show the file list

- d) Goto 3
- 4) If the choice is 2
 - a) Print Options to add, search, delete files & exit to main menu
 - b) If the choice is 1
 - i) Accept file name from the user
 - ii) Create that file
 - iii) Goto b
 - c) If the choice is 2
 - i) Accept file name from the user
 - ii) Delete that file
 - iii) Goto b
 - d) If the choice is 3
 - i) Accept file name from the user
 - ii) Search that file
 - iii) If file found, print file is found
 - iv) Else print File Not found
 - v) Goto b
 - e) If the choice is 4 goto 2
 - f) Goto 2
- 5) If the choice is 3 goto 6
- 6) Stop/Exit

Core Concepts Implemented:

1. Encapsulation - For better control of class attributes and methods; Improved flexibility, maintainability and re-usability of the code.
2. Do While loop - Execute the code block once, before checking if the condition is true, then repeat the loop as long as the condition is true.
3. Try Catch statement - Tests a block of code for errors while the program is being executed; The catch statement allows to define a block of code to be executed, if an error occurs in the try statement.
4. If statement - To execute a block of code, if a condition is true.

5. Exists method - To check whether there is a file or directory denoted by the abstract filename exists or not.
6. Arrays - To arrange data in a specific order.
7. Switch - To select one of many code blocks to be executed.
8. File Handling - To work with files; file creation, deletion & search.
9. Number Format Exception - That accepts only numbers as input from the user.
10. Equals - To compare two values and returns the result.

Conclusion:

Best practices are followed to ensure that the program doesn't end spontaneously and all exceptions are handled using custom or default exception classes. Arrays & File Handling methods are implemented to sort the files in ascending order; create new file, delete and search a file in the directory.