PROJECT TITLE : **LockedMe**

- **Project and developer details –**

  Dr. Jyothi N.M, Associate Professor, Dept.of Computer Science and Engineering, K L University, Vadeswaram, Guntur Dist., Andra Pradesh

- **Sprints planned and the tasks achieved in them** – 4 sprints planned ,.etails given below
- **Algorithms and flowcharts of the application** – Flow of project development is explained below in detail
- **Core concepts used in the project** –Explained below
- **Links to the GitHub repository to verify the project completion**
- **Your conclusion on enhancing the application and defining the USPs (Unique Selling Points)-** Project is fully functional and user friendly.

Project objective:

As a Full Stack Developer, complete the features of the application by planning the development in terms of sprints and then push the source code to the GitHub repository. As this is a prototyped application, the user interaction will be via a command line.

Background of the problem statement:

Company Lockers Pvt. Ltd. hired you as a Full Stack Developer. They aim to digitize their products and chose LockedMe.com as their first project to start with. You're asked to develop a prototype of the application. The prototype of the application will be then presented to the relevant stakeholders for the budget approval. Your manager has set up a meeting where you're asked to present the following in the next 15 working days (3 weeks):

I Specification document - Product's capabilities, appearance, and user interactions-

The features of the project s are

Files of the Company Lockers PVt. Ltd is maintained in test directory of D:\ drive

1.All the file manipulation is done in this directory alone.

2. Hence, D:\\test\\ is hard coded in the program

3.Create a new file

4. Add contents to the file

5. Delete file

6. Search file and show its contents

7. List the files

8.All functionalities accepts input from user.

9.And entre project is menu driven..

II Sprints

Number and duration of sprints required – 4

Sprint1 –Creating main function and menu design

Sprint2- Creating functions (adding file, listing file)

Sprint3- Creating functions(deleting file and searching file)

Sprint4-Testing

III Github url

Setting up Git and GitHub account to store and track your enhancements of the prototype

IV Java concepts being used in the project

–interface, functions, class, methods, file handling, packages, exception handling, io,util

Data Structures where sorting and searching techniques are used. –linear search and builtin sortin by list is used

Generic features and three operations: -

Following operations are used

public abstract void showAllFiles(); -Lists all files in test directory

public abstract void addFile();-Creates file in test directory and adds content to it

public abstract void deleteFile();-Deletes user given file in test directory. If file not present shows message

public abstract void searchFile();-searches user input file from test directory and displays its content. If file not found , displays the message

All the above operations are provided with exception handling

Below Features are incorporated in the project

- Retrieving the file names in an ascending order-
- Business-level operations:
- Option to add a user specified file to the application
- Option to delete a user specified file from the application
- Option to search a user specified file from the application
- Navigation option to close the current execution context and return to the main context
- Option to close the application

Project developed meets The goal of the company is to deliver a high-end quality product as early as possible.

The project developed meets the following requirements and features

Software Requirement Specifications

Four sprints are designed to complete the application

- Flow of application is stated in sprint
- List the core concepts and algorithms being used to complete this application

  Core concepts used are

  Interfaces, Packages, methods,searching, sorting, file IO, exception handling,switch-case
- Code to display the welcome screen. It should display:- Application name and the developer details
- The details of the user interface such as options displaying the user interaction information
- Features to accept the user input to select one of the options listed
- The first option should return the current file names in ascending order. The root directory can be either empty or contain few files or folders in it
- The second option should return the details of the user interface such as options displaying the following:
- Add a file to the existing directory list
- You can ignore the case sensitivity of the file names
- Delete a user specified file from the existing directory list
- You can add the case sensitivity on the file name in order to ensure that the right file is deleted from the directory list
- Return a message if FNF (File not found)
- Search a user specified file from the main directory
- You can add the case sensitivity on the file name to retrieve the correct file
- Display the result upon successful operation
- Display the result upon unsuccessful operation

- Option to navigate back to the main context
- There should be a third option to close the application

  All the above requirements are incorporated in the proect and it is met/fulfilled as per company's need

- Implement the appropriate concepts such as exceptions, collections, and sorting techniques for source code optimization and increased performance – is taken care of in the project.

Following platform and technologies are used for development of the project

- Eclipse/IntelliJ: An IDE to code for the application
- Java: A programming language to develop the prototype
- Git: To connect and push files from the local system to GitHub
- GitHub: To store the application code and track its versions
- Scrum: An efficient agile framework to deliver the product incrementally
- Search and Sort techniques: Data structures used for the project
- Specification document: Any open-source document or Google Docs

Following requirements are met and tested:

- The source code should be pushed to your GitHub repository. You need to document the steps and write the algorithms in it.
- The submission of your GitHub repository link is mandatory. In order to track your task, you need to share the link of the repository. You can add a section in your document.
- Document the step-by-step process starting from sprint planning to the product release.
- Application should not close, exit, or throw an exception if the user specifies an invalid input.

- You need to submit the final specification document which includes:
    - **Conclusion**
    - The project meets the Company’s requirements and tested.
    - It is uploaded in Git.
    - Future Enhancements
    - The project is command prompt driven
    - It could be added with User Interfaces by using swing components

Note-Screen shots of output and entire source code is attached as different files