**SPECIFICATION DOCUMENT**

Project Title: FileLockerApp

Project Developer: Anmol Panjwani

**Problem Statement:**

Company Lockers Pvt. Ltd. aimed to digitize their products and chose LockedMe.com as their first project to start with. This is a prototype application designed to test the basic features of the desired app.

**Product capabilities:**

1. The user is able to perform the following operations using this application
   1. Retrieve the file names in an ascending order
   2. Business-level operations like
      1. Adding a user specified file
      2. Deleting a user specified file
      3. Searching a user specified file
      4. Navigating back to the outer menu
   3. Closing the application
2. The application works with a single executable file and there’s no need to download any other dependency.

**Product Appearance:**

Since it is a prototype version of the application, the interaction is via the command line.

**User interaction:**

1. The user can interact with the application via a command line, without needing any other application except Java to support it. For windows terminal, type the command:

**Java-cp lockerapp-0.0.1-SNAPSHOT.jar com.lockerapp.main.FileLockerMain**

**Sprint Planning:**

The project was planned to be completed in 3 sprints, each sprints consisting of 5 working days.

* **Sprint 1 :** This sprint was planned to lay the basic model and collect the necessary resources.
  + **Tasks achieved:** The basic model with its attributes and functions were laid.
* **Sprint 2:** In this sprint, Sprint 1 week was reviewed and the Business logic was prepared of the application, with the testing and debugging.
  + **Tasks achieved:** The business class was integrated with the model class. The important functionalities were built and tested for errors.
* **Sprint 3**: This was the final sprint where Sprint 1 and Sprint 2 backlogs were reviewed and rectified. The Main class was implemented and the app was tested for bugs and errors.
  + **Task achieved:** As planned, the basic prototype version1 of the FileLockerApp was ready.

**Flowchart:**

**Tools and Technologies used:**

1. Spring Boot 4: An IDE to code the application
2. Java: A programming language to develop the prototype
3. Git: To connect and push files from the local system to GitHub
4. GitHub: To store the application code and track its versions
5. Scrum: An efficient agile framework to deliver the product incrementally
6. Maven: To manage the project dependencies
7. Microsoft word: For the specification document

**Core concepts**

1. The project was developed using agile methodology. And to implement this, the scrum framework was used.
2. Various java OOPs concepts like Exception Handling, Abstraction, Encapsulation were implemented.
3. The project was built on a 2 tier architecture comprising of Presentation Layer and the Business Logic Layer.
4. The data structure used to store data is LinkedHashMap from the Map in Collections Framework. It’s properties are:
   1. It gets all the properties of Set.
   2. Its not thread safe.
   3. Allows one null.
   4. It is a subclass of HashSet
   5. It uses DoublyLinkedList internally to preserve the order of insertion.

**Links to access the project:**

1. For Project Executable File:

<https://github.com/anmolpanjwani/TrainingPhase1Project/blob/master/lockerapp-0.0.1-SNAPSHOT.jar>

1. For Project Source Code:

<https://github.com/anmolpanjwani/TrainingPhase1Project/tree/master/lockerapp>

1. Images of execution:

<https://github.com/anmolpanjwani/TrainingPhase1Project/tree/master/ImplementationImages>

**Conclusion**:

This deliverable is a Minimum Viable Product with the basic requirements. And, is yet to be tested in the market for product review and feedback. This MVP version is a tool to help determine this app’s potential. It helps in identifying the Unique Selling Points as it:

1. Saves time and resources by making sure we’re investing in a project that’s likely to be successful.
2. Checks whether this app is appealing to potential users.
3. Finds out which trends we can take advantage of when developing the full version of the product.
4. Attains a potential user base and find early adopters.
5. Saves time and money on developing the final product.
6. Attracts investors earlier.