Development of LockedMe.com File Management Application

Developer: Newton Bujiku – bujikun@vodacom.co.tz

GIT URL:

The progress of the project is hosted at github repository below:

https://github.com/bujikun/java-fsd-newtonbujiku-bujikun-vodacom.co.tz

Under the Phase 1 directory

SPECIFICATION

This is a command line application that enables a user to create, view, delete and search files in a given directory. The user can navigate through different options present of the screen through user inputs.

TECHNOLOGIES & CONCEPTS

This application uses the following concepts and technologies

- Java 17
- Maven
- IntelliJ Idea
- Git & Github
- Agile Scrum Framework

For Java concepts in the project: The application requires JDK 17.

It uses concepts such as Multithreading, Regular Expressions, Generics, Stream API, Data Structures, Java NIO API and other basic java concepts.

Algorithms

Sorting : Selection Sort

Searching : Binary Search

PROJECT IMPLEMENTATION

The project was completed in 2 sprints:

Sprint 1

The following were achieved in this designing sprint:

- Determining Java concepts to be used
- Choosing data structures and algorithms
- Defining project scope and structure
- Preparing remote repository
- Sprint planning and review

Sprint 2

The following were done in this sprint including scrum ceremonies and user stories:

- Sprint Planning
- As a user I would like to be able to launch the program via a command line and pass arguments so as to create initial files
- As a user I would like to be able to select an option to create a new file
- As a user I would like to be able to select an option to delete an existing file
- As a user I would like to be able to select an option to view all files in a directory
- As a user I would like to be able to select an option to search a file using a filename
- As a user I would like to be able to select an option to search a file by passing a sequence of characters

How run the program.

The program can be run after unzipping the code and opening the java directory in a command line using **cd** command:

Linux/macOS: code/src/main/java

Windows: code\src\main\java

All the below command must be run inside java directory

Then compiling using **javac** command:

Linux/macOS: javac tz/co/vodacom/bujikun/Main.java

Windows: *javac tz\co\vodacom\bujikun\Main.java*

Then execution using **java** command:

Linux/macOS: java tz/co/vodacom/bujikun/Main.java

Windows: java tz\co\vodacom\bujikun\Main.java

Also this project can be loaded into an IDE like IntelliJ and Eclipse and then using the specific IDE run mechanism.

The screenshot.pdf file has all the screenshots depicting the execution of the application step by step.

Source Code Documentation

There is also a java doc generated documentation that contains all the information about classes and what they do. This can be reached in the directory **/code/documentation** and clicking the **index.html** which will open in the browser.