GitHub Repository: https://github.com/x4teen/FullStackDev02

Section 01 – Program capabilities

Main Screen – A user gets four choices as follows and an option to exit the program. A base directory is set by the program. The program API allows to change the base directory. All actions are performed in the base directory. After making a choice the user always has an option to go back to the main menu.

Text

Description automatically generated

Choice # 1 Listing files in the base directory.

Graphical user interface, text, application

Description automatically generated

Choice #2 Create a new file in the base directory.

Text

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated

Choice # 3 Search for a file in the base directory.

Text

Description automatically generated

Choice # 4 Delete a file from the base directory.

Text

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated

The software ignore incorrect choices and brings the user back to the first choice menu.

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The program terminates when the user enters 99. The termination code can be changed to any integer from the API.

Text

Description automatically generated

Section 02 – Program Design

Concepts Used:

The programs have an object-oriented design. The concepts used are encapsulation, inheritance, polymorphism, interfaces and singleton design.

Packages:

1. com.ryankhan.menu

- MenuItem.java (interface)

- Menu.java

- UserInput.java

The package was designed to be reusable for any console based menu and for any action. A Menu object is a collection of MenuItems. UserInput is a singleton that ensures there is only one Scanner class available for the application.

2. com.ryankkhan.filemenu

- FileMenu.java (extends Menu class)

- CreateFile.java (implements MenuItem)

- ListFiles.java (implements MenuItem)

- SearchFile.java (implements MenuItem)

- DeleteFile.java (implements MenuItem)

The package is implements the desired functionality on a files system.

3. com.simplilearn.assignment

- TestMenu.java

The package is the final application that interacts with the user.

Section 03 – Agile Design

The project was completed in two sprints.

Sprint 01 - com.ryankhan.menu

In this sprint Menuitem interface, Menu and UserInput class was created and tested to ensure they work for any menu.

Sprint 02 - com.ryankhan.filemenu

In this sprint all file system functionalities were implemented and tested.