Assignment Case	
DS using CH3	BINUS UNIVERSITY
Periode Berlaku Semester Genap 2023/2024 Valid on Even odd Year 2023/2024	Software Laboratory Center Assistant Recruitment 24-2

Note: Please focus on the main logic and main feature!

(Splash screen and design are not scored)

Soal

Case

BerlShka

Berishka epitomizes the essence of contemporary fashion, blending modern aesthetics with timeless elegance. Our meticulously curated collection showcases an eclectic mix of apparel, ranging from casual chic to sophisticated glamour, designed to inspire and empower individuals to embrace their personal style with confidence.

Driven by a commitment to quality and innovation, Berishka offers a seamless shopping experience where every garment tells a story of craftsmanship and refinement. With a focus on customer satisfaction and attention to detail, we invite you to explore our diverse range of fashion-forward pieces and elevate your wardrobe with Berishka's signature style.

Home Page

- This menu contains of 5 menus, which are Add, View, Update, Remove and Exit.
- Prompt user to input chosen menu. Validate the input must between 1 and 4 inclusively.

Figure 1. Home Page

Halaman: 1 dari 6 Page 1 of 6

- 1. If user choose Add Product (Menu 1), then:
 - Prompt user to input product name. Validate the input must be 10-20 characters long (inclusive).
 - Prompt user to input product price. Validate the input must be between 50000 100000 (inclusive).
 - Prompt user to input product color. Validate the input must be either Black/White/Brown (case sensitive).
 - Prompt user to input product quantity. Validate the input must be between 10 99
 (inclusive).
 - Prompt user to input product size. Validate the input must be either S/M/L/XL (case sensitive).

```
Input product name [10 - 20 characters]: Veka Jean
Input product name [10 - 20 characters]: Veka Jeans
Input product price [50000 - 100000]: 49999
Input product price [50000 - 100000]: 101000
Input product price [50000 - 100000]: 60000
Input product color [Black | White | Brown]: black
Input product color [Black | White | Brown]: White
Input product quantity [10 - 99]: 9
Input product quantity [10 - 99]: 101
Input product quantity [10 - 99]: 15
Input product size [S | M | L | XL]: xL
Input product size [S | M | L | XL]: XL
```

Figure 2. Add Product

 After validating all the product's information, generate the Product ID based on this format:

```
BRXXX
X = Random number (0-9)
```

o Then, insert the new product into file "products.txt" with the following format.

ID# Product Name # Product Price # Product Color # Quantity # Size

- 2. If user choose View Product (Menu 2), then:
 - Read data from "products.txt" with the following format.

ID#ProductName#ProductPrice#ProductColor#Quantity#Size

Halaman : 2 dari 6 Page 2 of 6 Display all products from "products.txt" and the sorting options.

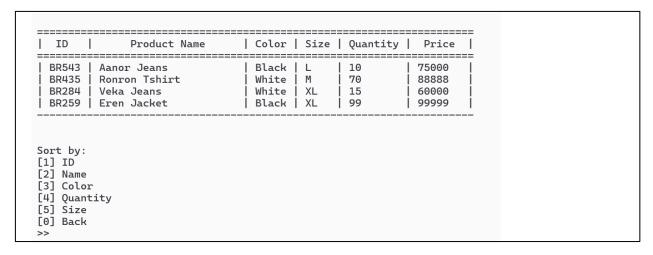


Figure 3. Add Product

o If there is **no data to be displayed**, please **show empty message** to the user.

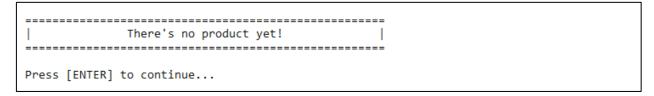


Figure 4. Empty Message

- Prompt user to input based on the options. Make sure the products list will be sorted
 ascendingly with the following conditions:
 - [1] -> sort based on the ID
 - [2] -> sort based on the Product Name
 - [3] -> sort based on the Product Color
 - [4] -> sort based on the Product Quantity
 - [5] -> sort based on the **Product Size**
- o **Display** the sorted result after every sorting process is completed.

Halaman: 3 dari 6 Page 3 of 6

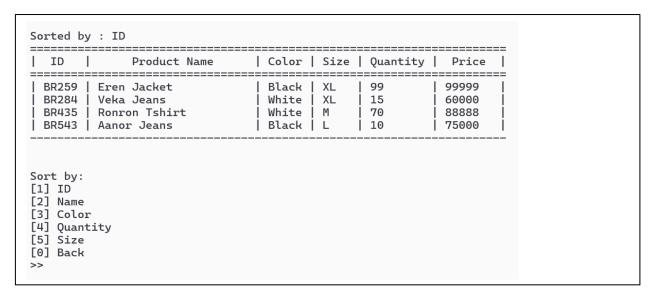


Figure 5. Sorted Result

- 3. If user choose **Update Product** (Menu 3), then:
 - Display all products from "products.txt"
 - o If there is **no data to be displayed**, please **show empty message** to the user.

```
There's no product yet! |

Press [ENTER] to continue...
```

Figure 6. Empty Message

o **Prompt** user to input **product ID** to update.

ID	Product Name	Color	Size	Quantity	/
BR259 I	 Eren Jacket	Black	XL	99	99999
BR284 1	Veka Jeans	White	XL	15	60000
BR435 I	Ronron Tshirt	White	M	70	88888
BR543	Aanor Jeans	Black	L	10	75000

Figure 7. Update Product

o If product ID is not found, **display** message to user.

Halaman: 4 dari 6 Page 4 of 6

```
Input product ID to update: BR123
Product with ID BR123 not found!

Press [ENTER] to continue...
```

Figure 8. Error Message

o If product ID **is found, prompt** the user to insert updated product details. **Make sure** to validate all the details **as the same as** the input validation.

```
Enter updated product name [10 - 20 characters]: Enel Jeans
Enter updated product price [50000 - 100000]: 75000
Enter updated product color [Black | White | Brown]: Black
Enter updated product quantity [10 - 99]: 11
Enter updated product size [S | M | L | XL]: L
Product with ID BR284 updated successfully!

Press [ENTER] to continue...
```

Figure 9. Update Product

- o Finally, **update** the product details in the file.
- 4. If user choose **Remove Product (Menu 4)**, then:
 - Display all products from "products.txt"
 - o If there is **no data to be displayed**, please **show empty message** to the user.

```
There's no product yet! |

Press [ENTER] to continue...
```

Figure 10. Empty Message

Prompt user to input product ID.

ID Product Name	Color Size	Quantity	Price
BR259 Eren Jacket BR284 Enel Jeans BR435 Ronron Tshirt BR543 Aanor Jeans	Black XL Black L White M Black L	99 11 70 10	99999 75000 88888 75000
Input product ID to remove:			

Figure 11. Remove Product

Halaman: 5 dari 6 Page 5 of 6 o If product ID is not found in the list, **display** error message to user.

```
Input product ID to remove: BR123
Product not found!

Press [ENTER] to continue...
```

Figure 12. Error Message

o If product ID is found, delete the product in "product.txt", and display success message.

```
Input product ID to remove: BR435
Product successfully deleted!
Press [ENTER] to continue...
```

Figure 13. Success Message

5. If user choose **Exit**, then stop the program.

Please run the EXE file to see the sample program.

Halaman: 6 dari 6 Page 6 of 6