


Soal Praktikum <i>Practicum Case</i>	 BINUS MALANG Institute of Creative Technology
COMP6362 Data Structures	
Teknik Informatika <i>Computer Science</i>	CS-COMP6362-Var02.3
Periode Berlaku Mulai Semester Genap 2019/2020 <i>Valid on Even Semester Year 2019/2020</i>	Revisi 00 <i>Revision 00</i>

Learning Outcomes

- Explain the concept of data structure and its usage in application

Topic

- Session 01 - Array and Structure

Sub Topics

- Array of Struct
- Struct Declaration
- Struct Implementation
- Array of Struct Implementation

Soal

Case

BAGOE'S stationery store is a small stationery store. Mr. Gimin, the manager of BAGOE'S stationery store, wants to change the cashier system to be paperless. He needs a program that can handle his stationery store transaction. He asks you as a skillful programmer to make a program like this:

- Program always shows List of Stationery which contains **No**, **Stationery Code**, **Stationery Name**, **Available**, and **Price** of the available stationery. The List of Stationery:

No.	Stationery Code	Stationery Name	Available	Price
01.	SA001	Pencil	140	Rp. 7500,-
02.	SA004	Eraser	90	Rp. 5000,-
03.	SA009	Pen	120	Rp. 8000,-
04.	SA012	Notes	80	Rp. 9500,-

- Program consists of 3 menus:
 1. Sell
 2. Add Stock
 3. Exit

- If user chooses **Sell**, then:
 - Ask user to input **stationery code** he/she wants to sell.
 - **The stationery code must consist of 5 characters** and be available in **the list of stationery**. If user inputs **the stationery code** other than the ones in the list, the program will show the message “--- The Stationery Code doesn't exist ---” and ask *user* to input again. **The stationery code** is case sensitive.
 - Then ask user to input **the quantity**.
 - **The quantity must be between 0 and x**, where **x = [available chosen stationery]**.
 - The user cannot sell the stationery more than **the quantity** available on the list. If user tries to do so, show the message “...The quantity of stationery is not enough...”
 - If user succeeds to sell, then show:
“Total Price is: Rp [price of stationery],- x [quantity of stationery] = Rp [total price],-”
“--- Thank You ---”
 - Then subtract **the available stationery** with **the quantity of stationery** that has been sold.
[available stationery] = [available stationery] - [quantity of stationery that has been sold]
- If user chooses **Add Stock**, then:
 - Ask user to input **the stationery code** he/she wants to add to the list.
 - The stationery code must **consist of 5 characters** and be available in **the list of stationery**. If user inputs **the stationery code** other than the ones in the list, program will show the message “--- The Stationery Code doesn't exist ---” and ask *user* to input again. **The stationery code** is case sensitive.
 - Then ask user to input **the quantity**.
 - Validate **the quantity of stationery** must be **between 1 and 10**.
 - If user succeeds to add stock, then show:
“--- Adding Stock Success ---”
 - Then add **the available stationery** with **the quantity of stationery** that has been added.
[available stationery] = [available stationery] + [quantity of stationery added]
- If user chooses **Exit**, then the program ends.

Please run the EXE file to see the sample program.

Print Screen of Main Menu

```

BAGUES Stationery Store CASHIER
=====

No. | Stationery Code | Stationery Name | Available | Price
-----
01. | SA001           | Pencil          | 140      | Rp. 7500,-
02. | SA004           | Eraser          | 90       | Rp. 5000,-
03. | SA009           | Pen             | 120      | Rp. 8000,-
04. | SA012           | Notes           | 80       | Rp. 9500,-
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Menu :
1. Sell
2. Add Stock
3. Exit
Input choice :

```

Print Screen of Sell Menu (Menu '1')

```
Input Stationery Code [5 chars]: SA009
Input Quantity [0..120]: 10

Total Price is : Rp 8000,- x 10 = Rp 80000,-
--- Thank You ---
```

Print Screen of Add Stock (Menu '2')

```
Input Stationery Code [5 chars]: SA004
Input Quantity [1..10]: 5

--- Adding Stock Success ---
```