


Practicum Case	
COMP6178 COMP6178003 Introduction to Programming	
Computer Science	C1-COMP6178-SH01-11
<i>Valid on Even Semester Year 2019/2020</i>	Revision 00

Learning Outcomes

- LO1 – Explain the kind of the algorithm in problem solving
- LO2 – Explain the usefulness of java syntax and OOPs
- LO3 – Explain the algorithm using java syntax
- LO4 – Explain the best algorithm in problem solving

Topic

- Session 11 – Introduction to OOP Concept

Sub Topics

- Advantage using OOP Concept
- Concept of Abstraction
- Concept of Inheritance
- Concept of Polymorphism
- Concept of Class and Object
- Concept of Encapsulation
- Introduction of OOP Concept

Soal

Case

POWER Recruitment

POWER Recruitment is a program to input, view, and remove the data of the candidate that want to join **POWER Group**. As a programmer, you are asked to build the program that consists of **4 menus**:

1. **Input New Candidate**
2. **View Candidate's Data**
3. **Remove Candidate**
4. **Exit**

```
POWER Recruitment
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1. Input New Candidate
2. View Candidate's Data
3. Remove Candidate
4. Exit
Choose :
```

- If user chooses **menu 1 (input new candidate)**:
 - The user will be asked to input:
 - **Candidate's name** must be **5 and 20 characters**, must be **at least 2 words**, and **the space character must not be in the first or last character**
 - **Candidate's gender** must be **male or female**
 - **Candidate's address** must be **ended with "street"**.
 - **Candidate's age** must be **17 and 30 years**
 - If user has inputted the data correctly, then the program will show the **initial** of the inputted data that is generated from the **first character of the first word** and **the first character of second word** from the inputted name.

```
Input candidate's name [5..20] : shirley
Name must be at least 2 words!
Input candidate's name [5..20] : shirley halim
Input candidate's gender [male | female] : female
Input candidate's address [must be ended with 'street'] : red strt
Input candidate's address [must be ended with 'street'] : red street
Input candidate's age [17..30] : 22

Thank you for registering! Your initial is : SH
```

- If user chooses **menu 2 (view candidate's data)**:
 - The program will **show the candidate's data sorted by name ascending**.

No.	Name	Initial	Gender	Age	Address
1.	marcella halim	MH	female	20	blue street
2.	shirley halim	SH	female	22	red street

- If there is **no data**, the program will show message **"No Data!"**

No data!

- If user chooses **menu 3 (remove candidate)**:
 - The program will **show the candidate's data sorted by name ascending**.

No.	Name	Initial	Gender	Age	Address
1.	marcella halim	MH	female	20	blue street
2.	shirley halim	SH	female	22	red street

Input candidate to be removed [1..2] [0 for cancel] : 3
 Input candidate to be removed [1..2] [0 for cancel] : 2

- The program will asked user to input the **candidate number** to be removed. The input **must be between 1 and the total number of candidate** that has been registered and the user can choose **0 for cancel** deleting the data.

No.	Name	Initial	Gender	Age	Address
1.	marcella halim	MH	female	20	blue street

- If there is **no data**, the program will show message **"No Data!"**

No data!

- If user chooses **menu 4 (Exit)** the program will be closed.

Please run the EXE file to see the sample program.