


<b>Assignment Case</b>	
COMP6122   COMP6122001 Framework Layer Architecture	
<b>Computer Science</b>	<b>Example Case</b>
<i>Valid on -</i>	<b>Revision 00</b>

**Soal***Case***JekPedia****Criteria:****1. State**

First, you need **state pattern** to let your program alter its behaviour when the internal state of an object changes.

**2. Iterator**

Next, you need to create **iterator pattern** to let your program loops over a collection without knowing the type of the collection.

**JekPedia** is the new merged company between Ojek Co. and Bopedia Co. Since its merging, JekPedia has announced lots of vacant position for developers around Indonesia. You, as the head programmer of JekPedia are asked to build a program based on the following criteria:

**1. Menu**

When the program starts, display menu to user. User can choose whether they want to **register new applicant form**, **view form**, or **exit** the program.

```
JekPedia
=====
1. Register New Applicant Form
2. View Form
3. Exit
>>
```

*Figure 1. Menu*

## 2. Register New Applicant Form

If user choose **menu 1 (Register New Applicant Form)**, then prompt user for information detail based on the following criteria:

- First, prompt user to **input name**. Validate the length of name **cannot be empty**.

```
Input name [cannot be empty]:  
Input name [cannot be empty]: Mario
```

*Figure 2. Name Input*

- Next, prompt user to **input job experience**. Validate the job experience must be **more than 1**.

```
Input job experience [> 1]: 0  
Input job experience [> 1]: 2
```

*Figure 3. Job Experience Input*

- Next, prompt user to **input job preference**. Validate the preference must be **between “Backend Dev” and “Frontend Dev” (case sensitive)**.

```
Input job preferences [Backend Dev | Frontend Dev][case sensitive]: bakkak dev  
Input job preferences [Backend Dev | Frontend Dev][case sensitive]: Backend Dev
```

*Figure 4. Job Preference Input*

- After that, **generate a random code** consisting of **5 characters** based on the following formula:

```
XXXXX | X can be filled with [A-Z0-9]
```

- Finally, **display message** informing the applicant form is being processed and **add data** to the database.

```
Data submitted!
```

*Figure 5. Display Success Message*

## 3. View Form

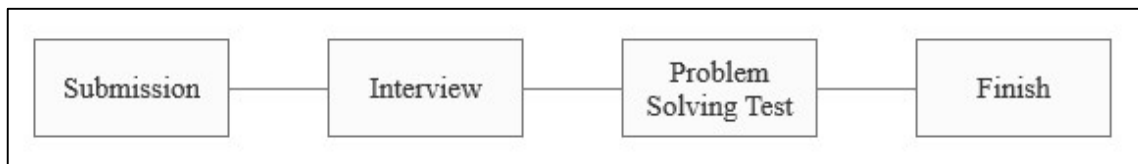
If user choose **menu 2 (View Form)**, then check the database based on the following criteria:

- If the **database is empty**, then **inform** user with a message.

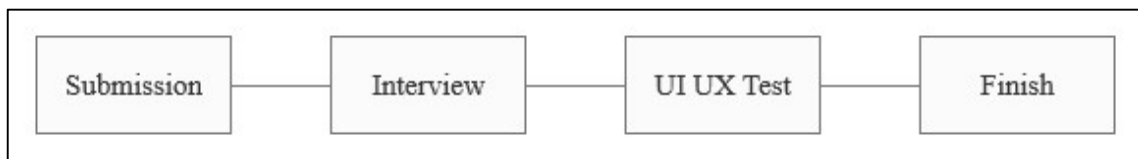
```
No data submitted yet..
```

*Figure 6. Database Empty Message*

- Otherwise, **display all identification** data with the following criteria:
  - **Applicant Code**
  - **Applicant Name**
  - **Job Experience**
  - **Job Preferences**
  - **Current Phase**, which divided based on **Job Preferences** based on the following picture.



*Figure 7. Backend Applicant Phase*



*Figure 8. Frontend Applicant Phase*

```

Applicant Code : VE88D
Applicant Name : Mario
Job Experience : 2
Job Preference : Backend Dev
Current Phase : Going Through Paperwork
  
```

*Figure 9. Display Applicant Data*

- Next, prompt user to **input preview status**. Validate the input must be **between “N” and “Q”** and on **case sensitive**.

```

Preview next applicant form ? [N for next | Q to quit][case sensitive]:
  
```

*Figure 10. Preview Input*

- If the input is “N” then the current data is **updated** to its **next phase**.
- Otherwise, if the input is “Q”, **return** to the menu.

```

Applicant Code : VE88D
Applicant Name : Mario
Job Experience : 2
Job Preference : Backend Dev
Current Phase : Going Through Paperwork
  
```

*Figure 11. Backend Dev Submission Phase*

Applicant Code : VE88D  
Applicant Name : Mario  
Job Experience : 2  
Job Preference : Backend Dev  
Current Phase : Ongoing Interviews

*Figure 12. Backend Dev Interview Phase*

Applicant Code : VE88D  
Applicant Name : Mario  
Job Experience : 2  
Job Preference : Backend Dev  
Current Phase : Solving Algorithm Problems

*Figure 13. Backend Dev Problem Solving Test Phase*

Applicant Code : VE88D  
Applicant Name : Mario  
Job Experience : 2  
Job Preference : Backend Dev  
Current Phase : Applicant Successfully Saved

*Figure 14. Backend dev Finish Phase*

Applicant Code : TFFRN  
Applicant Name : Maria  
Job Experience : 2  
Job Preference : Frontend Dev  
Current Phase : Going Through Paperwork

*Figure 15. Frontend Dev Submission Phase*

Applicant Code : TFFRN  
Applicant Name : Maria  
Job Experience : 2  
Job Preference : Frontend Dev  
Current Phase : Ongoing Interviews

*Figure 16. Frontend Dev Interview Phase*

Applicant Code : TFFRN  
Applicant Name : Maria  
Job Experience : 2  
Job Preference : Frontend Dev  
Current Phase : Designing Application UI UX

*Figure 17. Frontend Dev UI UX Test Phase*

Applicant Code : TFFRN  
Applicant Name : Maria  
Job Experience : 2  
Job Preference : Frontend Dev  
Current Phase : Applicant Successfully Saved

*Figure 18. Frontend Dev Submission Phase*

#### 4. Exit

If user chooses **menu 3 (Exit)**, then show a **thank you message** and **exit** the program.

Thank you for your cooperation!

*Figure 19. Exit*