Assignment Case	
JavaIIH2	 **BINUS** UNIVERSITY
Periode Berlaku Semester Ganjil 2021/2022 ***Valid on*** *Odd Year 2021/2022*	**Software Laboratory Center** **Assistant Recruitment 22-1**

Soal
Case

DiZcord

DiZcord is about giving people the power to create space to find belonging in their lives. We want to make it easier for you to communicate regularly with the people you care about. We want you to build genuine relationships with your friends and communities close to home or around the world. You as a programmer are asked by the CEO to create the program by using **Java** with the following requirements :

➢ **Login Page** (**Menu 1**)

- **Prompt** user to input the combination of his / her account credential **(username – password)** or **(email – password)**.

```
LOGIN
-----
Input username / email : adrian
Input password : tesT123

User doesn't exist !
```

<p align="center">Figure 1. Login Page</p>

1. If the **user doesn't exist**, then:

    o Prompt user to **register new account.**

    o **Prompt** user to input **Y or N (case sensitive)**.

    o If user **input Y**, redirect user to the **register page**.

    o If user **input N,** redirect user to the **login page**.

```
Do you want to register instead ? (Y | N) [case sensitive]
> Y
```

<p align="center">Figure 2. Prompt User to Register</p>

2. If the **user does exist**, then redirect user to the **Main Page**.

➢ **Register Page** (**Menu 2**)

- **Prompt** user to input **name. Validate** name must be **filled** and must between **1 and 255 characters inclusively**.

- **Prompt** user to input **username. Validate** username must be **filled** and must be between **5 and 10 characters inclusively.**

- **Prompt** user to input **email. Validate** email must be :

  o **Ended** by '**.com**'

  o **Contain** '**@**' symbol

  o **Doesn't start** with '**@**' symbol

- **Prompt** user to input **password. Validate** password must be :

  o Password must be **at least 6 characters**.

  o Must be **alphanumeric** and contain at least **one uppercase letter.**

```
REGISTER
--------
Input name : adrian
Input username : adrianwijaya
Username's length must be 5 - 10 characters !
Input username : adrianw
Input email : adrianwijaya@gmail.com
Input password : tesT123

User has been created successfuly !
```

Figure 3. Register Page

➢ **Main Menu** (**Menu 3**)

- Show current **logged in user's username**.

- This menu contains of **5 menus**, which are **Create New Group, Explore Group, See own groups, Logout, and Terminate DiZcord.**

- **Prompt** user to **input chosen menu. Validate** the input must **9 or between 0 and 3 inclusively**.

```
Welcome, adrianw
----------------
1. Create new group
2. Explore groups
3. See own groups
0. Logout
9. Terminate DiZcord
>
```

Figure 4. Main Menu

1. If user choose **Create New Group** (**Menu 1**), then:

   o **Prompt** user to **input group's name**. **Validate** the group's name must **between 1 and 10 characters inclusively.**

   o **Prompt** user to **input group's description**. **Validate** the group's description must **between 1 and 20 characters inclusively.**

   o If the user input **"/e" or "/exit"**, then redirect user to the **Main Menu**.

```
CREATE NEW GROUP
----------------
/e : exit

Input group's name : BJ20-1
Input group's description : Bluejack 20-1

BJ20-1 has been created !
```

Figure 5. Create New Group

2. If user choose **Explore Group** (**Menu 2**), then:

   o **Show all available group** with the following information, such as **group's name, group's description, and group's member count.**

   o **Prompt** user to input the chosen **group's number. Validate** the input must **between 1 and maximum number of the available group.**

   o If the user input **"/e" or "/exit"**, then redirect user to the **Main Menu**.

   o If the user input valid **group's number**, then **add the current user to the group** and redirect the user to the **Group Page**.

```
GROUP LIST
------------------------------------------------------------
| No. | Name       | Description         | Members    |
------------------------------------------------------------
| 1   | BJ20-1     | Bluejack 20-1       | 1 member(s) |
| 2   | SLC        | Group SLC           | 1 member(s) |
| 3   | Jombloers  | Group para jomblo   | 1 member(s) | - JOINED
------------------------------------------------------------

Which group do you want to have join ? [/e to exit]
>
```

Figure 6. Explore Group

3. If user choose **See Own Group,** then:

   o **Show all group that the user has joined** with the following information**,** such as **group's name, group's description, and group's member count.**

   o **Prompt** user to input the chosen **group's number. Validate** the input must **between 1 and maximum number of the available group.**

   o If the user input **"/e" or "/exit"**, then redirect user to the **Main Menu**.

   o If the user input valid **group's number**, then redirect user to the **Group Page**.

```
OWN GROUP LIST
------------------------------------------------------------
| No. | Name       | Description         | Members    |
------------------------------------------------------------
| 1   | Jombloers  | Group para jomblo   | 1 member(s) |
------------------------------------------------------------

Which group do you want to have chat ? [/e to exit]
>
```

Figure 7. See Own Group

4. If user choose **Logout,** then:

   o Remove **current logged on user data,** then redirect user to the **Login Page**.

5. If user choose **Terminate DiZcord**, then terminate the current running application.

```
See you later !
```

Figure 8. Terminate DiZcord

➢ **Group Page**

• Show **group's name, group's description, group's member count and the group's** chat, which contain **user's username** and the **user's chat content**.

• There is a **list of command** that can be used by the user according to their **role**:

    o **Member**

       - **/e or /exit,** redirect user to the **Main Menu**

       - **/l or /leave, remove user from the current group**, then redirect user to the **Main Menu**

       - **/h or /help,** show the **list of command** that can be **used by user**.

```
Command Line
------------
- /e | /exit   : exit current menu
- /l | /leave  : leave current group

Press any key to continue...
```

Figure 9. Command List

    o **Admin**

       - **/e or /exit,** redirect user to the **Main Menu**

       - **/l or /leave, remove user from the current group**, then redirect user to the **Main Menu.** If **current user** is the **one and only admin**, then **delete the group**

       - **/h or /help,** show the **list of command** that can be **used by user**

       - **/u or /update,** redirect user to the **update group menu**

       - **/k username or /kick username, remove the user** from the current group

       - **/p username or /promote username, promote the user** with following username to **Admin**

       - **/d username or /demote username, demote the** user with following username to **Member.**

```
BJ20-1
Bluejack 20-1
-------------------------------------------
Members (2)

adrian
Halo semua

william (me)
halo DZ !

william (me)
jadi mukbang ga?

/help (See command list)
>
```

Figure 10. Group Page

➢ **Update group menu**

- **Prompt** user to input the **new group's name**. Validate the group's name **must be filled** and **between 1 and 10 characters inclusively**.

- Prompt user to input the **new group's description**. Validate the group's description **must be filled** and **between 1 and 20 characters inclusively.**

```
UPDATE GROUP - Tim gabut
------------------------
Input new name : Tim sibuk
Input new description : Anti gabut2 club

"Tim gabut" has been updated !
```

Figure 11. Update Group Menu

Please run the EXE file to see the sample program.