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| --- | --- |
| **Assignment Case** |  |
| COMP6122  Framework Layer Architecture |
| **Computer Science** | **O213-COMP6122-SK01-01** |
| ***Valid on*** *Odd Semester Year 2020/2021* | **Revision 00** |

1. Seluruh mahasiswa tidak diperkenankan untuk:

*All students are not allowed to:*

* + 1. Melihat sebagian atau seluruh jawaban mahasiswa lain,

*Seeing a part or the whole answer from other student*

* + 1. Menyadur sebagian maupun seluruh jawaban dari buku,

*Adapted a part or the whole answer from the book*

* + 1. Mendownload sebagian maupun seluruh jawaban dari internet,

*Downloading a part or the whole answer from the internet,*

* + 1. Mengerjakan soal yang tidak sesuai dengan tema yang ada di soal,

*Working with another theme which is not in accordance with the existing theme in the matter of the case,*

* + 1. Melakukan tindakan kecurangan lainnya,

*Committing other dishonest actions,*

* + 1. Secara sengaja maupun tidak sengaja melakukan segala tindakan kelalaian yang menyebabkan hasil karyanya berhasil dicontek oleh orang lain / kelompok lain.

*Accidentally or intentionally conduct any failure action that cause the results of the project was copied by someone else / other groups.*

1. Jika mahasiswa terbukti melakukan tindakan seperti yang dijelaskan butir 1 di atas, maka **nilai mahasiswa** yang melakukan kecurangan (menyontek maupun dicontek) akan di – **NOL** – kan.

*If the student is proved to the actions described in point 1 above, the score of the student which committed dishonest acts (cheating or being cheated) will be “Zero”*

1. Perhatikan jadwal pengumpulan jawaban, segala jenis pengumpulan jawaban di luar jadwal tidak dilayani.

*Pay attention to the submission schedule, all kinds of submission outside the schedule will not be accepted*

1. Persentase penilaiaan untuk matakuliah ini adalah sebagai berikut:

*Marking percentage for this subject is described as follows:*

|  |  |  |
| --- | --- | --- |
| **Tugas Mandiri**  *Assignment* | **Proyek**  *Project* | **UAP**  *Final Exam* |
| 100% | - | - |

1. Software yang digunakan pada matakuliah ini adalah sebagai berikut:

*Software will be used in this subject are described as follows:*

|  |
| --- |
| **Software**  *Software* |
| Java 8  Eclipse 2020.6 |

## Ekstensi file yang harus disertakan dalam pengumpulan tugas mandiri dan proyek untuk matakuliah ini adalah sebagai berikut:

*File extensions should be included in assignment and project collection for this subject are described as follows:*

|  |  |  |
| --- | --- | --- |
| **Tugas Mandiri**  *Assignment* | **Proyek**  *Project* | **UAP**  *Final Exam* |
| JAVA, CLASS | - | - |

## Soal

*Case*

**AXForPatty**

**Criteria**:

1. Builder

First you need **Builder Pattern** says that, lets you construct complex objects step by step. The pattern allows you to produce different types and representations of an object using the same construction code.

1. Singleton

Next you need to create **Singleton Pattern,** Singleton is pattern that restrict the instantiation of a class to one object. this pattern makes it possible to user does not conflict when call the instance.

1. Adapter

Last you need **Adapter pattern**. Adapter pattern is structural design pattern for convert the interface of a class into another interface clients expect. Adapter lets classes work together that couldn’t otherwise because of incompatible interfaces.

AXForPatty is a new and rising burger franchise. It serves many types of burger to suit every taste. What makes it unique and different from other burger franchise is that they allow you to customize and view the burger you and other customer have created. However, recently AXForPatty have undergone huge growth, thus it needs a new application to handle customer request. AXForPatty believe that you are able to make a program that suits their need. The program criteria will be:

1. **Menu**

At first, the program will show the menu. In this menu, the player can choose whether they want to **Custom a burger, View burgerpedia,** and **Exit**.

Text

Description automatically generated

Figure 1. AXForPatty Menu

1. **Add new burger**

If the user chooses to **Custom a burger** menu**,** ask the user if they want to customize the current component, if not make the component using the default value:

* First ask the user if they want to customize the **patty**. Validate the input **must be between 0 and 6**
* After that, ask the user if they want to customize the **cheese**. Validate the input **must be between 0 and 6**
* After that, ask the user if they want to customize the **amount of buns**. Validate the input **must be between 0 and 6**
* After that, ask the user whether they want to include **vegetable** or not. Validate the input must be between **Y** or **N** **(case insensitive)**.
* After that, ask the user whether they want to include **pickle** or not. Validate the input must be between **Y** or **N** **(case insensitive)**.
* After that, ask the user whether they want their patty to be **smashed** or not. Validate the input must be between **Y** or **N** **(case insensitive)**.
* Lastly ask the user if they want to customize the **name**. Validate the input **length must be between 0 and 31.**

Below are the default value for each customable component:

|  |  |
| --- | --- |
| **Component** | **Value** |
| Patty | 1 |
| Cheese | 1 |
| Bun | 2 |
| Vegetable | include |
| Pickle | include |
| Smash | Don’t include |
| Name | “AXBurrPatt” |

Graphical user interface, text, application

Description automatically generated

Figure 2. Custom a burger

1. **Show all car**

If the user chooses the **view burgerpedia** menu, then show all the burgers with the following criteria,

* If there are **no burger**, show the message “**There is no burger yet**”
* If there are **burgers**, show all the burger in the **restaurant**.
* Show the **price** based on the inputted currency, based on the following formula:

|  |  |
| --- | --- |
| **currency** | **multiplier** |
| IDR | 1 |
| SGD | 1/4 |
| MYR | 1/2 |

Graphical user interface, text, application

Description automatically generated

Figure 3. View burgerpedia

1. **Exit**

If user choose **Exit**, Exit the program clearly.

***If there are any problems, please ask your assistant!***