


Project Case	
COMP6115 COMP6115001 Object Oriented Analysis & Design	
Computer Science	O252-COMP6115-LF01-00
Odd Semester Year 2024/2025	Revision 00

1. Kelompok tidak diperkenankan untuk:

Members of the group are prohibited from:

- Melihat sebagian atau seluruh jawaban kelompok lain,
Seeing a part or the whole answer from other groups,
- Menyadur sebagian atau seluruh jawaban dari buku, catatan, video, dan jenis referensi lainnya,
Retell a part or the whole answer from books, notes, videos, and other references,
- Menyadur sebagian atau seluruh jawaban dari internet,
Retell a part or the whole answer from the internet,
- Mengumpulkan jawaban yang tidak sesuai dengan tema soal,
Submitting an answer with a different theme from the given case,
- Melakukan tindakan yang menyebabkan jawaban dicontek oleh orang lain atau kelompok lain, baik disengaja maupun tidak disengaja,
Doing action that could result the answer being copied by someone or other groups, intentionally or unintentionally,
- Melakukan tindakan kecurangan lainnya.
Committing other dishonest actions.

2. Jika kelompok terbukti melakukan tindakan seperti yang dicantumkan pada butir ke-1, maka nilai mahasiswa dan/atau kelompok yang melakukan kecurangan, baik menyontek atau dicontek, akan dinolkan sesuai dengan peraturan yang berlaku.

If it has been proven that a group has committed dishonest actions outlined in point 1 above, the whole groups related to the incident, regardless of which one copies or has their answer copied, will be issued a score of zero according to the regulation.

3. Jawaban yang dapat diterima dan dinilai adalah jawaban yang dikumpulkan sebelum batas waktu yang telah ditentukan.

The answer must be submitted before the designated deadline to be accepted and graded,

4. Jawaban akan dinilai berdasarkan teknik atau metode yang diajarkan pada kelas praktikum dengan menggunakan software yang sudah ditentukan.

The scoring will be based on the materials taught during the practicum classes using the designated software. Using different software than requested may result in your answer not being graded.

5. Jika Anda tidak membaca peraturan ini, maka Anda dianggap sudah membaca dan menyetujuinya.

By taking this exam, you agree to these regulations, regardless of whether you have read it or not.

6. Persentase penilaian untuk matakuliah ini adalah sebagai berikut:

The score will be distributed as follows:

Tugas Mandiri <i>Assignment</i>	Proyek <i>Project</i>	UAP <i>Final Exam</i>
40%	60%	-

7. Perangkat lunak yang digunakan pada matakuliah ini adalah sebagai berikut:

This course uses the following software:

Software <i>Software</i>
Eclipse 2020.6 R Java 11.0.11 JavaFX 17.0.7 MySQL Java Connection Library 8.0.24 Visual Paradigm Community Edition 17.1 XAMPP 8.0.7

8. Ekstensi file yang harus dikumpulkan untuk matakuliah ini adalah sebagai berikut:

Your answers must be in the following file extensions:

Tugas Mandiri <i>Assignment</i>	Proyek <i>Project</i>	UAP <i>Final Exam</i>
VPP, Image Files	JAVA, CLASS, SQL	-

9. File yang harus dikumpulkan adalah keseluruhan jawaban beserta dengan aset yang digunakan (gambar, audio, video, dll) dan dokumentasi proyek yang berisikan link referensi aset dan penjelasan mengenai aplikasi yang dibuat (terlampir bersama dengan soal).

*Include other files that can support your project, such as: all files in your project, other files (image, audio, video, etc.) used in your project, *.doc file (documentation of your project) that contains all pages in your project, reference links of additional files (image, audio, video, etc.) used in your project, the description about how to use your application, etc.*

Soal*Case*

CaLouseIF

CaLouseIF is a marketplace application specifically designed to facilitate the buying and selling of second-hand clothing easily and safely. This platform provides a space for users to sell pre-loved clothing that is still of good quality and wearable, as well as offering buyers the opportunity to find unique and affordable fashion items. With a focus on sustainability and a sustainable lifestyle, **CaLouseIF** aims to promote more sustainable shopping practices by extending the lifespan of clothing. Through advanced features such as customizable search systems, user product reviews, and social media integration, users can easily explore various second-hand clothing options and interact with a community that shares similar interests. User security and customer satisfaction are top priorities, with the implementation of strong encryption technology and responsive customer support. By offering an enjoyable and beneficial shopping experience, **CaLouseIF** aims to become the go-to destination for those who care about sustainability and want to shop smartly.

- **Register**

- Users who wants to access the program needs to have an account. In this page, users can make a new account and choose the role they want for the program itself. Users who already have an account could go to the login page instead. When the user finally registered an account. It will automatically created an ID for the user itself.

Variable	Validation
Username	<ul style="list-style-type: none">- Cannot be empty.- Must at least be 3 character long.- Must be unique.
Password	<ul style="list-style-type: none">- Cannot be empty- Must at least be 8 character long.- Must include special characters (!, @, #, \$, %, ^, &, *).
Phone Number	<ul style="list-style-type: none">- Must at least contains a +62 and 10 numbers long (+62 counts as one, Example: +62123456789).
Address	<ul style="list-style-type: none">- Cannot be empty.
Roles	<ul style="list-style-type: none">- Must pick between seller using radio button.

- Login

- Users who already have an account could just fill the credentials in order to go to the home page. As for admin, they don't need an account in the database and they can just login with a specific credentials which is "admin" for the username and "admin" for the password.

Variable	Validation
Username	<ul style="list-style-type: none"> - Cannot be empty. - Match with database
Password	<ul style="list-style-type: none"> - Cannot be empty - Match with database

- Upload Item

- Users Logs in as a seller can upload their own respective item to the program by just clicking a button and fill the information needed. When the user successfully creates an item, It will automatically generates an ID for the item and the item will be sent to the admin to be accepted or declined.

Variable	Validation
Item Name	<ul style="list-style-type: none"> - Cannot be empty. - Must at least be 3 character long
Item Category	<ul style="list-style-type: none"> - Cannot be empty. - Must at least be 3 character long
Item Size	<ul style="list-style-type: none"> - Cannot be empty.
Item Price	<ul style="list-style-type: none"> - Cannot be empty. - Cannot be 0. - Must be in number.

- Edit item

- Sellers could also edit their items that has been accepted by the admin.

Variable	Validation
Item Name	<ul style="list-style-type: none"> - Cannot be empty. - Must at least be 3 character long
Item Category	<ul style="list-style-type: none"> - Cannot be empty. - Must at least be 3 character long
Item Size	<ul style="list-style-type: none"> - Cannot be empty.
Item Price	<ul style="list-style-type: none"> - Cannot be empty. - Cannot be 0 - Must be in number.

- **Delete Item**
 - As a seller, they could also delete their items that has been accepted/approved by the admin if maybe there is something wrong with the item's information. By doing this, it will also delete the item from the database.
- **View Item**
 - User that already have registered or logged in can view all of the available items that has been approved by the admin in the home page. It will show the item's name, category, size and price of each item. There will be option to either purchase or make an offer for that specific item.
- **Purchase Item**
 - After viewing the item, buyer could purchase that specific item by just clicking a button to purchase, after clicking the button, a pop up will appear for confirming the purchase. After the user confirmed the purchase, an ID will be automatically generated for the transaction and it will also save the User ID and Item ID. When a buyer has successfully purchased an item, the item will also be deleted from every user's wishlist.
- **Make Offer**
 - If the buyer think that they could get a better price on the item, they could make an offer for that item. They will be presented a form to offer the price to the seller to which they can input an offe. If there is an offer on the item, buyer can still make an offer but at a higher price, if the buyer offer a price lower than the current offer, the offer will not go through.

Variable	Validation
Offer Price	<ul style="list-style-type: none">- Cannot be empty.- Must be more than zero- Cannot be lower than the highest offer.

- **View Requested Item**
 - As an admin, they can view item that is waiting to be reviewed. It will show the item's name, category, size and the price that where the item status is still pending or waiting to be reviewed, the admin also has the option to either approve or decline the items.

- Approve Item
 - If the admin choose to approve the item, the item now can be purchased by the buyers in the buyer's homepage as well as update the item status in the database.
- Decline Item
 - If the admin choose to decline the item, then the item will be deleted from the database. Admin will also have to include a reason for declining the item reviewed.

Variable	Validation
Reason	- Cannot be empty.

- View Offered Item
 - As a seller, they could view items that has been offered by the buyers, it will display the item's name, category, size, initial price and also the offered price.
- Accept Offer
 - When the seller decides to accept the offer, it will automatically create an ID for the transaction for being created and the item and will also save the User ID that offer the item and the item ID itself. It will also be removed from the display.
- Decline Offer
 - When the seller decides to decline the offer, The seller has to give a reason for declining the offer. After submitting it, it will automatically remove the item from offered list and the offer will be deleted.

Variable	Validation
Reason	- Cannot be empty.

- Add Item to Wishlist
 - When the buyers are viewing the items, buyers could add the item to wishlist. When they add it, it will automatically create an ID for the wishlist itself.
- View Wishlist
 - Buyers could view the items that they add to wishlist by viewing the lists of wishlist. Buyers could also simultaneously remove the item from the wishlist.

- Remove Item from Wishlist
 - When the buyer is viewing the wishlist, they can remove it from their wishlist. When they remove it, it will automatically delete the wishlist from database.
- View Purchase History
 - When the buyer is viewing the homepage, buyer can view their purchase history by clicking the view history button, it will display the transaction ID, Item's name, category, size and price.

To help you design the program, Calouself has already hired Mrs. Caroline, a System Analyst, to provide you with the design of the program based on the requirement and the business flow above. You can open “**calouself.vpp**” to view the diagram that was designed by Mr. Budi. As a programmer, Calouself wants you to develop the application with the following requirement:

- The application must be built using Java-based Programming with **MVC (Model View Controller)** architecture for a better development process.
 - Model

The model layer is responsible for **representing concepts** in the business or information about the business situation. Besides that, the model layer is also responsible for **giving access to the database** via its public interfaces to acquiring and manipulating references to preexisting domain objects.
 - View

View layer, or Presentation Layer, is responsible for showing information to the user and interpreting the user's commands. This layer is the home for **all user interfaces** in the project.
 - Controller

This layer is responsible for validating all input from the view layer and **all business logics** are implemented in the controller layer. It is also responsible for **delegating requests** from the user to the lower layer for further processing.
- Ensure that **you didn't use regex, Java FXML, JavaFX Scene Builder, or any library used outside the class materials** in your project, or **it will affect your score.**
- The database must be using **MySQL.**
- The application must have an **authenticated user based on roles.**
- The application must **minimize human error with great user experiences.**

- The application **must be made based on the analysis diagram** that was provided by Mrs. Caroline, but you may add additional components to the system based on your assumption.
- Documentation for the application:
 - The guide for using the application in the form of **docx (External)**.
 - Explanation for your code in the form of **comment (Internal)**.
 - Any additional assumption that you make to develop the program.

Please ask your teaching assistant if there are any related questions.