


<b>Project – External Documentation</b>	
COMP6115   COMP6115001 Object Oriented Analysis & Design	
Odd Semester Year 2024/2025	

- **Project Title**

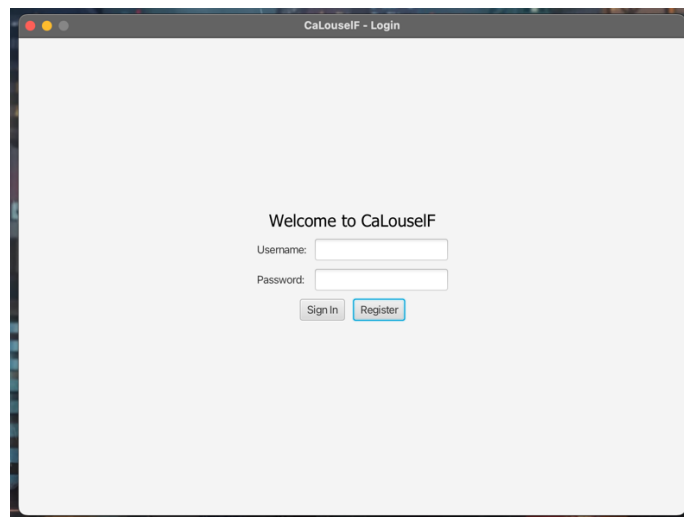
CaLouseIF

- **Introduction**

CaLouseIF is a comprehensive marketplace application developed using Java and JavaFX, designed to facilitate seamless buying and selling interactions between users. The application implements a robust role-based access control system, featuring distinct interfaces and functionalities for buyers, sellers, and administrators.

- **Report / Documentation**

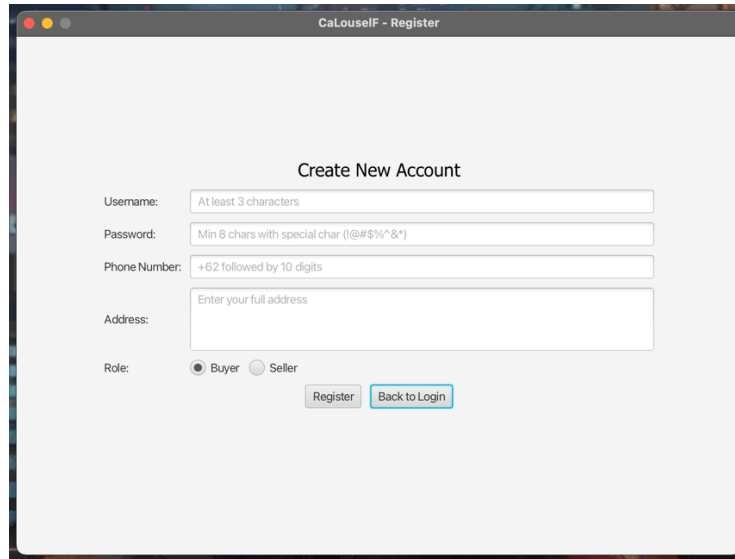
1. **Authentication System**



The login screen provides secure authentication with the following features:

- Clean and intuitive user interface
- Username and password validation
- Error messaging for invalid credentials
- Direct access to registration for new users
- Special admin authentication pathway

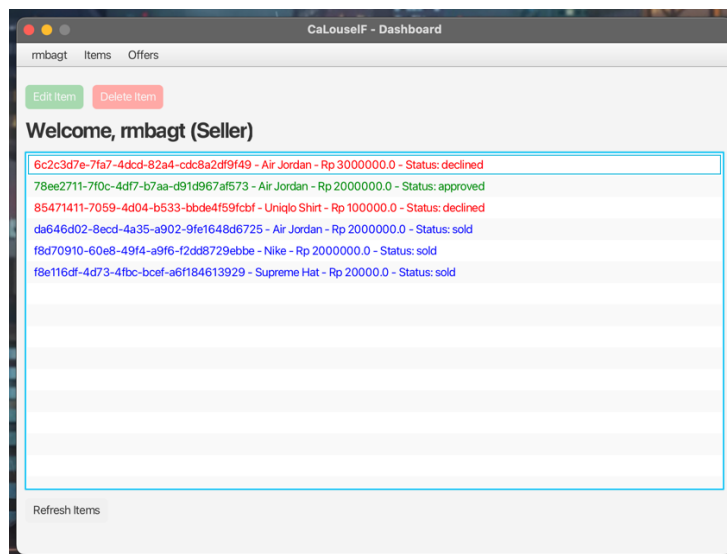
## 2. User Registration



The registration system includes comprehensive validation:

- Username: Minimum 3 characters
- Password: Minimum 8 characters with special character requirement (!@#\$%^&\*)
- Phone Number: Must start with +62 followed by 10 digits
- Address: Required field
- Role Selection: Buyer or Seller

## 3. Seller Dashboard

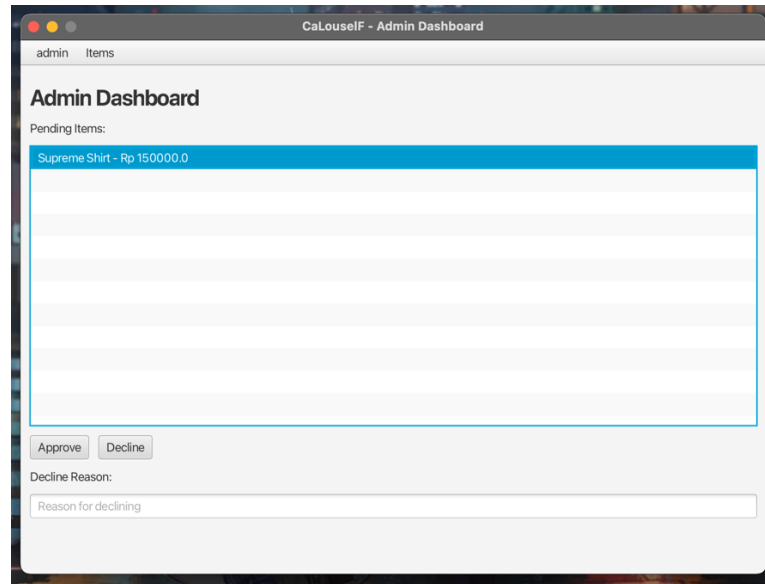


Sellers can manage their inventory through:

- Item listing with status indicators (pending, approved, declined, sold)

- Edit and delete functionality for approved items
- Color-coded status display
- Refresh capability for real-time updates

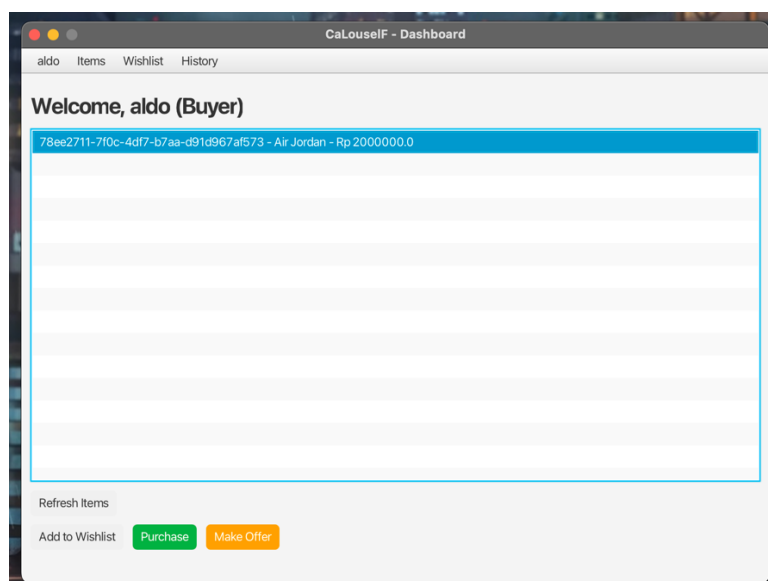
#### 4. Admin Dashboard



Administrators have access to:

- Pending item review queue
- Approve/Decline buttons
- Reason input field for declined items
- Clear status indicators

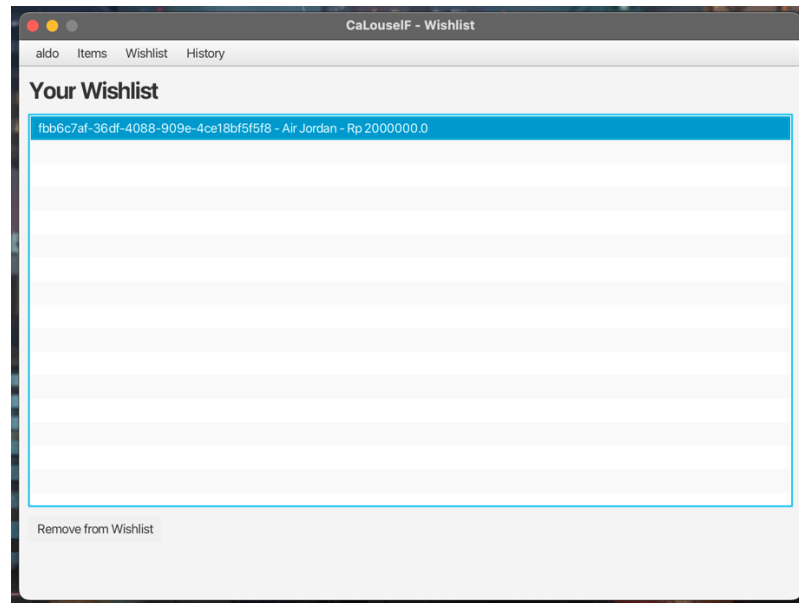
#### 5. Buyer Features



Buyers can interact with the platform through:

- Browse available items
- Add items to wishlist
- Make purchase offers
- Direct purchase option

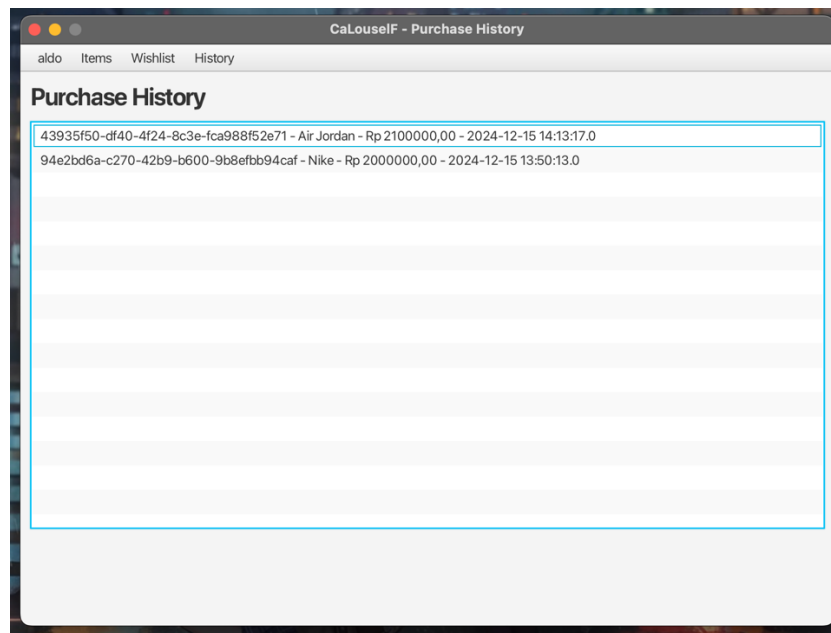
## 6. Wishlist Management



The wishlist feature includes:

- Saved item display
- Item details with pricing
- Remove from wishlist functionality
- Easy access to purchase options

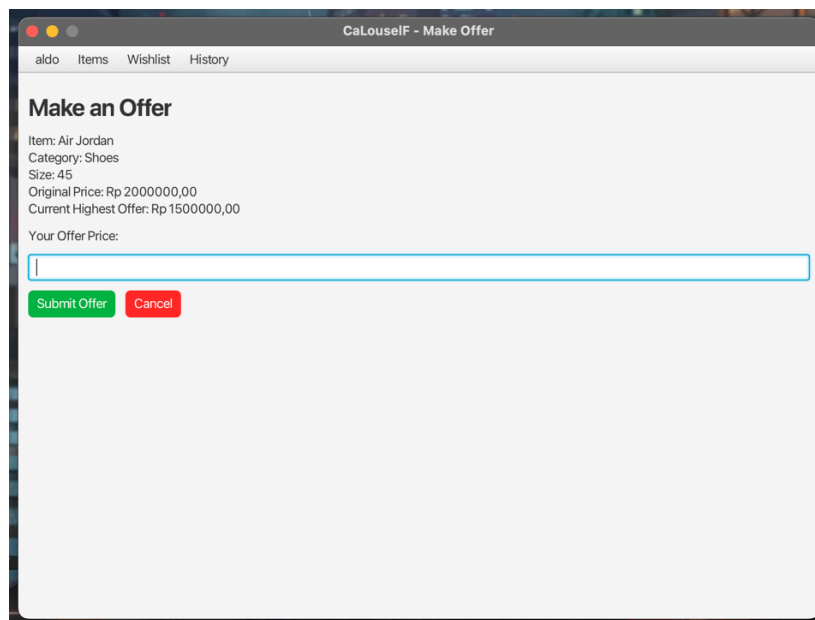
## 7. Purchase History

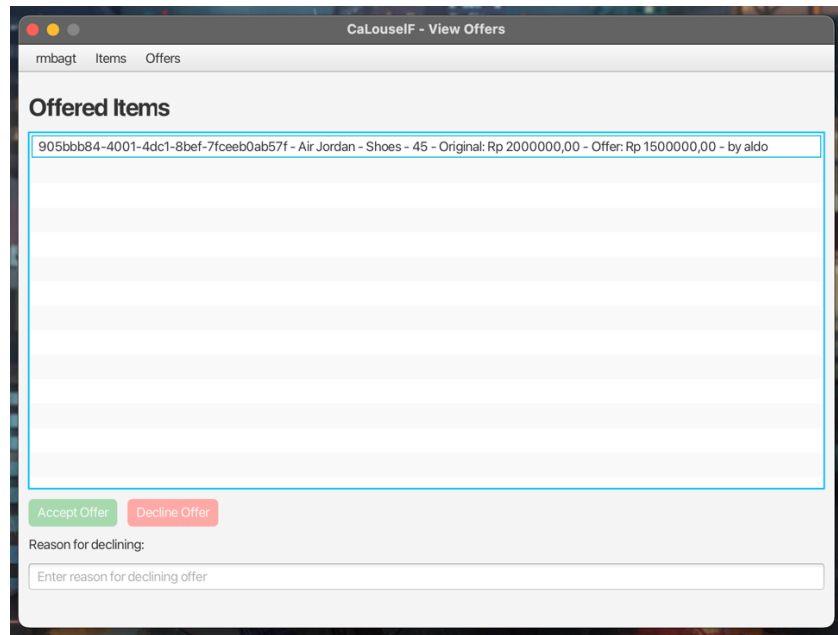


Transaction tracking includes:

- Complete purchase history
- Transaction timestamps
- Item details and pricing
- Chronological ordering

## 8. Offer System

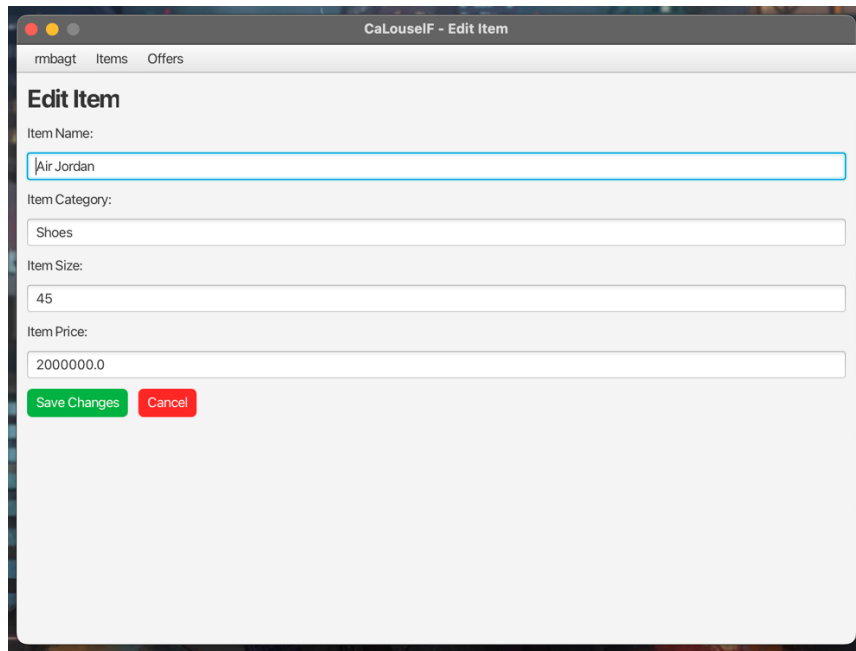




The offer system provides:

- Current price display
- Highest offer indication
- Offer submission interface
- Seller offer management
- Accept/Decline functionality with reason

## 9. Item Management



CaLousef - Edit Item

rmbagt Items Offers

### Edit Item

Item Name:

Item Category:

Item Size:

Item Price:

Sellers can manage items through:

- Upload new item
- Item details editing
- Price updates
- Category and size modification
- Save/Cancel functionality

- **Additional Assumptions and Implementation Details**

- 1. Database Management**

- Automatic UUID generation for all IDs
- Cascading deletions for related records
- Transaction isolation for concurrent operations

- 2. Security Considerations**

- Password hashing implementation ready
- Session management capability
- Input sanitization for all fields

- 3. Performance Optimizations**

- Lazy loading for item lists
- Efficient query optimization
- Connection pooling ready

- **Usage**

- 1. For Buyers**

- Register a new account with "Buyer" role
- Browse available items

- Add items to wishlist
- Make offers or purchase items directly
- View purchase history

## 2. For Sellers

- Register a new account with "Seller" role
- Upload items for sale
- Wait for admin approval
- Manage item listings
- Accept or decline offers

## 3. For Administrators

- Login with admin credentials (username: admin, password: admin)
- Review pending items
- Approve or decline items with reasons
- Monitor system activity

## • Installation

### 1. Clone the repository

git clone https://github.com/reynaldomarchell/calouself.git

### 2. Add JavaFX and MySQL Java Connection Library to the project

Using Eclipse:

- Right click on project folder -> Build Path -> Configure Build Path...
- On Libraries tab, click on Modulepath -> Add Library -> User Library
- Check JavaFX and MySQL and then apply changes

### 3. Set up the MySQL database

mysql -u root -p < /[Documentation\_SQL]/calouself.sql

### 4. Configure database connection

Update the database connection settings in connect/Connect.java

### 5. Compile and run

## • Build using

- Eclipse Version 4.34.0 (2024-12)
- Java 23.0.1 (2024-10-15)
- JavaFX 21.0.4
- MySQL Java Connection Library 8.0.24
- XAMPP 8.2.4-0

## • Reference

### ➤ JavaFX Documentation

- <https://openjfx.io/javadoc/21/>
- <https://docs.oracle.com/javase/8/javafx/api/toc.htm>



➤ **MySQL Documentation**

- <https://dev.mysql.com/doc/>
- <https://www.mysql.com/products/connector/>

➤ **Java Development Resources**

- <https://docs.oracle.com/en/java/>
- <https://docs.oracle.com/javase/tutorial/>

• **Group Member**

- 2602187664 – Stanislaus Kanaya Jerry Febriano
- 2602093992 – Valeska Valentin Ekklesia
- 2602093714 – Nicholas Vincent Chao
- 2602138214 – Reynaldo Marchell Bagas Adji