UNIVERSITI TUNKU ABDUL RAHMAN

LEE KONG CHIAN FACULTY OF ENGINEERING AND SCIENCE

UECS1144 OBJECT ORIENTED APPLICATION DEVELOPMENT

GROUP ASSIGNMENT

June 2024 Trimester

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System Requirements Specification

The inventory tracking system is developed as the desktop application which will help the businesses to monitor their inventory effectively.

The system will provide the following features:

Stakeholders:

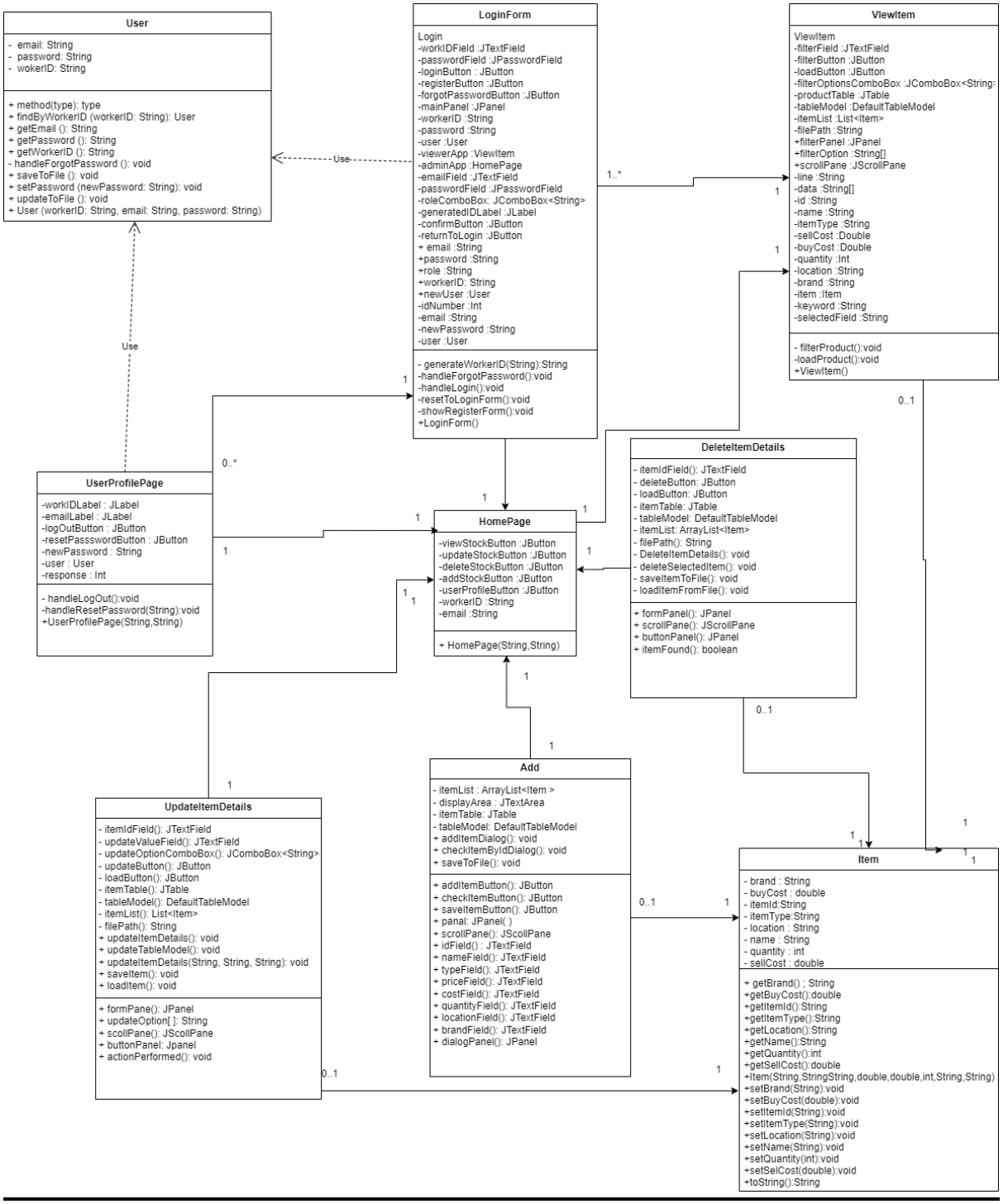
User: A person who only have the permission to view the inventory.

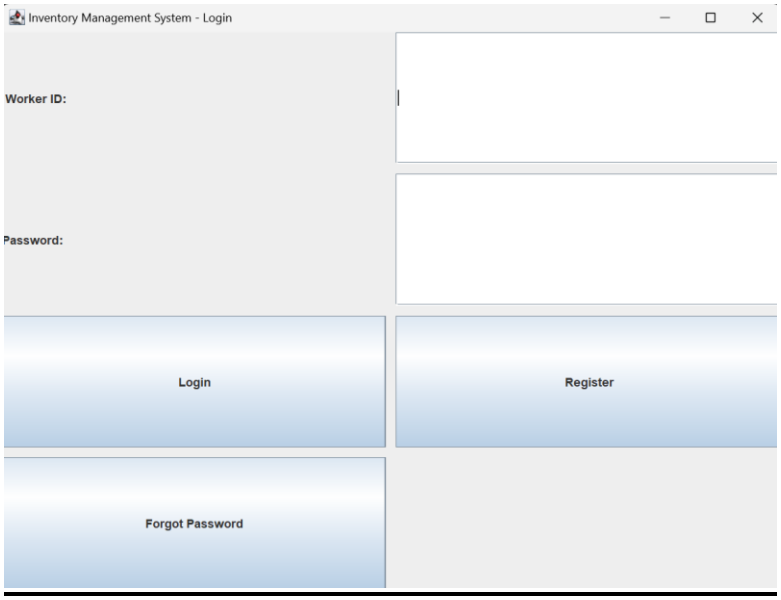
Admin: A person who manage the inventory. Which include adding, updating, view, and delete.

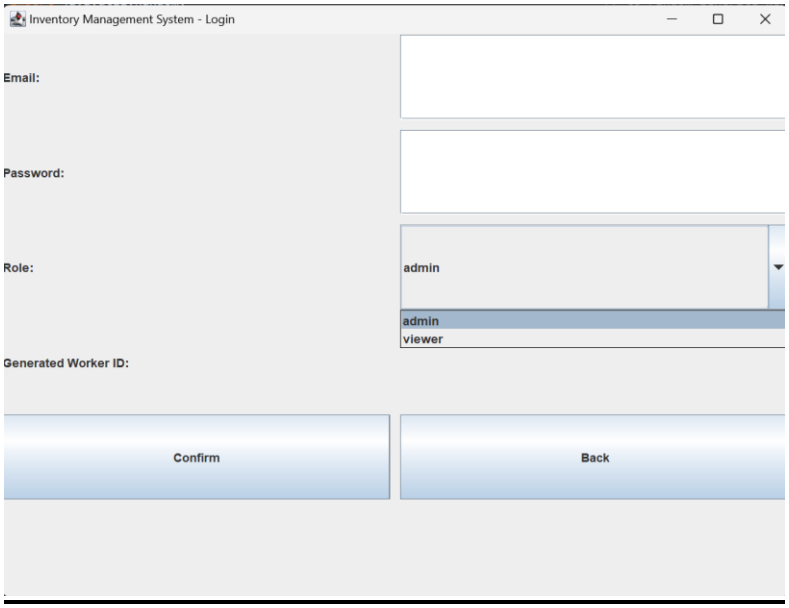
Functional Requirements:

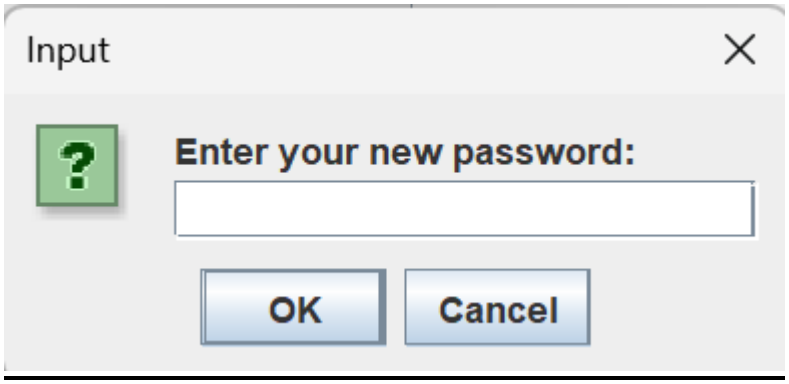
ID	Description
SRS001	The system shall allow the user to create account
SRS002	The system shall allow the user to login account.
SRS003	The system shall allow the admin to add inventory item.
SRS004	The system shall allow the admin to update inventory item.
SRS005	The system shall allow the admin to delete inventory item.
SRS006	The system shall allow the user to check inventory item.
SRS007	The system shall allow the user to view user profile.
SRS008	Users shall be able to recover their password through “reset password” feature.
SRS009	The system shall allow the user to logout account.
SRS010	The system shall allow the user to navigate function through HomePage

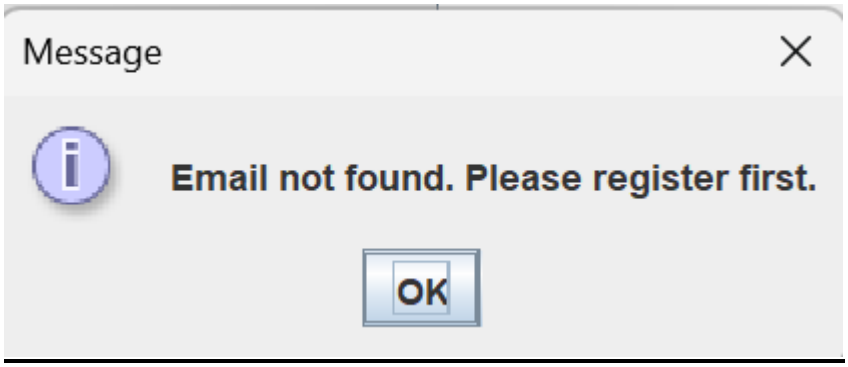
UML Class Diagram

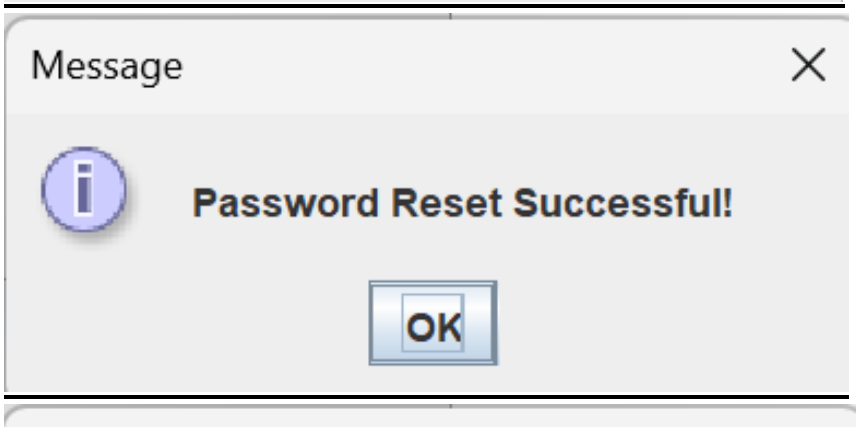

User
- email: String
- password: String
- wokerID: String
+ method(type): type
+ findByWorkerID (workerID: String): User
+ getEmail (): String
+ getPassword (): String
+ getWorkerID (): String
- handleForgotPassword (): void
+ saveToFile (): void
+ setPassword (newPassword: String): void
+ updateToFile (): void
+ User (workerID: String, email: String, password: String)
LoginForm
Login
-workIDField :JTextField
-passwordField :JPasswordField
-loginButton : JButton
-registerButton :JButton
-forgotPasswordButton :JButton
-mainPanel :JPanel
-workerID :String
-password :String
-user :User
-viewerApp :ViewItem
-adminApp :HomePage
-emailField :JTextField
-passwordField :JPasswordField
-roleComboBox: JComboBox<String>
-generatedIDLabel :JLabel
-confirmButton :JButton
-returnToLogin :JButton
+ email :String
+password :String
+role :String
+workerID: String
+newUser :User
-idNumber :Int
-email :String
-newPassword :String
-user :User
- generateWorkerID(String):String
-handleForgotPassword():void
-handleLogin():void
-resetToLoginForm():void
-showRegisterForm():void
+LoginForm()
VIewItem
ViewItem
-filterField :JTextField
-filterButton :JButton
-loadButton :JButton
-filterOptionsComboBox :JComboBox<String>
-productTable :JTable
-tableModel :DefaultTableModel
-itemList :List<Item>
-filePath :String
+filterPanel :JPanel
+filterOption :String[]
+scrollPane :JScrollPane
-line :String
-data :String[]
-id :String
-name :String
-itemType :String
-sellCost :Double
-buyCost :Double
-quantity :Int
-location :String
-brand :String
-item :Item
-keyword :String
-selectedField :String
- filterProduct():void
-loadProduct():void
+ViewItem()
Use
Use
1..*
1
1
1
0..1
0..*
1
1
1

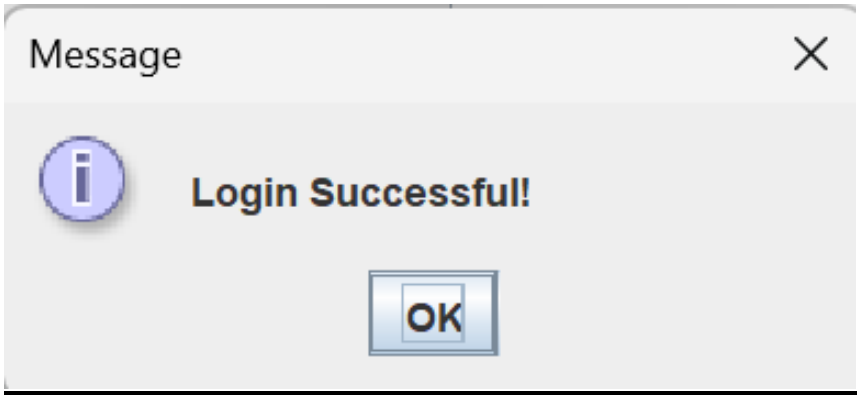

Inventory Management System - Login
Worker ID:
Password:
Login
Register
Forgot Password

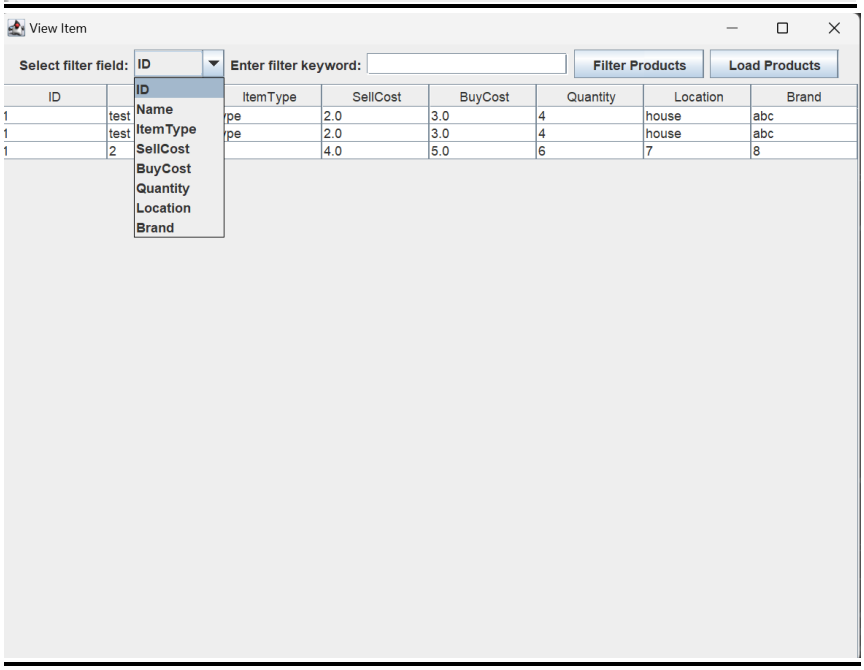

Inventory Management System - Login
Email:
Password:
Role:
admin
admin
viewer
Generated Worker ID:
Confirm
Back

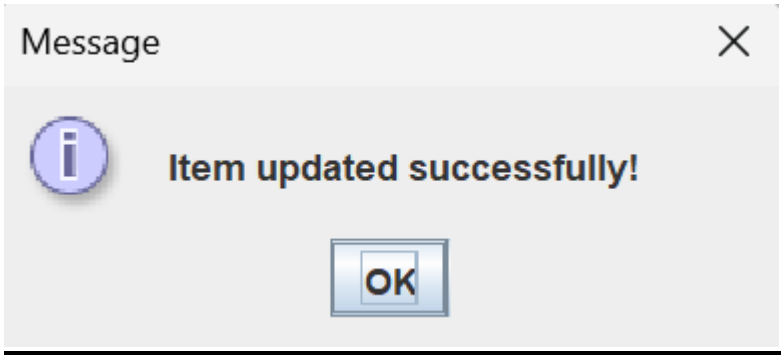

Input
Enter your new password:
OK
Cancel

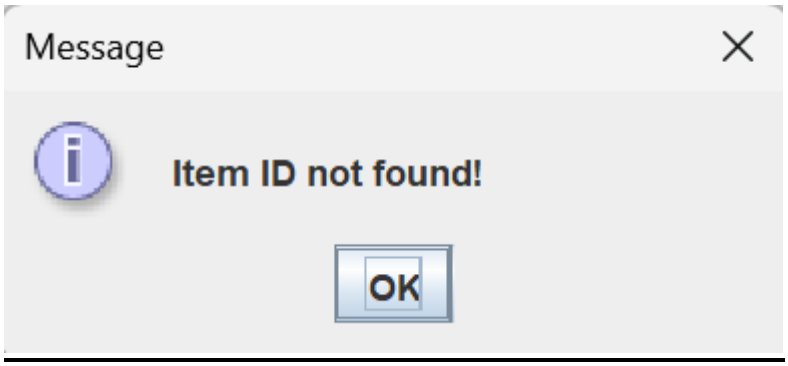

Message
Email not found. Please register first.
OK

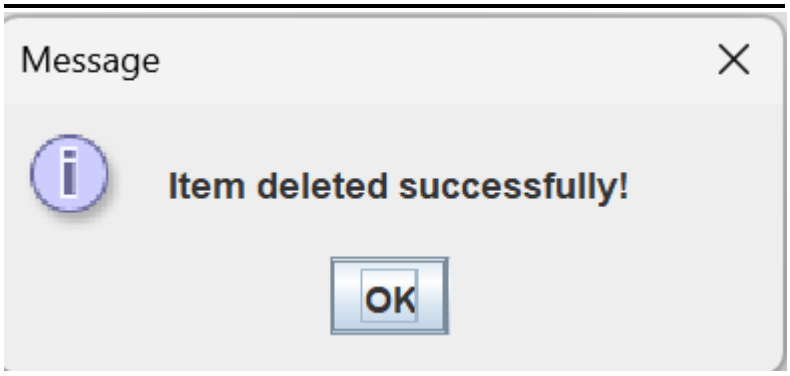

Message
Password Reset Successful!
OK


Message
Login Successful!
OK

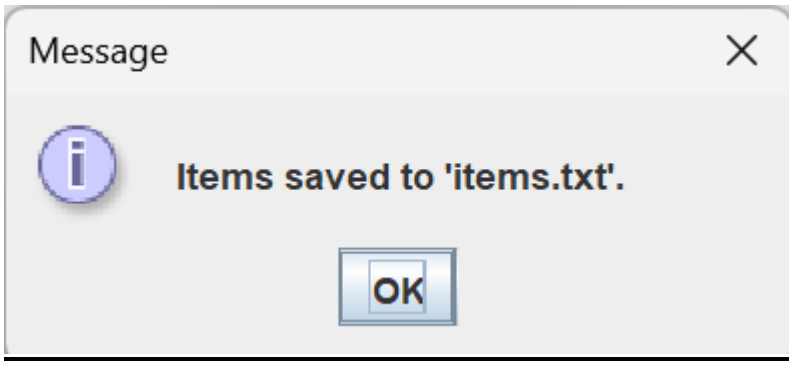

View Item
Select filter field:
ID
Enter filter keyword:
Filter Products
Load Products
ID
Name
ItemType
SellCost
BuyCost
Quantity
Location
Brand
ID
ItemType
SellCost
BuyCost
Quantity
Location
Brand
1 test ype 2.0 3.0 4 house abc
1 test ype 2.0 3.0 4 house abc
1 2 4.0 5.0 6 7 8

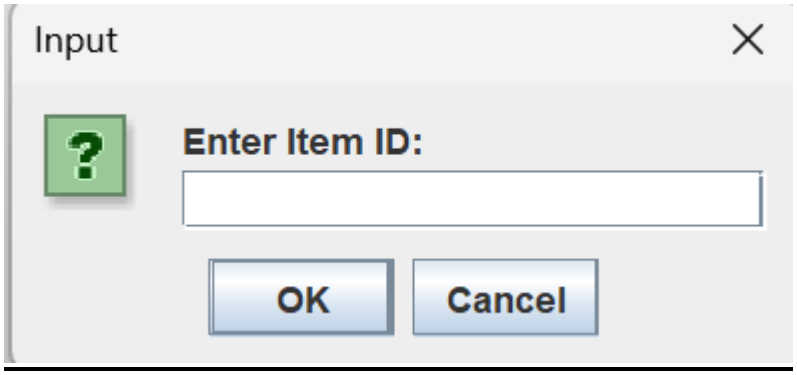

Message
Item updated successfully!
OK

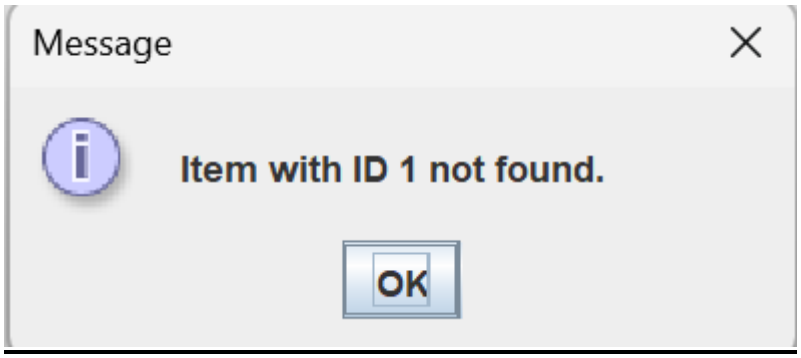

Message
Item ID not found!
OK

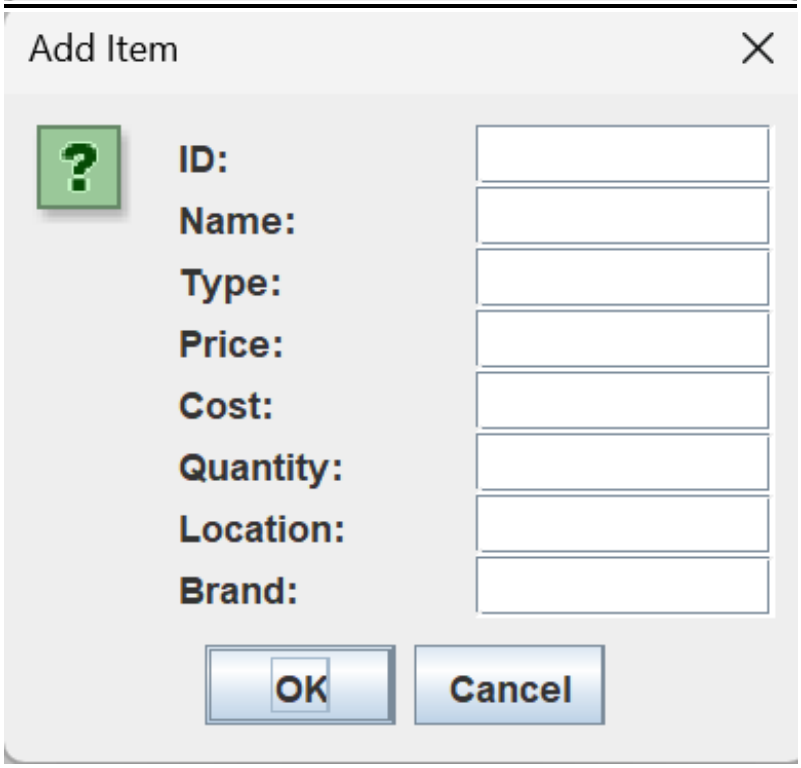

Message
Item deleted successfully!
OK

Message
Item ID not found!
OK

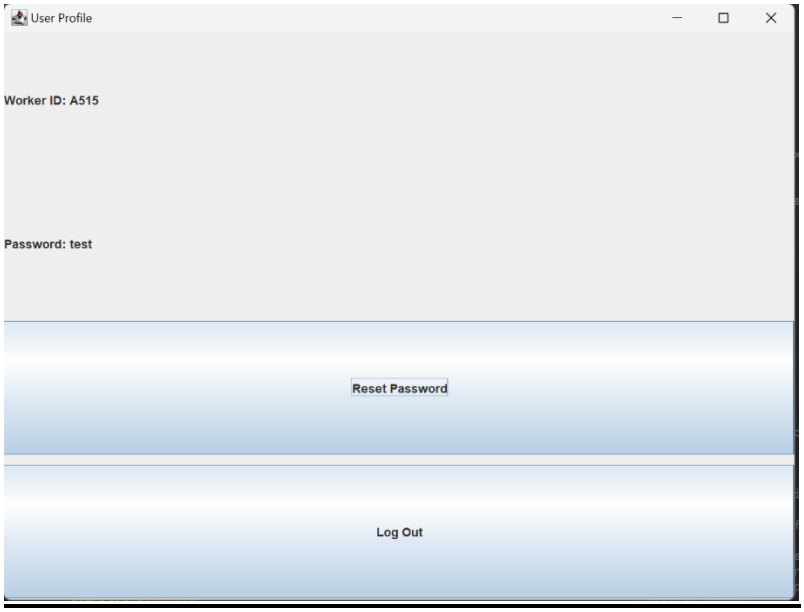

Message
Items saved to 'items.txt'.
OK

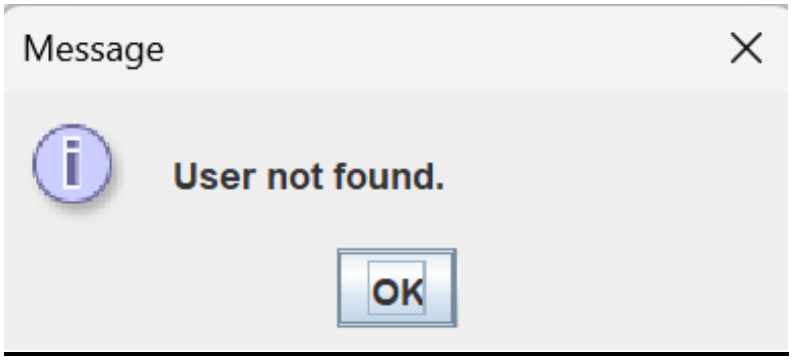

Input
Enter Item ID:
OK
Cancel

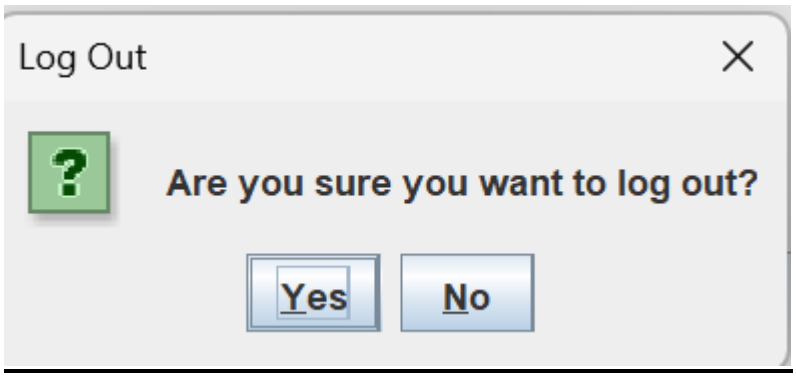

Message
Item with ID 1 not found.
OK


Add Item
ID:
Name:
Type:
Price:
Cost:
Quantity:
Location:
Brand:
OK
Cancel

Message
Invalid input. Please enter correct values.
OK


User Profile
Worker ID: A515
Password: test
Reset Password
Log Out


Message
User not found.
OK


Log Out
Are you sure you want to log out?
Yes
No

Appendix A

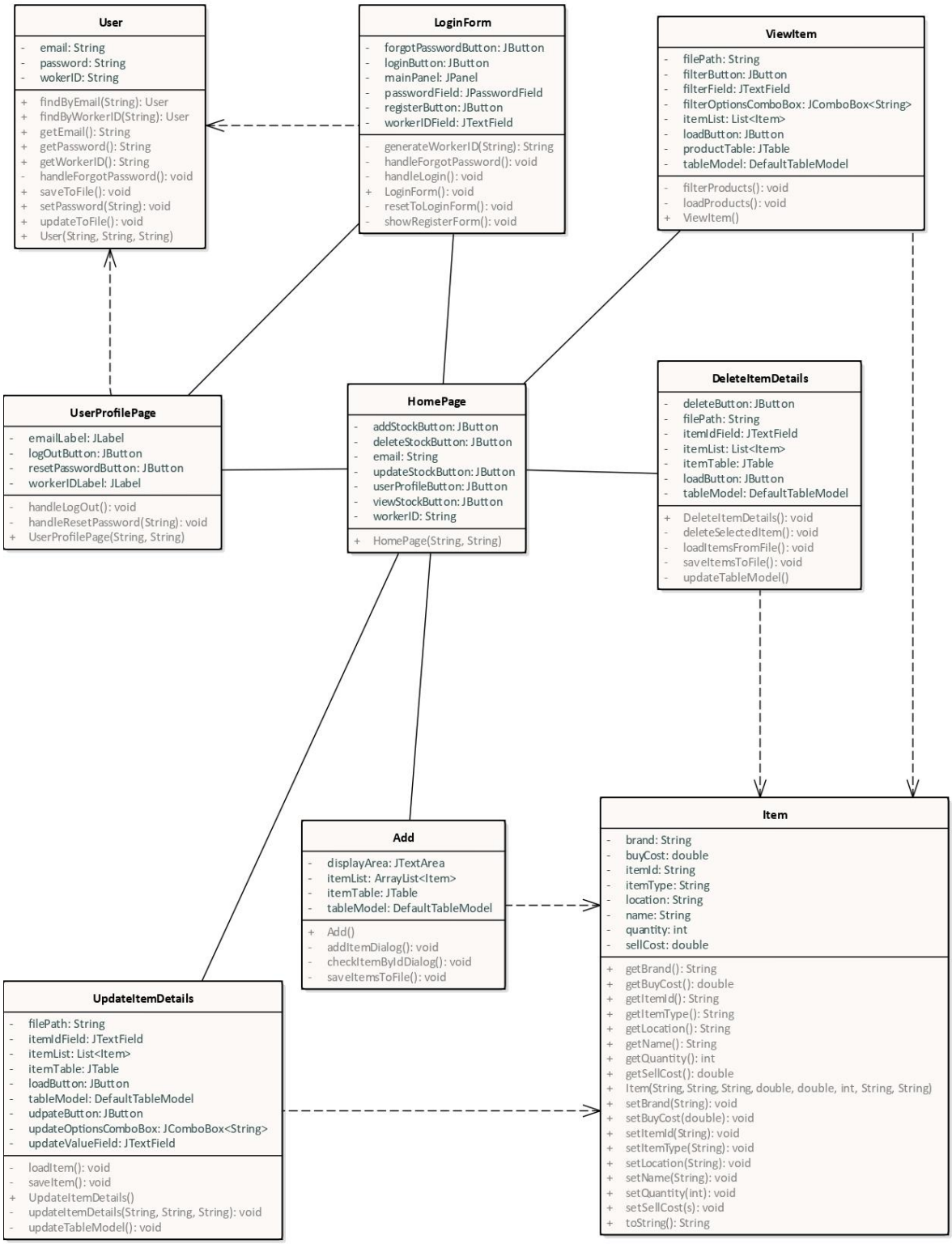


Figure1: This is the progress of UML diagram