

IT2020 – Software Engineering

Year 2, Semester I, 2022

Group Assignment

Online Food Ordering System

Group Details

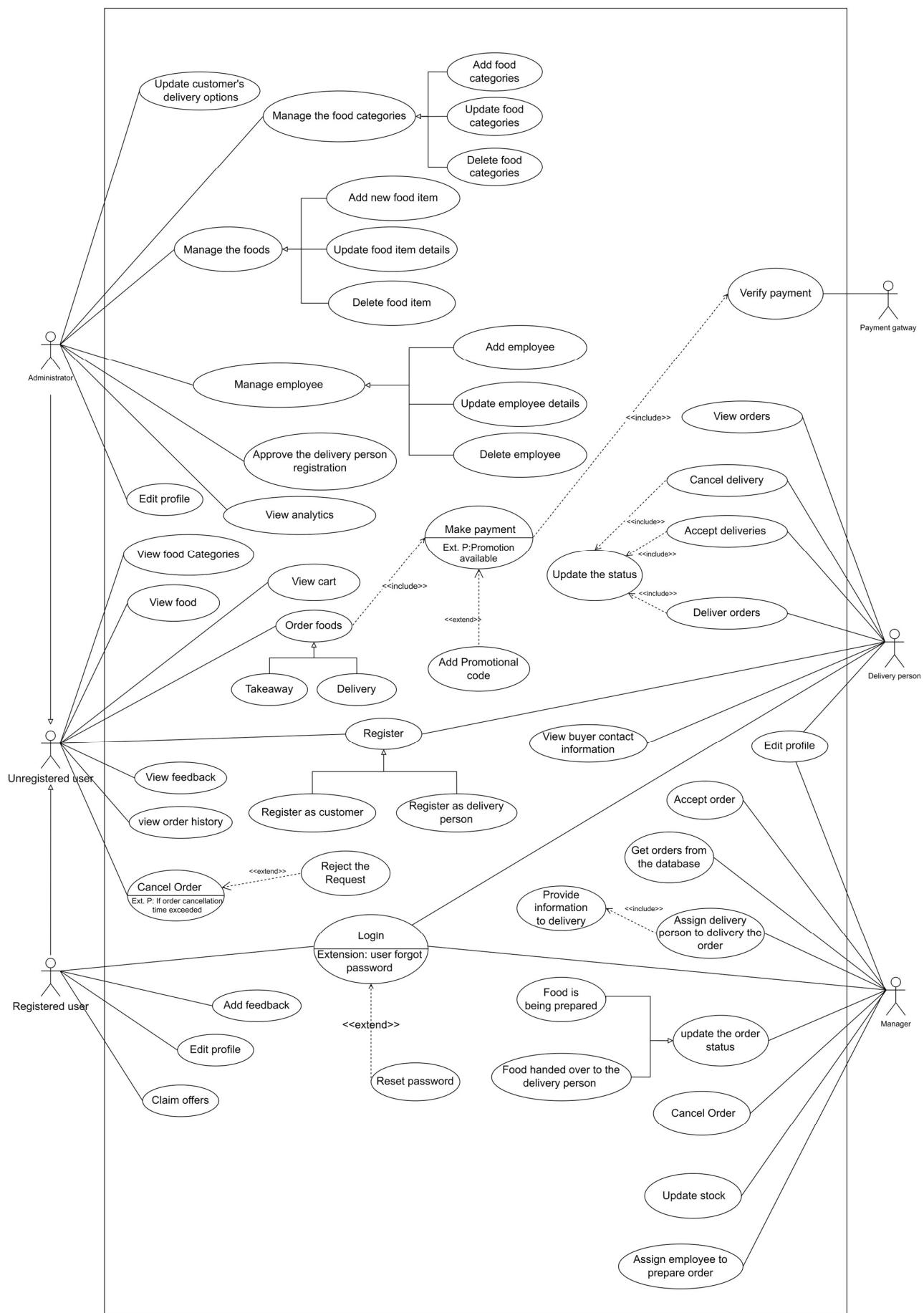
Batch: 3.1 / 2.2 / 8.2

SE/OOP Group Number: SE_OOP_MLB_WD_2022_S2_95

| | Student Registration Number | Student Name |
|----------|------------------------------------|----------------------|
| 1 | IT21165252 | Kuruppu K.A.G.S.R. |
| 2 | IT21160202 | Wijekoon W. M. S. R. |
| 3 | IT21377358 | Hanshani S.G.H.S. |
| 4 | IT21167300 | Sumanasekara P.D.M. |

Use Case Diagram

Online Food Ordering System



Use Case Scenario

IT21165252 Kuruppu K.A.G.S.R.

| | | |
|------------------------|---------------------------------------|---|
| Number | TD01 | |
| Name | User buy product | |
| Summary | User select food item and buy product | |
| Priority | 5 | |
| Preconditions | User must be logged in | |
| Postconditions | The order is placed | |
| Primary Actors | Registered user | |
| Secondary Actor | Payment gateway | |
| Trigger | User select product | |
| Main Scenario | Step | Action |
| | 1 | User select the product |
| | 2 | System display information about the product |
| | 3 | User click on "add to cart" button |
| | 4 | User click on "view cart" button |
| | 5 | System calculate and display total amount |
| | 6 | User click on "procced to checkout" button |
| | 7 | User select payment method |
| | 8 | User select pay with card option |
| | 9 | User fill in card details |
| | 10 | User click "save" button |
| | 11 | System display delivery option |
| | 12 | User select takeaway option |
| | 13 | User click "buy now" button |
| | 14 | System processes the transaction |
| | 15 | System updates database and send a "order successfully placed" notification |
| Extension | step | Branching Action |
| | 8.1 | User select pay on delivery option |
| | 8.2a | User select pay with online banking service |
| | 8.2b | User login to online banking service |
| | 8.2c | User authenticate the transaction |
| | 12.1 | User select delivery option |
| | 15.1 | System display transaction failed notification |

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|-----------------------|--|--|
| Number | TD02 | |
| Name | Process orders | |
| Summary | Check and process orders | |
| Priority | 10 | |
| Precondition | The User must be logged into the system. | |
| Postconditions | The User is directed to the orders page. | |
| Primary Actor | Manager | |
| Trigger | User wants to select an order and process. | |
| Main Scenario | Step | Action |
| | 1 | System displays the orders page (new orders to process) |
| | 2 | Manager selects an order to process |
| | 3 | System prompts the order processing interface |
| | 4 | System displays the order details to be prepared |
| | 5 | System updates the order status to "Preparing" |
| | 6 | Manager assign employee to prepare order |
| | 7 | Manager assigns a delivery person to deliver the order |
| | 8 | System updates the order status to "Delivered" |
| | 9 | System updates the order status to "Completed" |
| | 10 | Manager selects "order completed" button |
| | 11 | System redirect user to orders page |
| Extensions | Step | Branching Action |
| | 2.1 | If the manager wants to cancel the order, |
| | 2.1 a | The manager selects "cancel order" button |
| | 2.1 b | System displays "confirm cancel" button |
| | 2.1 c | System redirect manager to order page |
| | 4.1 | If the manager wants to add additional items to the order, add items |
| | 4.2 | If the manager wants to remove items from order, remove items |
| | 6.1 | System sends a message to customer |
| | 7.1 | If the order is prepared successfully, assign delivery person |
| | 8.1 | If the delivery person confirmed delivery success, |
| | 8.1.a | System sends a message to customer |
| | 9.1 | If the delivery person confirmed delivery success, |
| | 9.1a | System sends a message to customer |

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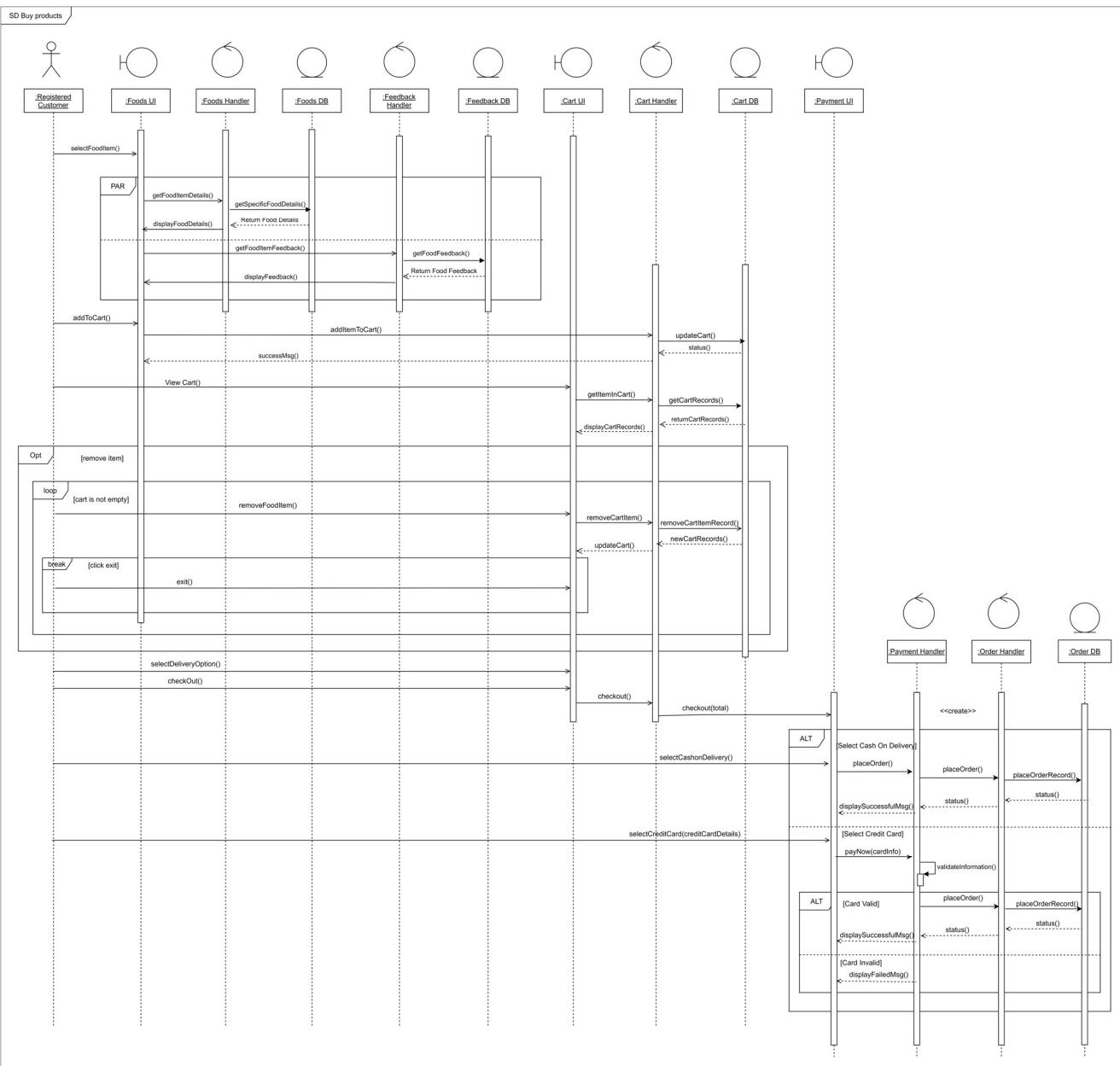
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|-------------------------|--|--|
| Number | TD03 | |
| Name | Add new Employee | |
| Summary | registering a new employee to the system | |
| Priority | 6 | |
| Preconditions | Visit the website | |
| Postconditions | The employee becomes a valid user | |
| Primary actor(s) | Administrator | |
| Secondary actor | Employee | |
| Trigger | For the Employee to login to the system | |
| Main scenario | Step | Action |
| | 1 | The administrator logins to the website |
| | 2 | Select the administrator panel |
| | 3 | Click “Add new employee “button |
| | 4 | Enter the employee personal details |
| | 5 | Enter contact number and email |
| | 6 | Enter the job position of the employee |
| | 7 | Create a username and password |
| | 8 | System validates the username and the password |
| | 9 | Enter the basic job role information |
| | 10 | Click “Register” button |
| | 11 | Create the Employee profile |
| | 12 | Email the employee logins and job description to the employee |
| Extension | Step | Branching Action |
| | 1a | System identifies the login as an administrator |
| | 1b | If the credentials are incorrect provide another chance, or exit |
| | 5.a.1 | Check whether the data are according to format, else display a message |
| | 5.a.2 | Enter valid details |
| | 6.a.1 | Check whether the required fields are filled |
| | 6.a.2 | Else display a error message |
| | 8.a.1 | Check whether the username & Password has already been used |
| | 8.a.2 | Change the username which is easy to identify |
| | 8.a.3 | Re-enter a password |
| | 10.a | If the details are correct and fulfilled, create the user profile |
| | 12.a | Check whether the email is successfully sent |
| | 12.b | Else Send again |

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| Number | TD04 | |
| Name | Add new food item | |
| Summary | Administrator adds a new food item to the menu for customers to purchase | |
| Priority | 3 | |
| Precondition | Admin must be logged into the system and there is a new item to be added to | |
| Postconditions | New item is listed in the menu | |
| Primary Actor | Administrator | |
| Secondary | - | |
| Trigger | New recipes for food items have arrived | |
| Main Scenario | Step | Action |
| | 1 | Administrator navigates to the add new item page |
| | 2 | Administrator fills the fields in the add new item page with the information about the new item |
| | 3 | System sets a positive value to the “total quantity available” of the new item according to the stocks available |
| | 4 | Administrator submits the new food item |
| | 5 | System generates a food item page for the new item for reviewing |
| | 6 | Administrator presses “Publish” |
| | 7 | System asks for confirmation from the administrator |
| | 8 | Administrator presses “Confirm” |
| | 9 | System publishes the new food item to the menu |
| | 10 | System sends out notification about the new food to the customers |
| Extensions | Step | Branching Action |
| | 3.1 | System sets a non-positive value to the “total quantity available” of the new item. |
| | 3.2 | System saves the new item information as a draft and will not publish the new item to the menu |
| | 8.1 | Administrator presses “Cancel” |
| | 8.2 | System redirects the administrator back to add new item page |
| | 10.1 | System doesn't send out notification about the new food item to the customers as administrator unticked send notifications |

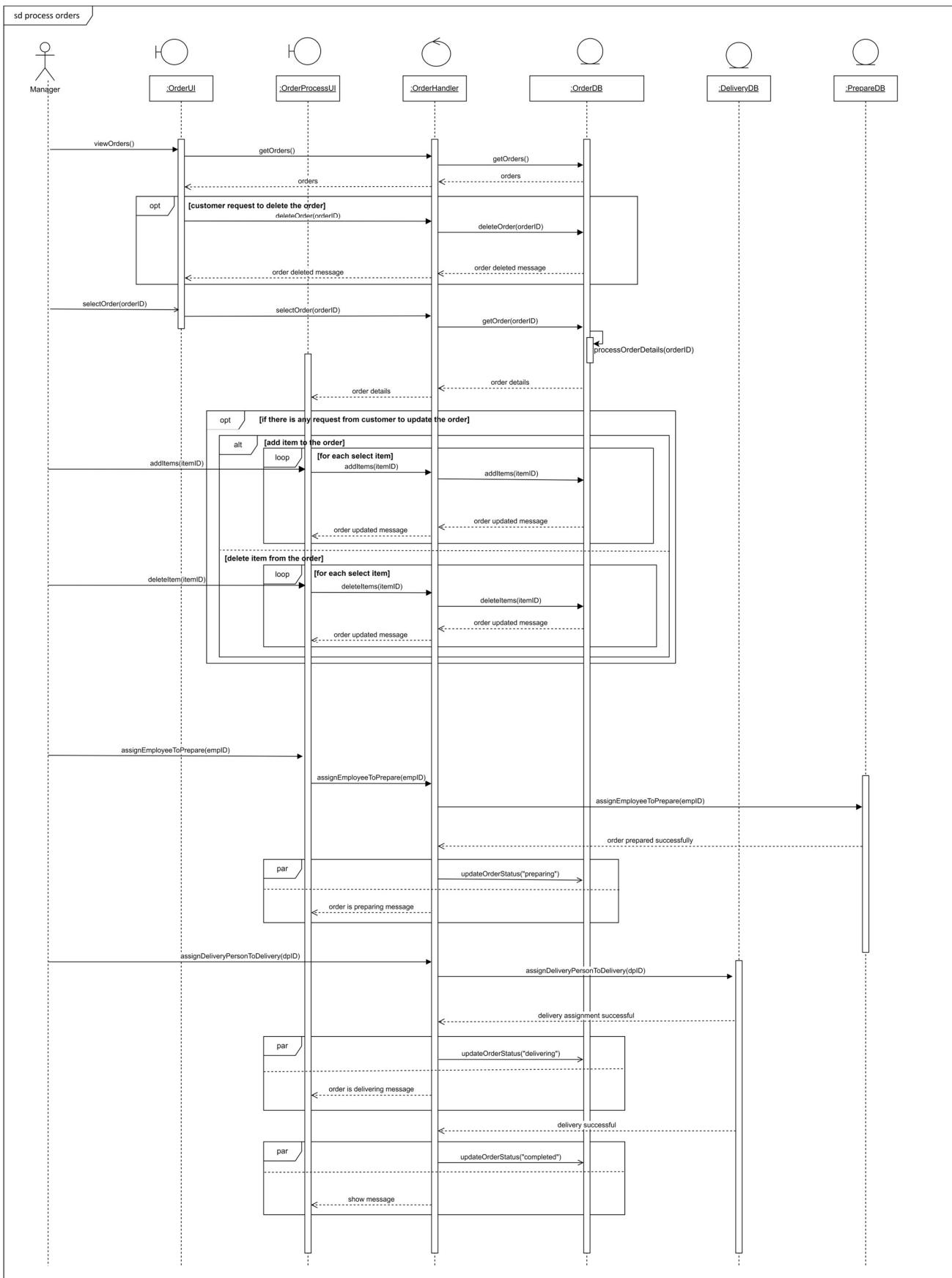
Sequence Diagram

IT21165252 Kuruppu K.A.G.S.R.

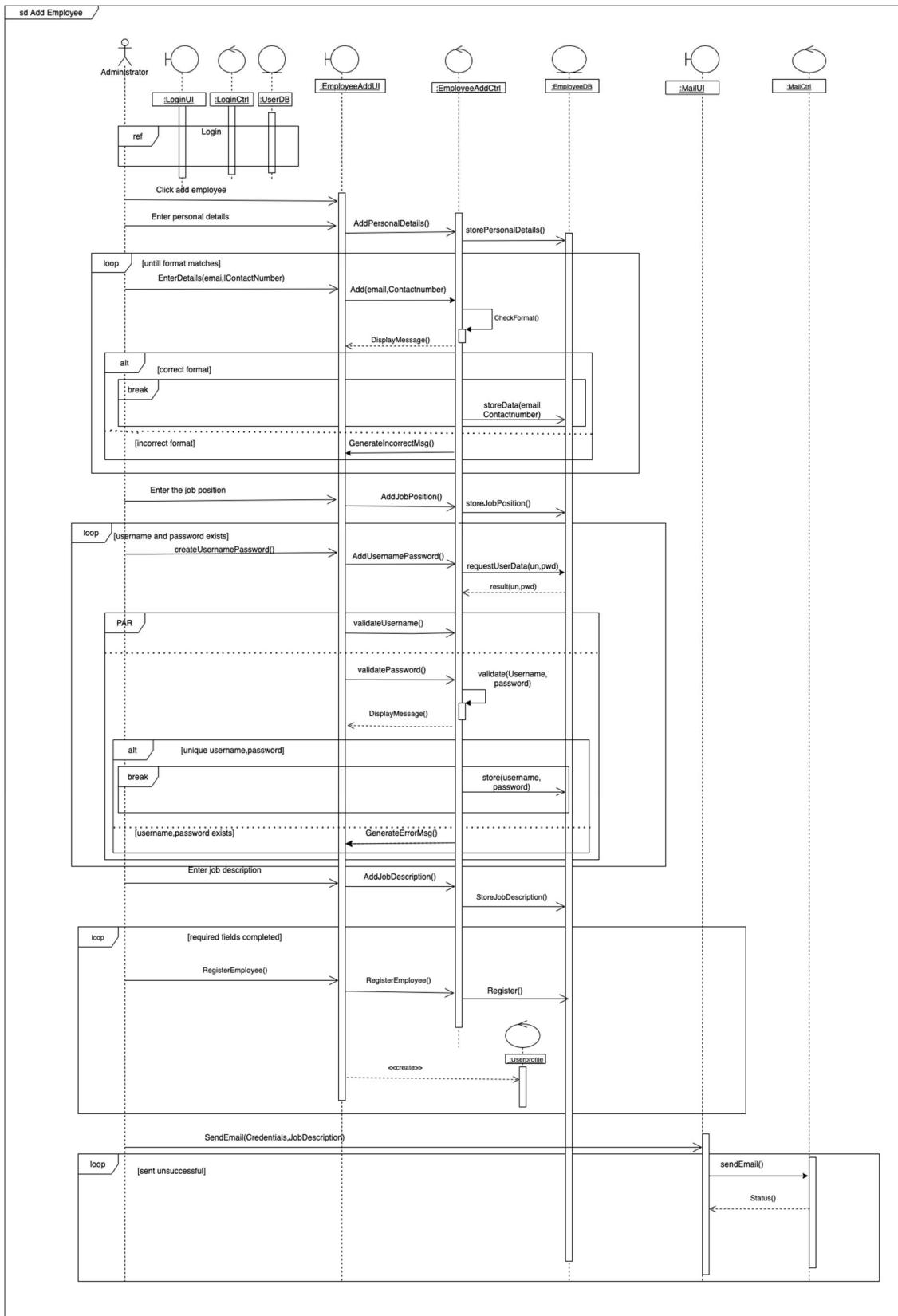


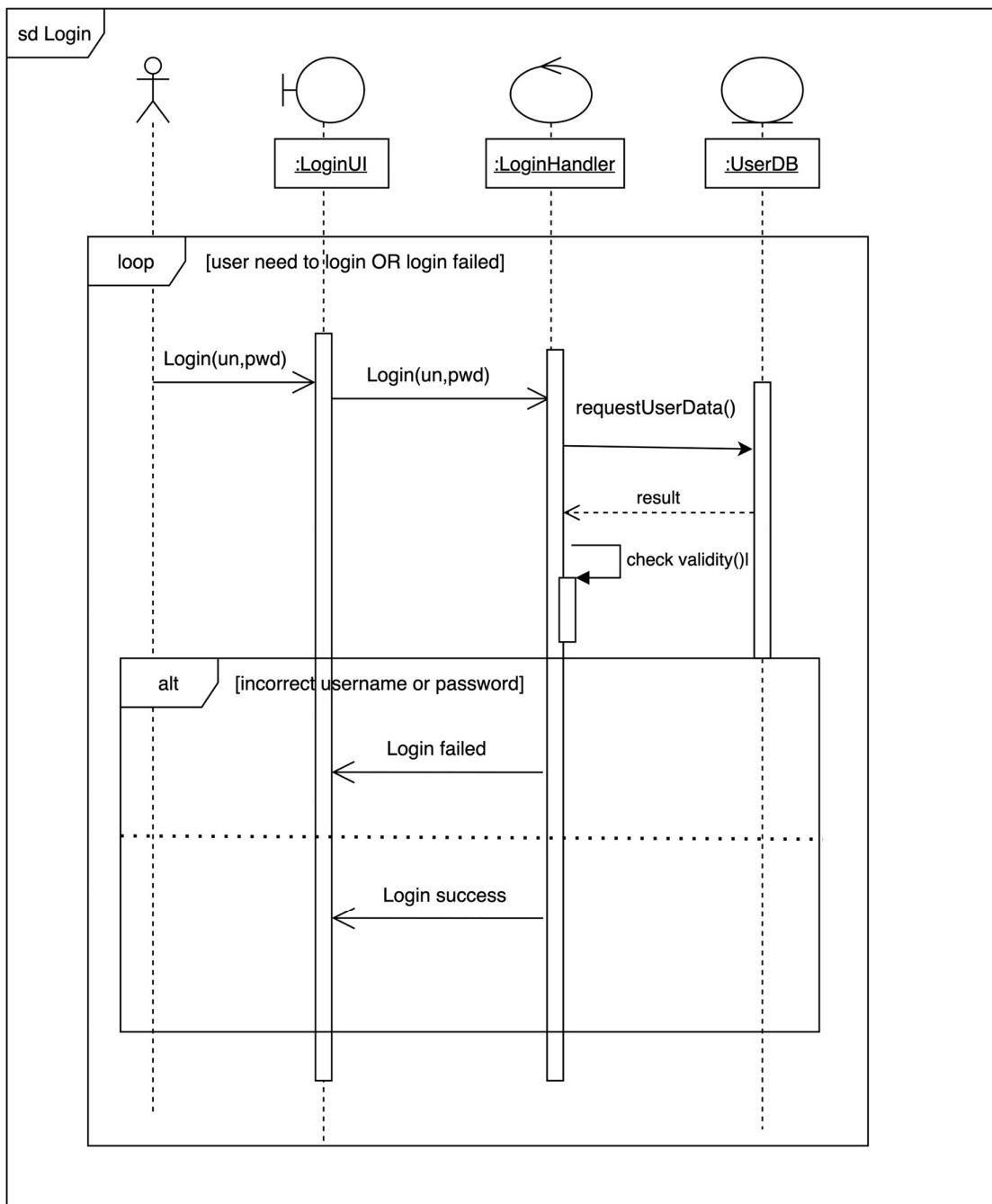
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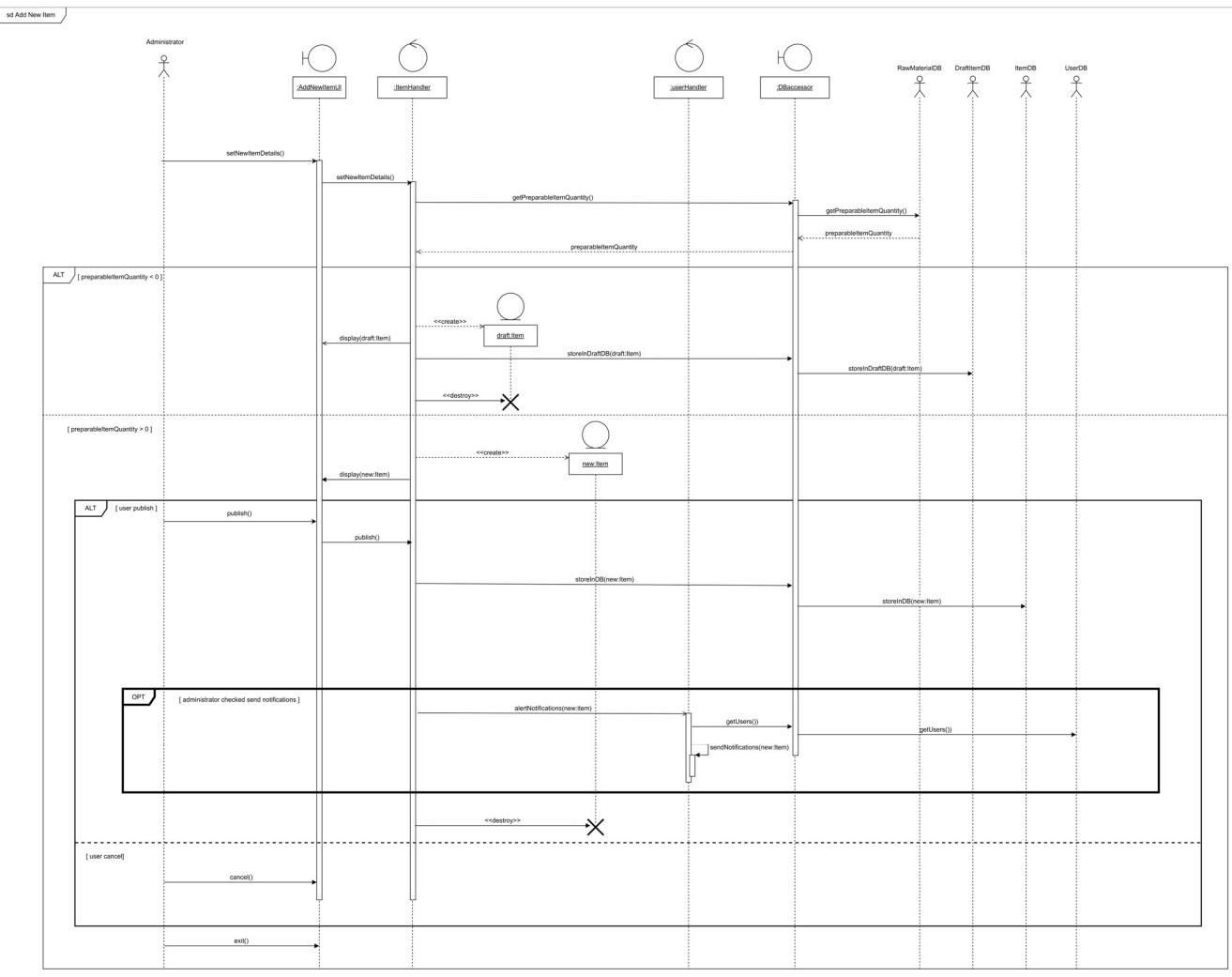


IT21377358 Hanshani S.G.H.S





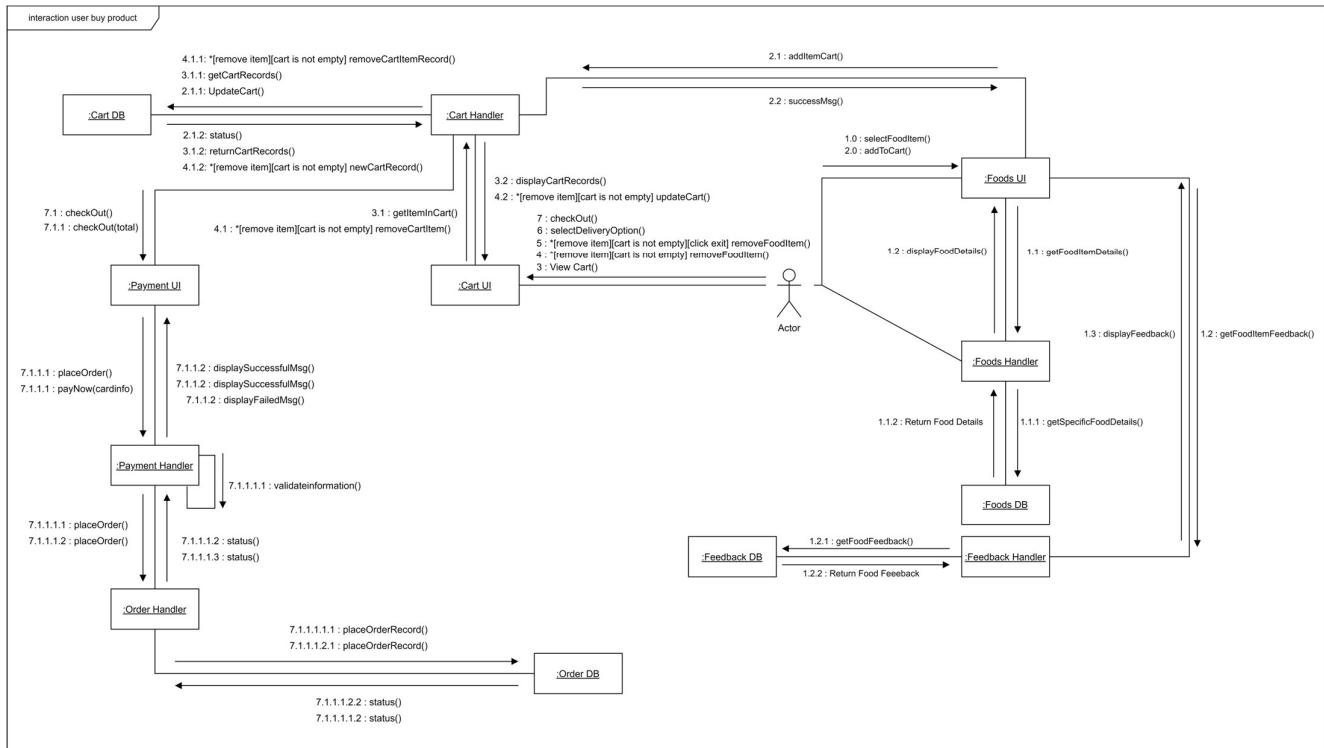
IT21167300 Sumanasekara P.D.M.



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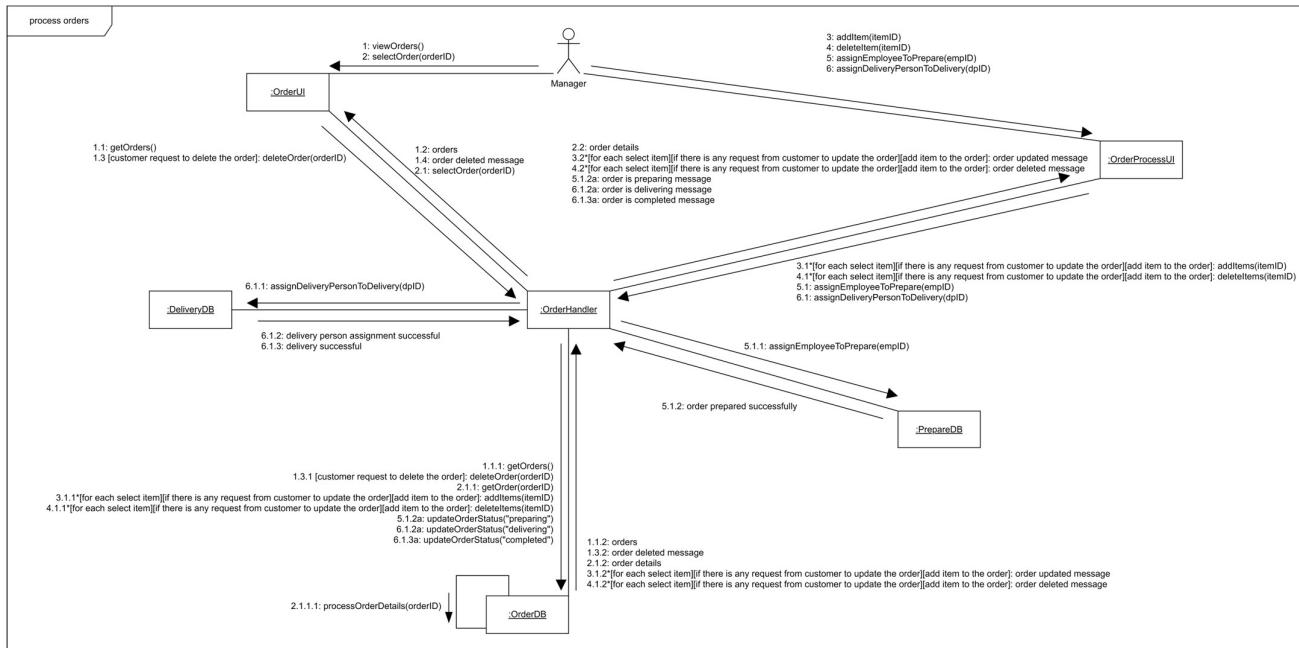
Communication Diagram

IT21165252 Kuruppu K.A.G.S.R.

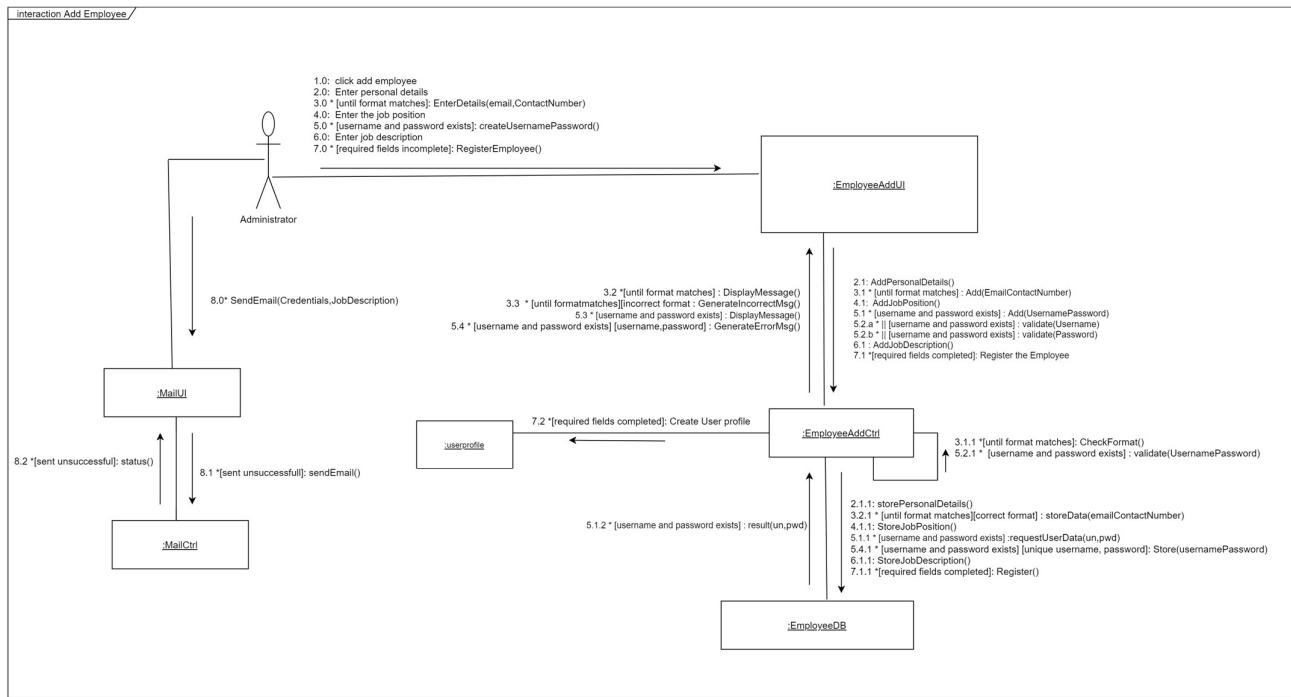


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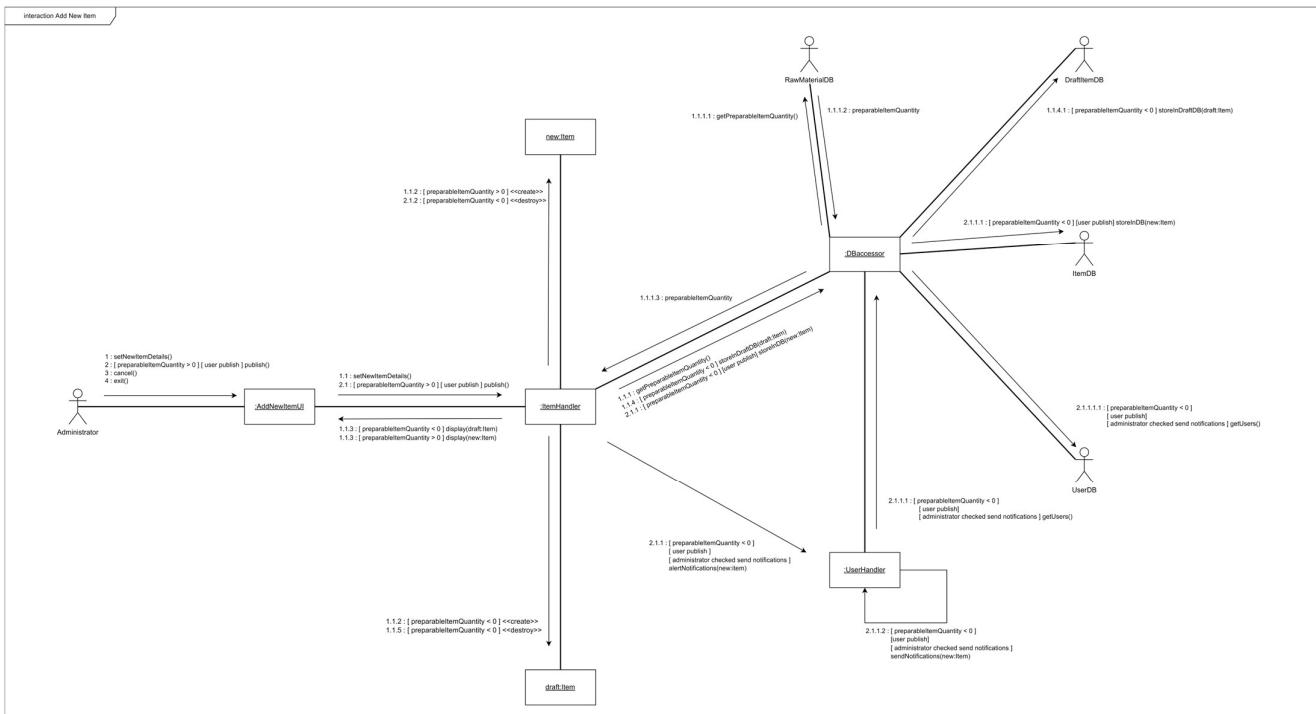
IT21160202 Wijekoon W. M. S. R



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IT21167300 Sumanasekara P.D.M



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| Student Registration Number | Student Name | contribution |
|------------------------------------|----------------------|---|
| IT21165252 | Kuruppu K.A.G.S.R. | <ul style="list-style-type: none"> • User buy product <ul style="list-style-type: none"> a) Use Case Scenario b) Sequence diagram c) Communication diagram • Use case diagram |
| IT21160202 | Wijekoon W. M. S. R. | <ul style="list-style-type: none"> • Process orders <ul style="list-style-type: none"> a) Use Case Scenario b) Sequence diagram c) Communication diagram • Use case diagram |
| IT21377358 | Hanshani S.G.H.S. | <ul style="list-style-type: none"> • Add new employee <ul style="list-style-type: none"> a) Use Case Scenario b) Sequence diagram c) Communication diagram • Use case diagram |
| IT21167300 | Sumanasekara P.D.M. | <ul style="list-style-type: none"> • Add new item <ul style="list-style-type: none"> a) Use Case Scenario b) Sequence diagram c) Communication diagram • Use case diagram |