

# IT2020 – Software Engineering Year 2, Semester II, 2022 Group Assignment

# **Online Computer Spare Parts Management System**

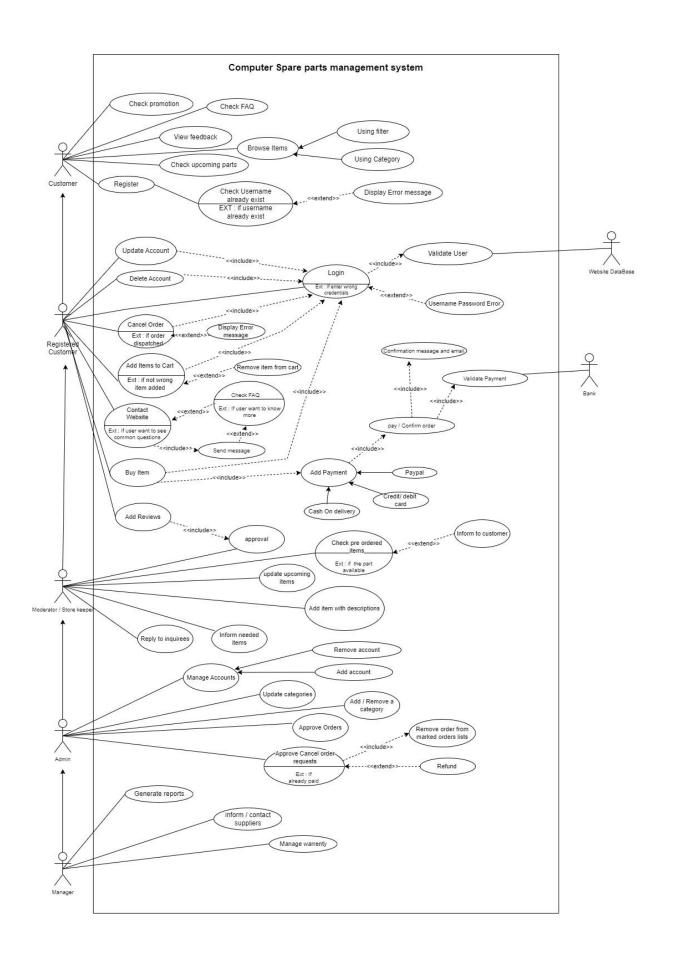
#### **Group Details**

Batch:

SE/OOP Group Number: SE/OOP\_MLB\_WD\_2022\_S2\_129

|   | Student Registration Number | Student Name          |
|---|-----------------------------|-----------------------|
| 1 | IT21189944                  | Madusanka G.K.I       |
| 2 | IT21176456                  | Gimmana M.R.M         |
| 3 | IT21177996                  | Cooray N.T.L          |
| 4 | IT21174780                  | D.M.M.I.T.Dissanayaka |

# Use Case Diagram



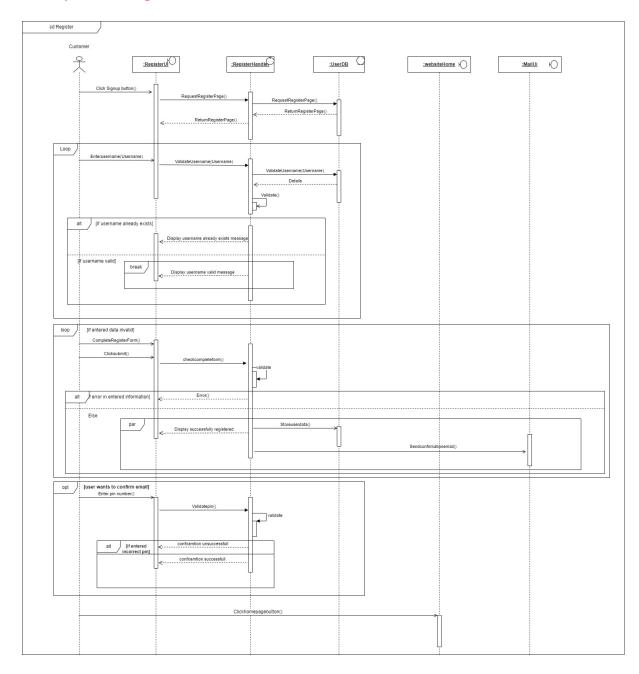
# IT21189944 – Madusanka G.K.I

## • <u>Customer Registration</u>

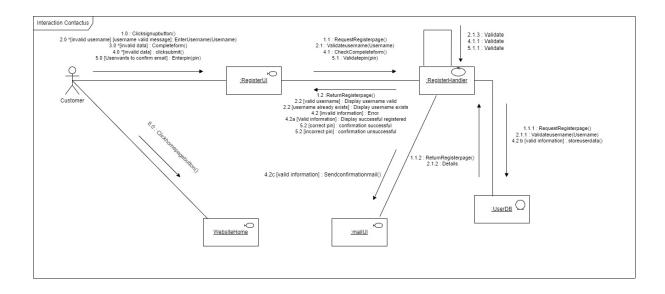
#### 1. Use case scenario:

| Number            | 01  |   |  |
|-------------------|---|---|--|
| Name              | Register  |   |  |
| Summary           | Register as user  |   |  |
| Priority          | 01  |   |  |
| Pre - Condition   | Guests must   | t visit the website.  |  |
| Post-Condition    | The system sends an email of gratitude to the user with a |   |  |
|                   | note to conf  | firm successful registration.   |  |
| Primary Actor     | Guest   |   |  |
| Trigger           | The guest chooses to register.                            |   |  |
| Main Scenario     | Step  | Action  |  |
| Iviaiii Scellalio | 1.  | Visit the website.  |  |
|                   | 2.  |   |  |
|                   | 3.  | Guest clicks on sign up button  |  |
|                   | 3.  | The system displays the registration form and asks to enter the name. |  |
|                   | 4   |   |  |
|                   | 4.  | The guest enters the username, full name,                             |  |
|                   |   | email, and password with the mentioned                                |  |
|                   | 5.  | characters and retypes the password.                                  |  |
|                   | 5.  | Guest clicks on the sign-up button to submit the                      |  |
|                   | 6.  | registration form.  |  |
|                   | б.  | The system stores the guest details and sends                         |  |
|                   | 7.  | an email with a PIN to confirm entered email.                         |  |
|                   |   | Guest entrees PIN on the website                                      |  |
|                   | 8.  | The system sends an email of gratitude to the                         |  |
|                   |   | user with a note to confirm successful                                |  |
| Extensions        | Chan  | registration.   |  |
| extensions        | Step  | Branching Actions The system notifies the guest that the entered      |  |
|                   | 5a  | The system notifies the guest that the entered                        |  |
|                   | Гh  | username already exists.  |  |
|                   | 5b  | The system notifies the guest that the entered                        |  |
|                   |   | email is not valid.   |  |
|                   | 5d  | The system notifies the guest that the re-                            |  |
|                   |   | entered password is not matched the previous                          |  |
|                   | F   | password.   |  |
|                   | 5e  | The system notifies guests that the information                       |  |
|                   |   | provided is incomplete.   |  |

# 2. Sequence Diagram:



#### 3. Communication Diagram:



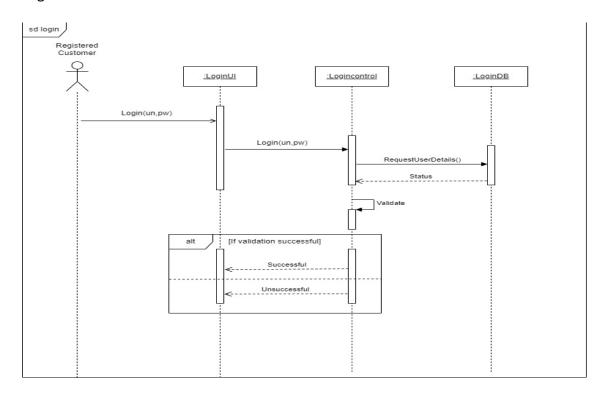
# • Registered Customer contact support services

#### 1. Use case Scenario:

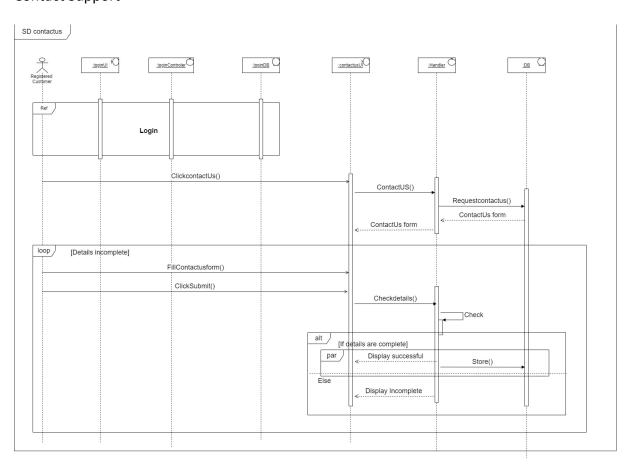
| Number          | 02                                |   |  |
|-----------------|-----------------------------------|---|--|
| Name            | Contact us                        |   |  |
| Summary         | Customer Inquiry                  |   |  |
| Priority        | 01                                |   |  |
| Pre - Condition | Registered t                      | o the system                                    |  |
| Post-Condition  | The customer submits the Inquiry. |   |  |
| Primary Actor   | Registered C                      | Customer  |  |
| Trigger         | Registered C                      | Customer chooses to contact the website.        |  |
| Main Scenario   | Step Action                       |   |  |
|                 | 1.                                | Visit the website.                              |  |
|                 | 2.                                | The Customer logins by entering their username  |  |
|                 |                                   | and password                                    |  |
|                 | 3.                                | Customer clicks on the contact us button        |  |
|                 | 4.                                | The system displays the contact us page.        |  |
|                 | 5.                                | Users fill out the contact us form with the     |  |
|                 |                                   | necessary details.                              |  |
|                 | 6.                                | The user clicks the submit button.              |  |
|                 | 7.                                | System store the inquiry details                |  |
| Extensions      | Step                              | Branching Actions                               |  |
|                 | 2a                                | The system notifies the guest that the entered  |  |
|                 |                                   | email or username is incorrect.                 |  |
|                 | 2b                                | The system notifies the guest that the entered  |  |
|                 |                                   | password is incorrect.                          |  |
|                 | 6a                                | The system notifies guests that the information |  |
|                 |                                   | provided is incomplete.                         |  |

## 2. Sequence Diagram:

#### Login –

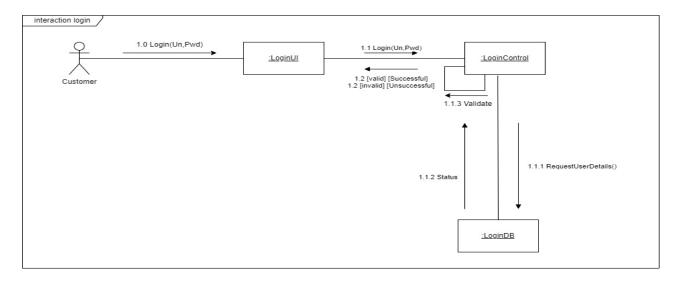


#### Contact Support-

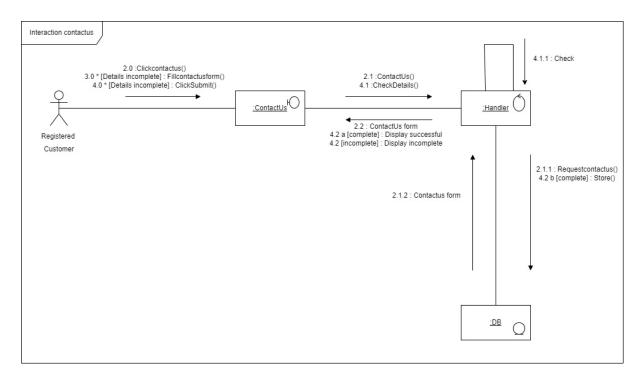


#### 3. Communication Diagram:

#### Login -



#### Contactus -



- I assume that the checking procedure is a part of the checkdetails().
- I assume that the fill contact form part and click submit part must repeatedly do until the user fills in the form details correctly.

# IT21176456 – Gimmana M.R.M

# • Customer Buy Items online

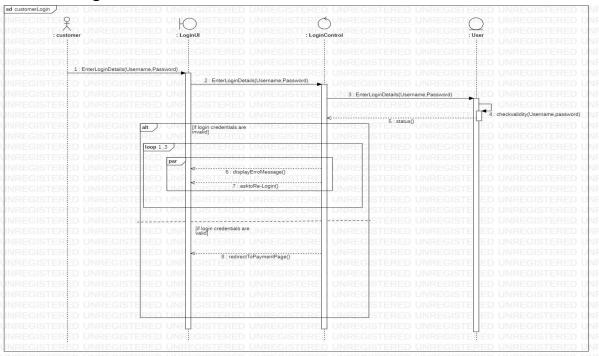
#### 1. Usecase Scenario:

| Number          | B002                                  |   |  |
|-----------------|---------------------------------------|---|--|
| Name            | Buy item(s)                           |   |  |
| Summary         | Customers k                           | ouy items online                                    |  |
| Priority        |                                       | ·   |  |
| Pre - Condition | Customer view cart and select an item |   |  |
| Post-Condition  | Send purcha                           | sed items to pack                                   |  |
| Primary Actor   | customer                              |   |  |
| Main Scenario   | Step Action                           |   |  |
|                 | 1.                                    | Customers select Item(s)                            |  |
|                 | 2.                                    | System checks availability of the selected          |  |
|                 |                                       | item(s)   |  |
|                 | 3.                                    | System Update the item cart                         |  |
|                 | 4.                                    | Display the cart to the customer                    |  |
|                 | 5.                                    | customer click purchase button to buy the item      |  |
|                 | 6.                                    | system asks to give login credentials               |  |
|                 | 7.                                    | Customer gives his login credentials                |  |
|                 | 8.                                    | System checks the customer credentials              |  |
|                 | 9.                                    | System displays payment page                        |  |
|                 | 10.                                   | Customer gives payment details                      |  |
|                 | 11.                                   | System checks payment details                       |  |
|                 | 12.                                   | System generates a bill                             |  |
|                 | 13.                                   | System displays the bill to customer                |  |
|                 | 14.                                   | Customer place order                                |  |
|                 | 15.                                   | System updates store                                |  |
|                 | 16.                                   | System displays order success message               |  |
| Extensions      | Step                                  | Branching Actions                                   |  |
|                 | 2a                                    | If the items are not available system displays      |  |
|                 |                                       | items is not in the stock                           |  |
|                 | 2b                                    | System asks customer to select item again           |  |
|                 | 6a                                    | If login credentials are invalid, system asks to    |  |
|                 |                                       | re-enter the login credentials                      |  |
|                 | 8a                                    | If login credentials are invalid, system ask to re- |  |
|                 |                                       | login   |  |
|                 | 11a                                   | If payment details are invalid system ask to re-    |  |
|                 |                                       | enter the details                                   |  |

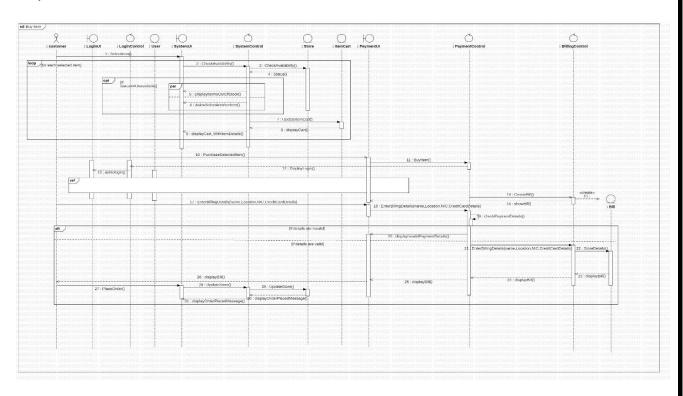
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# 2. Sequence Diagram :

# Customer login:



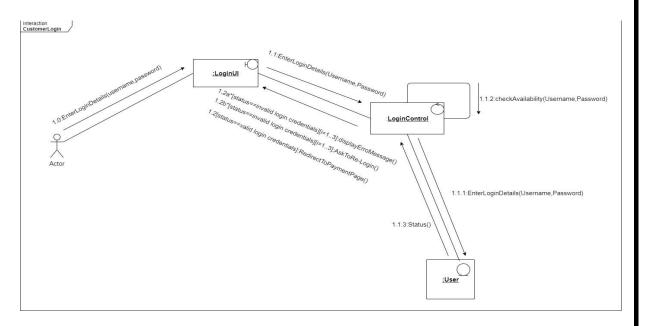
# Buy Item Online :



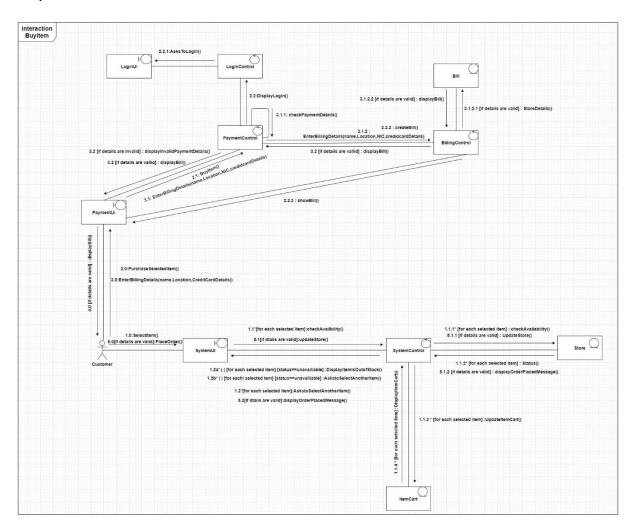
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#### 3. Communication Diagram

# Login:



## Buy Items:



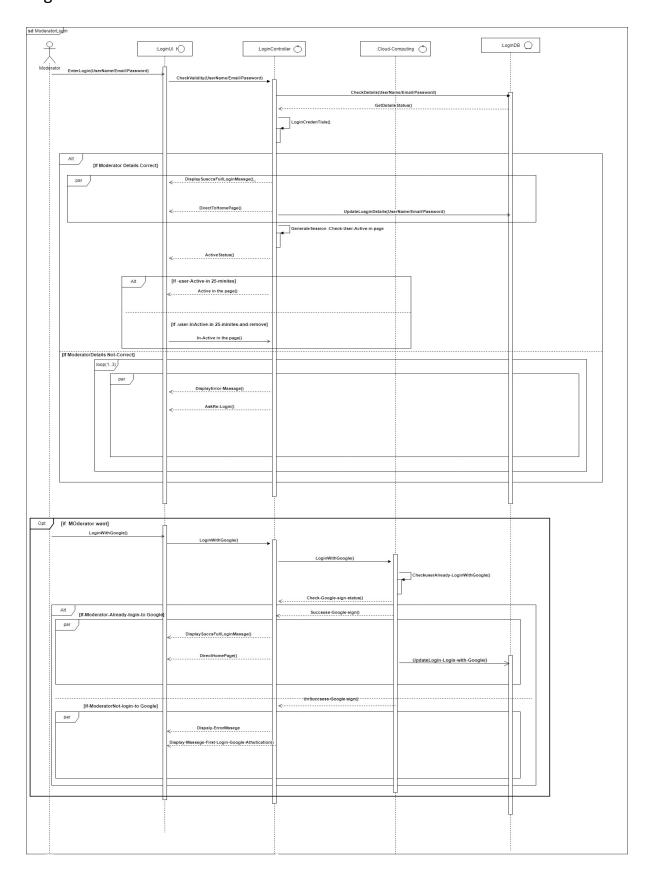
# IT21177996 - Cooray N.T.L

## 1. Use Case Scenario

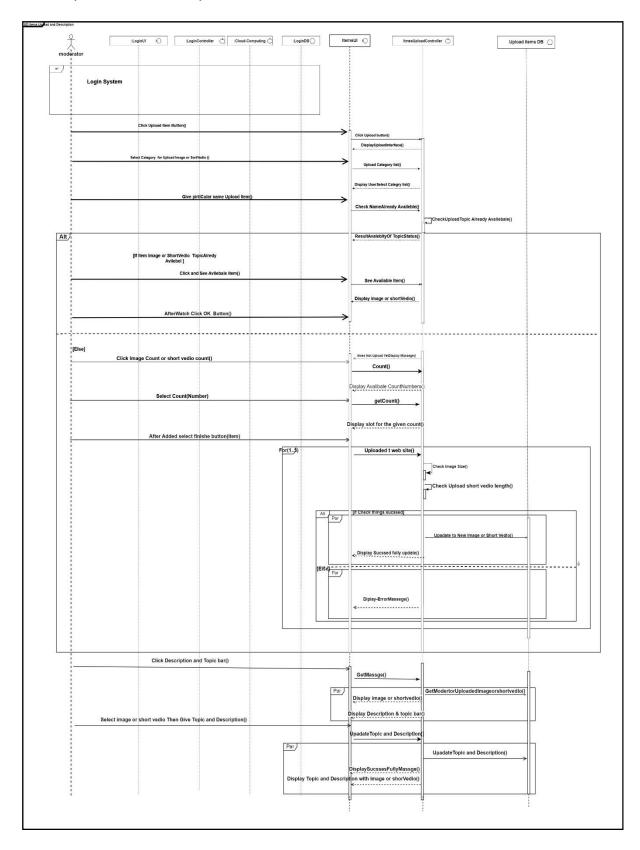
| Number          | 008  |   |  |
|-----------------|--|---|--|
| Name            | Upload items and Description                               |   |  |
| Summary         | The moderator visits the System and has added items and    |   |  |
|                 | Descriptions to the Website.                               |   |  |
| Priority        | 2  |   |  |
| Pre - Condition | Moderator has a successfully registered account in this    |   |  |
|                 | system and Moderator has already logged in to the website. |   |  |
| Post-Condition  | Moderator added an item with a description                 |   |  |
| Primary Actor   | Moderator  |   |  |
| Main Scenario   | Step   | Action  |  |
|                 | 1.   | Moderator Logins to the Dashboard Using             |  |
|                 |  | Username and Password or Google                     |  |
|                 |  | Authentication(Using Admin Approved Email)          |  |
|                 | 2.   | The moderator goes through the website with         |  |
|                 |  | he has features                                     |  |
|                 | 3.   | Moderator clicks upload items button                |  |
|                 | 4.   | Moderator access the upload items and               |  |
|                 |  | Description panel                                   |  |
|                 | 5.   | Select Items category moderator want                |  |
|                 | 6.   | Give the particular name to upload video(s) or      |  |
|                 |  | image(s)  |  |
|                 | 7.   | Select the count moderator wants for the            |  |
|                 |  | upload items  |  |
|                 | 8.   | Upload items and update the database                |  |
|                 | 9.   | Display 'successfully uploaded items' and           |  |
|                 |  | display items they have added topic and             |  |
|                 |  | description for the items                           |  |
|                 | 10.  | select an image or short video and then give the    |  |
|                 |  | topic and Description of moderator uploaded         |  |
|                 |  | things  |  |
| Extensions      | Step   | Branching Actions                                   |  |
|                 | 1a   | Provide the opportunity to log in again             |  |
|                 |  |   |  |
|                 | 1b   | If verification fails three times and display error |  |
|                 |  | an exist, the process                               |  |
|                 | 6a   | If items are already available in the system        |  |
|                 |  | show images or short videos                         |  |
|                 | 6.a.1  | then click the ok button                            |  |
|                 | 6b   | If a related item is not in their display "Not      |  |
|                 |  | available message"                                  |  |

## 2. Sequence Diagram

# Login:



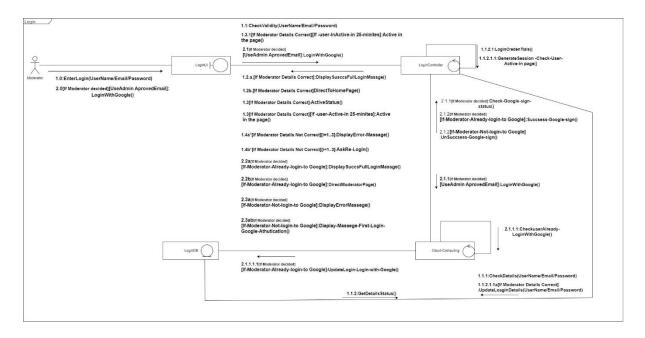
## Item Upload and description:



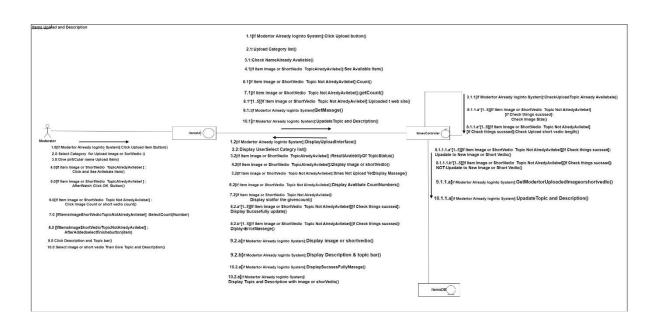
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#### 3. Communication Diagram

#### Login:



#### Item Upload and description:

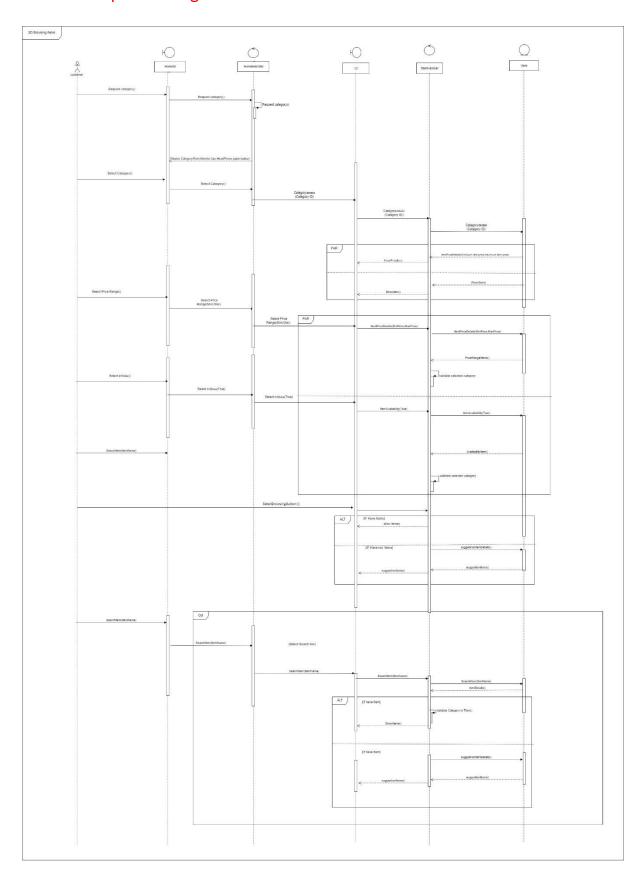


# IT21174780 - D.M.M.I.T.Dissanayaka

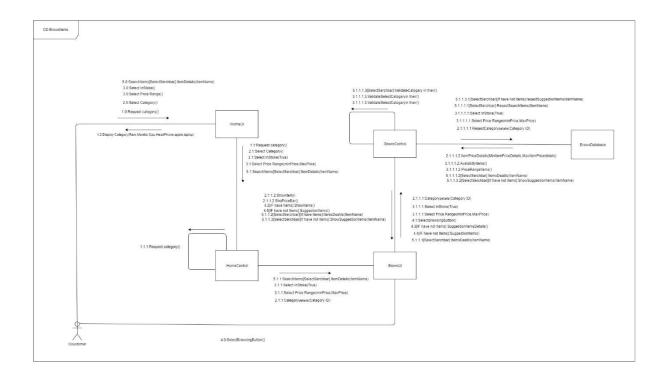
#### 1. Use case scenario:

| Number          | 008                             |  |  |
|-----------------|---------------------------------|--|--|
| Name            | Customers browse an Item        |  |  |
| Summary         | Customers browse and find item  |  |  |
| Priority        |                                 |  |  |
| Pre - Condition | Customer must visit the website |  |  |
| Post-Condition  | Customers f                     | ind the item   |  |
| Primary Actor   | Customer                        |  |  |
| Main Scenario   | Step                            | Action   |  |
|                 | 1.                              | Customers need to reach home page.                   |  |
|                 | 2.                              | System checks all main category in the database      |  |
|                 |                                 | and show all categories.                             |  |
|                 | 3.                              | Customer needs to select what he wants to find       |  |
|                 |                                 | from the category.                                   |  |
|                 | 4.                              | Display the price bar by including minimum and       |  |
|                 |                                 | maximum price range by checking the                  |  |
|                 |                                 | database.  |  |
|                 | 5.                              | Customer select the price range from the price       |  |
|                 |                                 | bar needed to be brows.                              |  |
|                 | 6.                              | Show availability check bar.                         |  |
|                 | 7.                              | Customer check in stoke Item.                        |  |
|                 | 8.                              | Customer clicks Browsing Button                      |  |
|                 | 9.                              | Preview item list using the conditions in            |  |
|                 |                                 | database.  |  |
|                 | 10.                             | Customer can enter the item what he wants.           |  |
| Extensions      | Step                            | Branching Actions                                    |  |
|                 | 3a                              | Search Item using Search bar.                        |  |
|                 | 5b                              | If does not select any price range, display all the  |  |
|                 |                                 | price ranges item in the database.                   |  |
|                 | 7a                              | If does not assign the availability, display all the |  |
|                 |                                 | item in the database.                                |  |
|                 | 9a                              | If it is not in there in the item list, it shows     |  |
|                 |                                 | suggestion items.                                    |  |

# 2. Sequence Diagram



#### 3. Communication Diagram:



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# **Individual Contribution**

| Reg No Name |                    | Function Name   |
|-------------|--------------------|---|
| IT21189944  | Madusanka<br>G.K.I | 1. Customer Registration  ✓ Usecase scenario  ✓ Sequence diagram  - Loop  - Break  - Alt  - Opt  - par  ✓ Communication diagram  2. Contact website  ✓ Usecase scenario  - Loop  - Alt  - Ref  - par  ✓ Sequence diagram  ✓ Communication diagram |
| IT21176456  | Gimmana<br>M.R.M   | 1. Buy Item  ✓ Usecase scenario  ✓ Sequence diagram  - Loop  - Opt  - Alt  - Ref  - Par  - create  ✓ Communication diagram  |
| IT21177996  | Cooray<br>N.T.L    | 1. Add item with description  ✓ Usecase scenario  ✓ Sequence diagram  - Loop - Alt  |

|            |                           | <ul><li>Par</li><li>Ref</li><li>✓ Communication diagram</li></ul>                                      |
|------------|---------------------------|--|
| IT21174780 | D.M.M.I.T.D<br>issanayaka | 1. Browse an Item  ✓ Usecase scenario  ✓ Sequence diagram  - Alt  - Opt - par  ✓ Communication diagram |