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# Use Cases

for

# ShopPeas

**Version 1.3 approved**

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## Revision History

Name	Date	Reason For Changes	Version
Yi Xuan, Winnie, Jedidiah, Rachel, Saffron, Jun Chao	24/08/2024	Documented the first version of the project use cases.	1.0
Yi Xuan, Winnie, Jedidiah, Rachel, Saffron, Jun Chao	15/09/2024	Updated use cases based on changes to system functionality.	1.1
Yi Xuan, Winnie, Jedidiah, Rachel, Saffron, Jun Chao	19/10/2024	Updated use cases based on changes to application design and to include exception handling.	1.2
Yi Xuan, Winnie, Jedidiah, Rachel, Saffron, Jun Chao	10/11/2024	Made final updates to use cases for submission.	1.3

# Use Cases

## 1. Consumer

Use Case ID:	CUS01		
Use Case Name:	Register		
Created By:	Rachel	Last Updated By:	Winnie
Date Created:	26/08/2024	Date Last Updated:	10/11/2024

Actor:	Consumer
Description:	A form to get the user's details and create a new account for them to purchase food products from wholesalers.
Preconditions:	NIL
Postconditions:	1. The user can log in to their account.
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user enters the app and sees the landing page.</li> <li>2. The user clicks the "SIGN UP" option and is directed to a page that asks the user which account they want to create: "Consumer" or "Business Owner".</li> <li>3. The user clicks the "Consumer" option and is directed to the registration form.</li> <li>4. The user enters their credentials. <ol style="list-style-type: none"> <li>a. The user provides their first name.</li> <li>b. The user provides their last name.</li> <li>c. The user provides an email.</li> <li>d. The user provides a phone number.</li> <li>e. The user clicks "NEXT" to enter details about their address.</li> </ol> </li> <li>5. The user enters their address details. <ol style="list-style-type: none"> <li>a. The user provides their street name.</li> <li>b. The user provides their unit number.</li> <li>c. The user provides their building name.</li> <li>d. The user provides their city, country.</li> <li>e. The user provides their postal code.</li> </ol> </li> <li>6. The user chooses their password <ol style="list-style-type: none"> <li>a. The user provides a password.</li> <li>b. The user must confirm the password by entering it again in another field.</li> </ol> </li> </ol>

	<ol style="list-style-type: none"> <li>7. The user clicks "REGISTER" to register their details in the system. <ol style="list-style-type: none"> <li>a. The system validates that the email follows the correct format.</li> <li>b. The system checks if there is a duplicate email.</li> <li>c. The system validates that the phone number follows the correct format.</li> <li>d. The system checks if there is a duplicate phone number.</li> <li>e. The system validates that the provided password is secure enough.</li> <li>f. The system validates if the password entered is the same in both fields.</li> </ol> </li> <li>8. The system creates a new record in the database.</li> <li>9. The app prompts the user to log in.</li> </ol>
Alternative Flows:	<p>AF01-CUS01: The user enters an invalid input at any stage</p> <ol style="list-style-type: none"> <li>1. User inputs invalid information (e.g., incorrect email format).</li> <li>2. The system displays error messages before allowing the user to register and prompts the user to fix the input values.</li> <li>3. User corrects the input and resubmits, the system will return to the Login/Sign up Page.</li> </ol> <p>AF02-CUS01: The password entered in the "Password" and "Confirm Password" fields do not match.</p> <ol style="list-style-type: none"> <li>1. User keys in a different password in "Confirm Password" compared to the initial Password.</li> <li>2. The system prompts the user to re-enter the password, "Passwords do not match".</li> </ol>
Exceptions:	<p>EX01-CUS01: The user enters an email address that already exists.</p> <ol style="list-style-type: none"> <li>1. The system checks the database and finds that the email address already exists.</li> <li>2. Display an error message, "This email belongs to an existing user. Please log in instead."</li> </ol>

	EX02-CUS01: Firebase connection cannot be established. 1. Inform the user of the connection issue and ask them to try again later.
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	CUS02		
Use Case Name:	Login		
Created By:	Rachel	Last Updated By:	Winnie
Date Created:	26/08/2024	Date Last Updated:	10/11/2024

Actor:	Consumer
Description:	A form to ask for the user's email and password before they can access app functionalities that require user authentication.
Preconditions:	NIL
Postconditions:	1. The user can access the pages to purchase products.
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user enters their credentials - an email and password. <ol style="list-style-type: none"> <li>1.1. The system validates that the email keyed in exists in the database.</li> <li>1.2. The system validates that the provided password matches the password tagged to the account.</li> </ol> </li> <li>2. The user is directed to the Consumer Product Page after successfully logging in.</li> </ol>
Alternative Flows:	<p>AF01-CUS02: User wants to Register an Account</p> <ol style="list-style-type: none"> <li>1. The user clicks the "No Account? Create One!" link. <ol style="list-style-type: none"> <li>1.1. The user is redirected to the Register page to enter their chosen account details.</li> </ol> </li> </ol> <p>AF02-CUS02: User keys in the wrong password</p> <ol style="list-style-type: none"> <li>1. User keys in wrong password <ol style="list-style-type: none"> <li>1.1. System displays an error message, "Wrong password!"</li> </ol> </li> </ol>
Exceptions:	<p>EX01-CUS02: Firebase connection cannot be established.</p> <ol style="list-style-type: none"> <li>1. Inform the user of the connection issue and ask them to try again later.</li> </ol>
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	CUS03		
Use Case Name:	Product List		
Created By:	Rachel	Last Updated By:	Jedidiah
Date Created:	26/08/2024	Date Last Updated:	02/11/2024

Actor:	Consumer
Description:	The list of healthy food products sold by various wholesalers for the consumers to purchase.
Preconditions:	NIL
Postconditions:	NIL
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. The system queries the database to get all product records.</li> <li>2. The user scrolls through the products. <ol style="list-style-type: none"> <li>a. Upon selecting a product they are interested in, the system will direct them to get all the available wholesalers for the selected products</li> </ol> </li> <li>3. If the user has a specific product to find, they can enter the item in the search bar. <ol style="list-style-type: none"> <li>a. The system will filter the product records based on the text query entered.</li> <li>b. The system will display the filtered list of records.</li> <li>c. The user clicks on the specific product they want and they will be redirected to all the available wholesalers for the selected product.</li> </ol> </li> </ol>
Alternative Flows:	NIL
Exceptions:	EX01-CUS03: System unable to retrieve information <ol style="list-style-type: none"> <li>1. The System does not show any product listings.</li> </ol>
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	CUS04		
Use Case Name:	Product Details		
Created By:	Rachel	Last Updated By:	Yi Xuan
Date Created:	27/08/2024	Date Last Updated:	02/11/2024

Actor:	Consumer
Description:	Displays the details of the healthy food product the user selected, such as the available wholesalers, price, and quantity for them to make an informed decision before purchasing the product. Through this page, the user can add products to their shopping cart.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user must be logged in.</li> <li>2. The user selects a product from the Product page.</li> </ol>
Postconditions:	NIL
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. The system queries the database to get all wholesalers selling the specific product based on the product selected on the Product page. <ol style="list-style-type: none"> <li>a. For each wholesaler, the system will call the OneMap API to get the total time between the wholesaler's pickup location and the consumer's home address. <ol style="list-style-type: none"> <li>i. The time will be displayed in each record as “__ minutes away from your house..”.</li> </ol> </li> </ol> </li> <li>2. The user reviews the list of wholesaler options. <ol style="list-style-type: none"> <li>a. The user can sort the list based on their priorities such as price, duration and stock. <ol style="list-style-type: none"> <li>i. The system will sort the records based on the chosen field.</li> <li>ii. The system will display the sorted records.</li> </ol> </li> <li>b. For each option, the user can click on the wholesaler's name to view more details about the wholesaler. <ol style="list-style-type: none"> <li>i. The wholesaler's name will be highlighted.</li> <li>ii. The user will be directed to the respective "Wholesaler Details" page.</li> </ol> </li> </ol> </li> <li>3. The user selects an option. <ol style="list-style-type: none"> <li>a. The option is highlighted in a different colour.</li> </ol> </li> </ol>



	<ul style="list-style-type: none"> <li>b. A pop-up screen appears and the user indicates the quantity they want to add to the cart. A map of the wholesaler's location is also shown using the OneMap API. <ul style="list-style-type: none"> <li>i. The user selects the quantity of item he would like to buy.</li> <li>ii. If the user selects the "Add to Cart" button, the Shopping Cart page is updated with the addition of this product.</li> <li>iii. The shopping cart and transaction records in the database are updated accordingly</li> </ul> </li> <li>4. The system returns to the page and displays "Success!" and users can continue to navigate the app.</li> </ul>
Alternative Flows:	AF01-CUS04: User tries to add an invalid quantity to cart <ul style="list-style-type: none"> <li>1. System prompts user to add a valid quantity to cart</li> </ul>
Exceptions:	EX01-CUS04: System unable to retrieve information <ul style="list-style-type: none"> <li>1. The System does not display anything on the interface.</li> </ul> EX02-CUS04: User does not type in a valid postal code <ul style="list-style-type: none"> <li>1. The system does not display anything on the interface.</li> </ul>
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	CUS05		
Use Case Name:	Shopping Cart		
Created By:	Rachel	Last Updated By:	Saffron Lim
Date Created:	27/08/2024	Date Last Updated:	09/11/2024

Actor:	Consumer
Description:	Facilitates the purchasing process by allowing users to create a virtual shopping cart. Users can add desired products to their cart, view a detailed list of items, and calculate the total cost before checkout. This feature provides a convenient way for users to organise their purchases and make informed decisions.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user must be logged in.</li> <li>2. The user clicks the Shopping Cart icon from another page which directs them to the Shopping Cart page.</li> <li>3. The user has to Add to Cart at least one item.</li> </ol>
Postconditions:	NIL
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. The system displays a list of products added to the cart, where each product detail is shown together in a list item.</li> <li>2. Product details shown include quantity ordered, wholesaler ordered from, wholesaler address, and price of that specific item.</li> <li>3. The system calculates the total cost of all items within the cart and displays it at the bottom panel as “Total \$__”.</li> <li>4. The user may complete their purchase by clicking the button to check out. <ol style="list-style-type: none"> <li>a. The user is directed to the Payment page.</li> </ol> </li> </ol>
Alternative Flows:	<p>AF01-CUS05: The user deletes an item.</p> <ol style="list-style-type: none"> <li>1. The user clicks the delete icon associated with the product item.</li> <li>2. The item is removed from the shopping cart.</li> <li>3. The system recalculates the total amount.</li> </ol> <p>AF02-CUS05: The user updates the quantity.</p> <ol style="list-style-type: none"> <li>1. The user uses the number input spinner to update the quantity.</li> <li>2. The system updates the price within the product item row.</li> </ol>

	<p>3. The system recalculates the total amount.</p> <p>AF03-CUS05: The user clicks the wholesaler name.</p> <ol style="list-style-type: none"> <li>1. The system directs the user to the respective View Wholesaler page.</li> </ol> <p>AF04-CUS05: The user checks out when the updated stock amount is less than the requested quantity.</p> <ol style="list-style-type: none"> <li>1. The Shopping Cart page loads.</li> <li>2. The system gets the quota to update the maximum number for the number input spinner for each product. <ol style="list-style-type: none"> <li>a. If the stock is less than the user's selected quantity. <ol style="list-style-type: none"> <li>i. If the stock is not 0. <ol style="list-style-type: none"> <li>1. Change the quantity in the number input slider to the wholesaler's maximum stock.</li> <li>2. Update the price for the product.</li> <li>3. Display an alert to inform the user that the wholesaler's stock has been updated.</li> </ol> </li> <li>ii. If the stock is 0. <ol style="list-style-type: none"> <li>1. Change the quantity in the number input slider to 0.</li> <li>2. Disable all buttons in the number input slider.</li> <li>3. Change the price to 0 for the product.</li> <li>4. Display an alert to inform the user that the wholesaler has no more stocks and ask them to consider other wholesalers. <ol style="list-style-type: none"> <li>a. If the user selects another wholesaler. <ol style="list-style-type: none"> <li>i. Update the price for the product.</li> <li>ii. Change the quantity in the number input slider to 1.</li> <li>iii. Enable all buttons in the number input slider.</li> </ol> </li> </ol> </li> </ol> </li> </ol> </li> </ol> </li> </ol>
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	<p>b. If the user does not select another wholesaler and checks out.</p> <p>i. The system removes the product from the purchase history records.</p> <p>AF05-CUS05: The user has an empty cart</p> <ol style="list-style-type: none"> <li>1. The Shopping Cart page loads.</li> <li>2. System displays a message stating “No Cart Items Yet”.</li> </ol> <p>AF06-CUS05: The user tries to checkout an empty cart.</p> <ol style="list-style-type: none"> <li>1. The Shopping Cart page loads.</li> <li>2. User clicks on the checkout button.</li> <li>3. System displays an error message, “Error, cart is empty” and prevents the user from checking out the cart.</li> </ol>
Exceptions:	<p>EX01-CUS05: Retrieval of shopping cart data for user fails</p> <ol style="list-style-type: none"> <li>1. System displays an error message</li> </ol>
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	CUS06		
Use Case Name:	Check Out		
Created By:	Rachel	Last Updated By:	Saffron
Date Created:	27/08/2024	Date Last Updated:	09/11/2024

Actor:	Consumer
Description:	For consumers to review their order details, enter payment information, and finalise their purchase.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user must be logged in.</li> <li>2. The user clicks the Shopping Cart icon from another page which directs them to the Shopping Cart page.</li> <li>3. The user's shopping cart has at least one item.</li> <li>4. The user clicks the checkout button</li> </ol>
Postconditions:	NIL
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. The shopping cart data is retrieved from the database <ol style="list-style-type: none"> <li>a. The price of each item is checked for any updates and the prices of the individual items and the total payment amount are updated and reflected accordingly in the transactions and shopping cart data records.</li> </ol> </li> <li>2. The total payment amount is calculated and displayed.</li> <li>3. The user clicks the Check out button.</li> <li>4. The user is directed to the payment page where the payment methods and the item he is purchasing is displayed.</li> <li>5. The user clicks into Payment Method to choose the payment method.</li> <li>6. The user's current payment methods are displayed (if any) <ol style="list-style-type: none"> <li>a. If the user has not selected a payment method, they can click a button to add a payment method which will direct them to a page to add a new credit/debit card.</li> </ol> </li> <li>7. The user selects a payment method.</li> <li>8. The user clicks the "Make Payment" button to transfer the payment to the wholesaler.</li> <li>9. The interface shows "Success! Card Successfully added".</li> </ol>

	<ul style="list-style-type: none"> <li>a. The amount is converted to the wholesaler's preferred currency (SGD or MYR).</li> </ul> <p>10. Upon successful payment: the following changes occur:</p> <ul style="list-style-type: none"> <li>a. The status of the transaction data is changed from “IN-CART” to “PENDING-ACCEPTANCE”.</li> <li>b. The current shopping cart is emptied</li> <li>c. A new record is added to the Order History table for data persistence.</li> </ul>
Alternative Flows:	<p>AF01-CUS06: Data entered into the form fields are in the wrong format.</p> <ul style="list-style-type: none"> <li>1. An error message is displayed to notify the user of the incorrect data format and prompt them to re-enter.</li> </ul> <p>AF02-CUS06: User selects to add a new payment method.</p> <ul style="list-style-type: none"> <li>1. User clicks the "Payment Method" button in the Payment page which directs them to the Payment Method page.</li> <li>2. The user selects to add a new payment method and is directed to an Add Card page for them to enter their card details, Card Number, Expiry Date, CVV and Name on Card.</li> <li>3. The user clicks "Submit" after filling in the form.</li> <li>4. The form is validated.</li> <li>5. The system directs the user back to the Payment page.’</li> <li>6. The new card details will be updated as an existing payment method.</li> </ul> <p>AF03-CUS06: Shopping cart is empty.</p> <ul style="list-style-type: none"> <li>1. After selecting the “Cart” section, the system is unable to find any cart records for the user.</li> <li>2. The system displays a message “No Cart Items”.</li> <li>3. Users can navigate to other sections of the app.</li> </ul>
Exceptions:	<p>EX01-CUS06: Input data contains invalid wholesaler details.</p> <ul style="list-style-type: none"> <li>1. System displays an error message</li> </ul> <p>EX02-CUS06: Input data contains invalid order details.</p> <ul style="list-style-type: none"> <li>1. System displays an error message</li> </ul> <p>EX03-CUS06: Retrieval of payment method data for user fails</p> <ul style="list-style-type: none"> <li>1. System displays an error message</li> </ul>
Includes:	NIL

Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	CUS07		
Use Case Name:	Order History		
Created By:	Jedidiah	Last Updated By:	Jun Chao
Date Created:	31/08/2024	Date Last Updated:	09/11/2024

Actor:	Consumer
Description:	To aid the user experience, the purchase history will allow users to be able to view what they had previously ordered and rate their orders.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user must be logged in.</li> <li>2. The user must have paid for items that are processed.</li> </ol>
Postconditions:	NIL
Priority:	Medium
Frequency of Use:	Medium
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user selects the “History” option from the bottom tab navigation.</li> <li>2. The system retrieves the user order data from the database and displays it.</li> <li>3. For each order, the system will display the relevant information such as <ol style="list-style-type: none"> <li>a. Name of Wholesaler(s).</li> <li>b. Date of order purchase.</li> <li>c. List of items purchased.</li> <li>d. Quantity of items.</li> <li>e. Price of individual item</li> <li>f. Status of the order.</li> <li>g. Total Amount paid.</li> <li>h. Status on whether the order has been rated.</li> </ol> </li> <li>4. The user can rate the item by clicking onto the “Give Rating” button and press the appropriate rating out of 5 stars for the wholesaler.</li> <li>5. The wholesaler rating will be updated in the frontend UI and backend database.</li> <li>6. The interface shows the “Give Rating” icon turning dark green “Rated” to indicate success.</li> <li>7. The user can navigate to other sections of the app using the navigation menu.</li> </ol>
Alternative Flows:	AF01- CUS07: User has no purchase history



	<ol style="list-style-type: none"><li>1. After selecting the “History” section, the system is unable to find past orders for the user.</li><li>2. The system displays a message “No past orders”.</li><li>3. Users can navigate to other sections of the app.</li></ol>
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	<ol style="list-style-type: none"><li>1. The user is accessing the platform using a stable internet connection</li></ol>
Notes and Issues:	NIL

Use Case ID:	CUS08		
Use Case Name:	Wholesaler Details		
Created By:	Jedidiah	Last Updated By:	Jun Chao
Date Created:	31/08/2024	Date Last Updated:	09/11/2024

Actor:	Consumer
Description:	Users will be allowed to search and view detailed information about different wholesalers on ShopPeas. This enhances the user experience by enabling consumers to conveniently find wholesalers that meet their needs, compare offerings and make informed purchasing decisions.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user must be logged in.</li> <li>2. The wholesaler must exist in the database.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The user can navigate to the Product Details page by selecting a product listed in the Wholesaler Details page.</li> </ol>
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user is viewing products on the Product Details page.</li> <li>2. The user clicks on the wholesaler's name.</li> <li>3. The system directly retrieves the wholesaler's information.</li> <li>4. The user is redirected to the wholesaler's details page to view more detailed information including: <ol style="list-style-type: none"> <li>a. Wholesaler name and logo.</li> <li>b. Location and address.</li> <li>c. List of products offered.</li> <li>d. Ratings.</li> </ol> </li> </ol>
Alternative Flows:	<p>AF01-CUS08: View Wholesaler from the Shopping Cart Page</p> <ol style="list-style-type: none"> <li>1. The user is viewing their shopping cart.</li> <li>2. The user clicks on the wholesaler's name.</li> <li>3. The system directly retrieves the information of the wholesaler.</li> <li>4. The user is redirected to the wholesaler's details page.</li> </ol> <p>AF02-CUS08: View Wholesaler from the Order History Page</p> <ol style="list-style-type: none"> <li>1. The user is viewing their order history.</li> <li>2. The user clicks on the wholesaler's name.</li> </ol>

	<ol style="list-style-type: none"><li>3. The system directly retrieves the information of the wholesaler.</li><li>4. The user is redirected to the wholesaler's details page.</li></ol>
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	CUS09		
Use Case Name:	Profile		
Created By:	Jun Chao	Last Updated By:	Yi Xuan
Date Created:	01/09/2024	Date Last Updated:	02/11/2024

Actor:	Consumer
Description:	The profile feature allows users to view and manage their personal information within the e-commerce platform. Users can access their profiles to review current details and make updates as needed. This feature enhances user experience by providing a centralised location for managing account information and preferences.
Preconditions:	1. The user must be logged in.
Postconditions:	NIL
Priority:	Low
Frequency of Use:	Low
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user clicks on the “Profile” button in the bottom tab navigation menu.</li> <li>2. The system displays the user’s profile page with current information such as Name, Date Joined, Location, Email, Contact, and Address.</li> <li>3. The user selects the “Edit Profile” option</li> <li>4. The system presents editable fields for the user to update their information and fill in with current information. <ol style="list-style-type: none"> <li>a. Users can change their contact details, street name, unit number, building name, city and postal code by editing the fields.</li> </ol> </li> <li>5. The user makes changes and clicks the “Save” button.</li> <li>6. The system validates the input, saves the changes and displays a confirmation message “Success! Profile has been updated”.</li> <li>7. The system navigates back to the Explore page.</li> <li>8. The updated information will be stored in the backend Firestore database.</li> <li>9. Updated profile information is shown to the user if the user accesses the profile page.</li> </ol>
Alternative Flows:	AF01-CUS09: Invalid Contact Details <ol style="list-style-type: none"> <li>1. The user enters an invalid contact details format.</li> </ol>

	<ol style="list-style-type: none"> <li>The system displays error messages when the user tries to save details and prompts users to re-enter relevant fields.</li> <li>The user corrects the input and resubmits</li> </ol> <p>AF02-CUS09: No Changes Made</p> <ol style="list-style-type: none"> <li>The user clicks “Save” without making any changes</li> <li>The system detects no changes and returns back to the Explore page.</li> </ol> <p>AF03-CUS09: Cancels editing</p> <ol style="list-style-type: none"> <li>The user clicks on the “cancel” button.</li> <li>The system brings the user back to the Profile page.</li> </ol>
Exceptions:	<p>EX01-CUS09: Phone number already exists.</p> <ol style="list-style-type: none"> <li>Prompt the user to enter another phone number.</li> </ol>
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

## 2. Wholesaler

Use Case ID:	WH01		
Use Case Name:	Register		
Created By:	Jun Chao	Last Updated By:	Winnie
Date Created:	01/09/2024	Date Last Updated:	10/11/2024

Actor:	Wholesaler
Description:	The registration feature allows wholesalers to create an account on ShopPeas. This multi-step process collects essential information about the wholesaler, including company details, address, bank account information, and account credentials. The registration process is designed to be straightforward while ensuring that all necessary data is collected for proper vetting and account setup.
Preconditions:	NIL
Postconditions:	The user can log in
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. The user enters the app and sees the landing page.</li> <li>2. The user clicks the "SIGN UP" option and is directed to a page that asks the user which account they want to create: "Consumer" or "Business Owner".</li> <li>3. The user clicks the "Business Owner" option and is directed to the registration form.</li> <li>4. The user enters their credentials. <ol style="list-style-type: none"> <li>4.1. The user provides their company name</li> <li>4.2. The user provides an email.</li> <li>4.3. The user provides a phone number.</li> <li>4.4. The user clicks "NEXT" to enter details about their address.</li> </ol> </li> <li>5. The user enters their address details. <ol style="list-style-type: none"> <li>5.1. The user provides their street name.</li> <li>5.2. The user provides their unit number.</li> <li>5.3. The user provides their building name.</li> <li>5.4. The user provides their city, country.</li> <li>5.5. The user provides their postal code.</li> </ol> </li> <li>6. The user enters their address details. <ol style="list-style-type: none"> <li>6.1. The user provides their street name.</li> <li>6.2. The user provides their unit number.</li> </ol> </li> </ol>

	<ul style="list-style-type: none"> <li>6.3. The user provides their building name.</li> <li>6.4. The user provides their city, country.</li> <li>6.5. The user provides their postal code.</li> <li>7. The user enters their bank account details <ul style="list-style-type: none"> <li>7.1. The user provides their bank account name.</li> <li>7.2. The user provides their bank account number</li> <li>7.3. The user provides the bank.</li> </ul> </li> <li>8. The user chooses their password <ul style="list-style-type: none"> <li>8.1. The user provides a password.</li> <li>8.2. The user must confirm the password by entering it again in another field.</li> </ul> </li> <li>9. The user clicks "REGISTER" to register their details in the system. <ul style="list-style-type: none"> <li>9.1. The system validates that the email follows the correct format.</li> <li>9.2. The system checks if there is a duplicate email.</li> <li>9.3. The system validates that the phone number follows the correct format.</li> <li>9.4. The system checks if there is a duplicate phone number.</li> <li>9.5. The system validates that the provided password is secure enough.</li> <li>9.6. The system validates if the password entered is the same in both fields.</li> </ul> </li> <li>10. The system creates a new record in the database.</li> <li>11. The app prompts the user to log in.</li> </ul>
Alternative Flows:	<p>AF01-WH01: The user enters an invalid input at any stage</p> <ul style="list-style-type: none"> <li>1. The wholesaler inputs invalid information (e.g., incorrect email format).</li> <li>2. The system displays error messages before allowing the user to register and prompts the user to fix the input values.</li> <li>3. The wholesaler corrects the input and resubmits, the system will return to the Login/Sign up Page.</li> </ul> <p>AF02-WH01: The password entered in the "Password" and "Confirm Password" fields do not match.</p> <ul style="list-style-type: none"> <li>1. User keys in a different password in "Confirm Password" compared to the initial Password.</li> <li>2. The system prompts the user to re-enter the password, "Passwords do not match".</li> </ul>

Exceptions:	EX01-WH01: Existing email or UEN <ol style="list-style-type: none"><li>1. The wholesaler inputs an existing email or UEN.</li><li>2. The system checks with the database and confirms the existing email/UEN.</li><li>3. The system displays specific error messages that the email or UEN is already registered.</li><li>4. The wholesaler inputs a different valid email or UEN.</li></ol>
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL



Use Case ID:	WH02		
Use Case Name:	Product Management		
Created By:	Jun Chao	Last Updated By:	Jedidiah
Date Created:	01/09/24	Date Last Updated:	09/11/24

Actor:	Wholesaler
Description:	The Product Management feature allows wholesalers to add, edit, delete, and manage their product listings on the ShopPeas platform. This feature enables wholesalers to maintain an up-to-date catalogue of their offerings, including product details, pricing, inventory levels, and product images.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user must be logged in.</li> <li>2. There must be an existing product management page.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The product list is updated if necessary</li> </ol>
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. The wholesaler logs into ShopPeas. <ol style="list-style-type: none"> <li>a. The system displays the wholesaler's current products, with options for adding new products, viewing existing products, deleting products and editing product information.</li> </ol> </li> <li>2. The wholesaler adds a new product. <ol style="list-style-type: none"> <li>a. The wholesaler clicks on the “Add New Product” button</li> <li>b. The system displays a form with several required information: <ol style="list-style-type: none"> <li>i. Wholesaler clicks on the selected Product Name based on the existing list given.</li> <li>ii. Wholesaler input the Price</li> <li>iii. Wholesaler input the Current Stock</li> </ol> </li> <li>c. The wholesaler fills in the input fields and clicks on the “Add New Product” Button.</li> <li>d. The system validates the input, saves the new product and adds the product to the top of the wholesaler’s “My Products” page.</li> </ol> </li> <li>3. The wholesaler edits an existing product. <ol style="list-style-type: none"> <li>a. The wholesaler selects a product from the list and clicks on the edit product icon button.</li> </ol> </li> </ol>

	<ul style="list-style-type: none"> <li>b. The system displays a form with several required information:               <ul style="list-style-type: none"> <li>i. Price</li> <li>ii. Current Stock</li> </ul> </li> <li>c. The wholesaler fills in the input fields and clicks on the “Update” Button.</li> <li>d. The system validates the input</li> <li>e. The system displays “ Success Product Edited!”</li> <li>f. System saves the changes and displays an updated product list.</li> </ul> <p>4. The wholesaler deletes a product.</p> <ul style="list-style-type: none"> <li>a. The wholesaler selects a product from the list and clicks on the delete product icon button.</li> <li>b. The system displays a confirmation dialogue.</li> <li>c. The wholesaler confirms the deletion.</li> <li>d. The system displays “Success Product Removed!”.</li> <li>e. The system removes the products and updates the product list.</li> </ul>
Alternative Flows:	<p>AF01-WH02: Invalid Product information</p> <ul style="list-style-type: none"> <li>1. The wholesaler enters invalid or incomplete product information.</li> <li>2. The system does not update the product listing.</li> <li>3. The wholesaler resubmits the form to add new products.</li> </ul>
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	WH03		
Use Case Name:	Order Management (Pending Orders)		
Created By:	Saffron Lim	Last Updated By:	Saffron Lim
Date Created:	01/09/2024	Date Last Updated:	09/11/2024

Actor:	Wholesalers
Description:	Wholesaler will be able to view and manage orders placed by consumers that have not yet been completed (Pending Orders). Pending Orders are categorised into “To be accepted” and “To be completed”. Orders can also be searched by Order ID or product.
Preconditions:	<ol style="list-style-type: none"> <li>1. The wholesalers must be logged in</li> <li>2. The wholesalers must have orders that are pending/completed.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The wholesaler can view their Pending Orders</li> </ol>
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. The wholesaler accesses the Pending Orders page. <ol style="list-style-type: none"> <li>a. The wholesaler clicks on the “Transactions” tab at the bottom navigation menu and then selects “Pending Orders” from the drop-down menu.</li> <li>b. By default, the System will display Orders (old to new) that are “To be accepted”. Information displayed includes: <ol style="list-style-type: none"> <li>i. Order ID (OID)</li> <li>ii. Product Name</li> <li>iii. Order Quantity</li> <li>iv. Total Price according to the wholesaler’s currency preference</li> </ol> </li> <li>c. All Orders that are “To be accepted” are displayed.</li> </ol> </li> <li>2. The wholesaler Accepts an order <ol style="list-style-type: none"> <li>a. The wholesaler navigates to the Pending Orders, “To be accepted” page.</li> <li>b. The wholesaler clicks on the “Accept” button for the Order that the wholesaler wants to Accept.</li> </ol> </li> </ol>

	<ul style="list-style-type: none"> <li>c. The system updates the Orders that are “To be accepted” by removing the order that is accepted. <ul style="list-style-type: none"> <li>i. The status of the order (transaction) is updated in Firebase.</li> </ul> </li> <li>d. The Order that was Accepted can now be found under the “To be completed” page.</li> </ul> <p>3. The wholesaler completes an order</p> <ul style="list-style-type: none"> <li>a. The wholesaler navigates to the Pending Orders, “To be completed” page.</li> <li>b. The wholesaler clicks on the “Complete” button for the Order that the wholesaler has completed.</li> <li>c. The system updates the Orders that are “To be completed” by removing the order that is completed. <ul style="list-style-type: none"> <li>i. The status of the order (transaction) is updated in Firebase.</li> </ul> </li> <li>d. The Order that was completed can now be found under the “Completed Orders” drop down.</li> </ul> <p>4. The wholesaler accesses “Completed Orders” page</p> <ul style="list-style-type: none"> <li>a. The wholesaler clicks on the “Transactions” tab at the bottom navigation menu and then selects “Completed Orders” from the drop-down menu.</li> <li>b. The system provides a list of completed orders and indicates the number of completed orders at the top. <ul style="list-style-type: none"> <li>i. Order ID (OID)</li> <li>ii. Product Names</li> <li>iii. Order Quantity</li> <li>iv. Total Price according to the wholesaler’s currency preference</li> </ul> </li> </ul> <p>5. The wholesaler searches for an Order</p> <ul style="list-style-type: none"> <li>a. The wholesaler navigates to the Pending Orders or Completed Orders page.</li> <li>b. The wholesaler enters either the Order ID in the search bar on the top.</li> <li>c. The system retrieves the data from the database and displays appropriate orders matching the Order ID.</li> <li>d. The System displays the search result.</li> </ul>
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	6. The wholesaler can continue to navigate to other pages.
Alternative Flows:	<p>AF01-WH03: No search results based on specific products</p> <ol style="list-style-type: none"> <li>1. The system is unable to find specific products matching the wholesalers's search criteria.</li> <li>2. The system displays no results.</li> </ol> <p>AF02-WH03: No Pending Orders to be Accepted</p> <ol style="list-style-type: none"> <li>1. The system is unable to find any Orders that are pending and waiting to be accepted.</li> <li>2. The system displays the message "No orders found".</li> </ol> <p>AF03-WH03: No Pending Orders to be Completed</p> <ol style="list-style-type: none"> <li>1. The system is unable to find any Orders that have not been Completed.</li> <li>2. The system displays the message "No orders found".</li> </ol>
Exceptions:	<p>EX01-WH03: Unable to Retrieve Transactions by Status</p> <ol style="list-style-type: none"> <li>1. The system displays an error message.</li> </ol>
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	WH04		
Use Case Name:	Order Management (Completed Orders)		
Created By:	Saffron Lim	Last Updated By:	Saffron
Date Created:	01/09/2024	Date Last Updated:	09/11/2024

Actor:	Wholesalers
Description:	Wholesalers will be able to view and manage orders placed by consumers that have been completed (Completed Orders). Orders can also be searched by Order ID or product.
Preconditions:	1. The wholesalers must be logged in
Postconditions:	1. The wholesaler can view their Completed Orders.
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. The wholesaler accesses the Completed Orders page. <ol style="list-style-type: none"> <li>a. The wholesaler clicks on the “Transactions” tab at the bottom navigation menu and then selects “Completed Orders” from the drop-down menu.</li> <li>b. System will display Completed Orders</li> <li>c. Information displayed for each Order includes: <ol style="list-style-type: none"> <li>i. Order ID (OID)</li> <li>ii. Product Name</li> <li>iii. Order Quantity</li> <li>iv. Total Price according to the wholesaler’s currency preference</li> </ol> </li> </ol> </li> <li>2. The wholesaler searches for an Order <ol style="list-style-type: none"> <li>a. The wholesaler navigates to the Completed Orders page.</li> <li>b. The wholesaler enters either the Order ID in the search bar.</li> <li>c. The System displays the search result.</li> </ol> </li> </ol>
Alternative Flows:	<p>AF01-WH04: No search results based on specific products</p> <ol style="list-style-type: none"> <li>3. The system is unable to find specific products matching the wholesalers’s search criteria.</li> <li>4. The system displays no results.</li> </ol>

	AF02-WH04: No Completed Orders 1. The system is unable to find any Orders that have been Completed. 2. The system displays the message “No orders found”.
Exceptions:	EX01-WH04: Unable to Retrieve Completed Transactions 1. The system displays an error message.
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	WH05		
Use Case Name:	Profile Management		
Created By:	Saffron Lim	Last Updated By:	Yi Xuan
Date Created:	01/09/2024	Date Last Updated:	02/11/2024

Actor:	Wholesalers
Description:	Wholesalers will be able to view their Profile details, including account details and products. The wholesaler may edit their account details.
Preconditions:	1. The wholesalers must be logged in
Postconditions:	NIL
Priority:	High
Frequency of Use:	High
Flow of Events:	<ol style="list-style-type: none"> <li>1. The wholesaler accesses the Profile page. <ol style="list-style-type: none"> <li>a. The wholesaler clicks on the Profile button in the bottom navigation menu.</li> <li>b. The System displays the following information: <ol style="list-style-type: none"> <li>i. Wholesaler Profile Image</li> <li>ii. Wholesaler Business Name</li> <li>iii. Date Joined</li> <li>iv. Location</li> <li>v. Currency</li> <li>vi. Unique Entity Number (UEN)</li> <li>vii. Ratings</li> <li>viii. Account details: <ol style="list-style-type: none"> <li>1. Contact number</li> <li>2. Email</li> <li>3. Address</li> </ol> </li> </ol> </li> <li>c. From the Profile page, the wholesaler may navigate to the “My Products” page or the “Settings” page.</li> </ol> </li> <li>2. The wholesaler edits their account details <ol style="list-style-type: none"> <li>a. The wholesaler navigates to the “Profile” page and clicks on the “edit” button.</li> <li>b. The wholesaler can then amend the following items. The form field will display the original values.</li> </ol> </li> </ol>



	<ul style="list-style-type: none"> <li>i. Select Preferred Currency (SGD/MYR) using the drop-down panel</li> <li>ii. Contact Details</li> <li>iii. Address <ul style="list-style-type: none"> <li>1. City</li> <li>2. Street name</li> <li>3. Unit Number</li> <li>4. Building Name</li> <li>5. Postal Code</li> </ul> </li> <li>iv. Bank Account Details <ul style="list-style-type: none"> <li>1. Bank</li> <li>2. Bank Number</li> </ul> </li> <li>c. The wholesaler can press the “Save” button to save their changes.</li> <li>d. The system will validate the input values and prompt the user if there are invalid input values. The system will not allow the user to save their changes until the input has been corrected.</li> <li>e. The wholesaler can press the “Cancel” button to cancel their changes.</li> </ul> <p>3. Updating the system</p> <ul style="list-style-type: none"> <li>a. After the input fields have been valid, the changed details will be saved to the database.</li> <li>b. The system displays “Success! Profile Updated!”</li> <li>c. The system automatically returns to the Home page and users can navigate to the Profile page to check for their changes under the Account Details.</li> </ul>
Alternative Flows:	<p>AF01-WH05: Invalid Contact Details</p> <ul style="list-style-type: none"> <li>1. The user enters an invalid contact details format.</li> <li>2. The system displays error messages when the user tries to save details and prompts users to re-enter relevant fields.</li> <li>3. The user corrects the input and resubmits</li> </ul> <p>AF02-WH05: No Changes Made</p> <ul style="list-style-type: none"> <li>1. The user clicks “Save” without making any changes</li> <li>2. The system detects no changes and returns to the Profile page.</li> </ul>

	AF03-WH05: Cancels editing 1. The user clicks on the “cancel” button. 2. The system brings the wholesaler back to the Profile page.
Exceptions:	NIL
Includes:	NIL
Special Requirements:	NIL
Assumptions:	NIL
Notes and Issues:	NIL