

Software Requirements Specification

for

OneLook

Version 1.0

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24/01/23

Sequence Diagram
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07/02/2023

Class Diagram
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14/2/23

Test case
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14/03/23

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Revision History

Name	Date	Reason For Changes	Version
OneLook	24/01/2023	NA	1.0

1. Introduction

1.1 Purpose

The purpose of the Software Requirement Specifications (SRS) is to provide a clear, documented model of the requirements for the online shopping system, that will provide top level use cases for a web customer making purchases online.

1.2 Document Conventions

This Document was created based on the IEEE template for System Requirement Specification Document. The System features are written in the Functional point of view.

1.3 Intended Audience and Reading Suggestions

Intended Audience:

- i. This website has been designed for the people of India as of now and will be expanded based on the experience and feedback of the users.
- ii. OneLook seeks to provide the best of services to all its members and its always open to the contributors to make it a better and happy place for all.

Reading Suggestions:

- i. It is recommended to have a close look at the SRS because it contains all the major and minor details about the product.
- ii. Users are requested to go through it at least once to understand the various functionalities related to the product.
- iii. Developers should read for maintaining the website and manipulating the available features and adding the new functionalities.

1.4 Product Scope

OneLook is a web application that seeks to lower down the stress of the people all around the country who hardly manages to give time to cater the everyday needs and intends to provide the best in terms of quality and the service. It just requires a look to make the users stick to the product and gaining their trusts. The most salient feature is that the company is providing the extra security to the consumers by directing the call from the vendors to the end users without a third party in between which may leak the personal information of the users. It also provides one day delivery without any extra charge based on certain T&Cs.

1.5 References

None

2. Overall Description

2.1 Product Perspective

The online shopping system allows the users to use the OneLook website to make purchases online. The top-level features are to allow the customers to browse the website as a guest user or log in as a registered user. The browse and search items can be used by customer as primary feature use case if the customer only wants to find and see some products. The search and browse Items use case is extended by several optional use cases - customer may search for items, browse catalog, view and select those items, add them to shopping cart and view the shopping cart. All these use cases are extending use cases because they provide some optional functions allowing customer to find item.

The second set of features allows the user to make purchase. The make purchase use case requires the customer to either use the buy item now option with one click payment authentication and verification (available only to registered users) to place the order or go through the checkout use case. In the checkout use case, customer provide the shipping address, and then specify the method of payment which can be done either by using credit card or with bank account. After providing the payment method, customer will review and order item.

2.2 Product Functions

The main use cases of this software are:

Use case	Description
<i>Login</i>	Login as registered user to the website
<i>Home</i>	A part of the main UI where user can see the basic items.
<i>Search items</i>	Could be used if only customer wants to find products.
<i>Scan Products</i>	Users can scan available products to get similar kinds of products.
<i>Browse items</i>	Could be used if only customer wants to browse item catalog.
<i>View and Select item</i>	Used to find and select product to purchase .
<i>Buy item now</i>	Quick way for registered users to easily order an item .
<i>Add to shopping cart</i>	Add a selected item to the shopping cart.
<i>View shopping cart</i>	View item(s) in shopping cart.
<i>Proceed to checkout</i>	Select this option to get to the payment and checkout use case .
<i>Enter method of delivery</i>	Used by customer to specify where item will be delivered.
<i>Make payment</i>	Make payment for the item in the shopping cart.
<i>Review and order item</i>	Review and order item in the shopping.
<i>Settings</i>	User can click on the settings tab to enable or disable something.
<i>Log out</i>	Used when the user wants to log out from the system.
<i>Customer Service</i>	User can opt for services in case of any inconvenience.
<i>User account</i>	User can keep track of the orders made and the delivery of items.

2.3 User Classes and Characteristics

The different user classes involved in the software are:

1. Buyers	This section represents altogether a different UI to the targeted audience which provides the functionality of login, managing profiles, customer service, tracking order, feedbacks and many more.
2. Sellers	This class renders a separate interface specific to the sellers who can track of the items available, in demand and running out of stock and have their login module in a special seller mode.
3. Delivery Partners	These section of service providers also get a separate space for their own login modules and updates the system by providing the details about the shipment of the ordered items and any delay if occurs which helps in easy tracking of the goods.
4. Admin	This class has to ensure the smooth running of the overall functionalities of the software by tracking the all other classes.

2.4 Operating Environment

Software Requirements:

- i. Best suited for Chrome, Firefox and Brave Web browsers.
- ii. It needs Android 6.0 or higher and IOS 10+.
- iii. Windows 7 and higher, Linux, MacOS.

Hardware Requirements:

Internal memory of 8GB, the ideal is 16GB for androids.

2.5 Design and Implementation Constraints

The app version is created using Swift and flutter for IOS and Android respectively.

The web application has been implemented using HTML, CSS, JavaScript, React and MongoDB as a database.

2.6 User Documentation

A proper guideline is provided in the app as well as in the website on how to make use of the available features in the documentation section.

2.7 Assumptions and Dependencies

- i. All items are bought as new.
- ii. The one click ordering for the user has been configured.
- iii. The user is using a valid credit card during payment.
- iv. Ship to the specified address is the only delivery method.

3. External Interface Requirements

3.1 User Interfaces

The Web based Graphical User Interface (GUI) will be completely menu driven and user friendly. Certain interactive and animations find its place only on the web application which are relatively absent on the app version. Displaying of the searched items follows the concept of lazy- loading for providing a healthy user experience and performance boost.

The application is made very much responsive and is also menu-driven. The software requires good internet connectivity.

3.2 Hardware Interfaces

- i. The device should have touch screen for the GUI to take input and any kind of interaction.
- ii. Also the device should have camera to scan QR/UPI codes.

3.3 Software Interfaces

Operating System: Windows 7 or higher, Linux and Mac

Database: MongoDB

3.4 Communications Interfaces

The software needs to communicate with the server to provide the necessary information to the clients and retrieve data, and it's all done using API calls and making HTTP requests.

4. System Features

The basic features of the software are listed below:

4.1 Login

4.1.1 Description and Priority

The login feature allows the clients of the software to use the product as a registered user.

Preconditions: create an account.

4.1.2 Stimulus(S)/Response(R) Sequences

S: A sign in button is presented as an initial UI to the user and Skip for now option is also made available.

R: User may click on the sign-in button to enter as an authorized person or may choose the skip for now to enter as a guest user.

S: If the user is already a customer he/she can either choose the forgot password button or Already a customer link according to the circumstances.

4.1.3 Functional Requirements

Client selects the sign in button and the sign in window is displayed where it asks for the user's email and password with an enter OTP input field and a sign in button to complete the process.

If any of the input field is invalid or is left blank then an error is shown to the user and the sign in button is disabled.

The software sends an OTP on the entered email or phone number.

The website validates the user as a registered user.

If the user chooses the skip feature then he/she can make use of the product features which are available to unregistered ones.

4.2 HOME

4.1.1 Description and Priority

The home button is available as part of the main UI with other buttons like User account, Settings, Add to cart and the Search bar. It displays a list of products to the user.

Preconditions: None.

4.1.3 Stimulus(S)/Response(R) Sequences

S: User login in the software or enter as a guest user.

R: The Home page is displayed.

4.1.3 Functional Requirements

The Home page is shown as an initial part of the software upon entering. It contains display of certain items with deals available on that day.

4.3 Search Items

4.2.1 Description and Priority

The search items allows the users of the software to find products on the software.

Preconditions: None.

4.2.2 Stimulus(S)/Response(R) Sequences

S: User clicks on the search bar.

R: Initially a list of items is rendered. After the user has typed in his/her searched item then either a list of items related to the searched one or the specified item is shown based on the availability.

4.2.3 Functional Requirements

The client type in keyword of the item. The software display list of possible items related to keyword.

4.4 Scan items

4.1.1 Description and Priority

Scan item feature allows the user to scan a product to check it's availability on the software.

Preconditions: create an account.

4.1.4 Stimulus(S)/Response(R) Sequences

S: User clicks on the Search bar.

R: Initially a list of items is rendered. After the user has typed in his/her searched item then either a list of items related to the searched one or the specified item is shown based on the availability.

Below that a scan item button is available.

S: User clicks on the scan item button.

R: A pop-up appears with two options. 1. Take a photo, 2. Upload from device.

4.1.3 Functional Requirements

As the user clicks on the scan item button he/she can either take a photo of the available item or can upload the same from the device to search either the same or similar kind of product.

4.5 Browse Items

4.3.1 Description and Priority

The search items allow the consumers of the software to browse items in the catalog on the website.

Preconditions: None.

4.3.2 Stimulus(S)/Response(R) Sequences

S: User clicks the 'category' down arrow.

R: The available categories of the services which are provided gets displayed .

4.3.3 Functional Requirements

The Browse item is available as part of the Home Button. The user clicks the catalog list icon and the website as a result displays catalog items by category. When the user selects a catalog from the list, it gets displayed as a list of items belonging to that category by the software.

4.6 View and Select item

4.4.1 Description and Priority

The view and select item feature allows the user to find and select product he/she wants to purchase.

Preconditions: None.

4.4.2 Stimulus(S)/Response(R) Sequences

S: User selects an item from the displayed result.

R: The item with all the necessary specifications related to it is displayed.

4.4.3 Functional Requirements

This option is available below every item that gets displayed on the screen. User needs to click on an item to view all the details related to a specific item shown on user's request. The item is then displayed with all the necessary details along with the items related items and reviews on the selected item. Customer can either buy that item now or add it to the shopping cart.

4.7 Buy item now

4.5.1 Description and Priority

The buy item now feature allows the users to quickly order item using 1-Click ordering.

Preconditions: User needs to 'Turn on 1-Click ordering for the browser' to user the feature.

4.5.2 Stimulus(S)/Response(R) Sequences

S: User clicks the 'Buy Now' button.

R: The system confirms the order has been placed.

4.5.3 Functional Requirements

This option is available below every item that gets displayed on the screen. User clicks on the 'Buy Now' button(only available to registered users) and the system authenticates user and order product.

4.8 Add to Cart

4.6.1 Description and Priority

The add to cart feature allows the user of the software to list of items which he/she might order while ordering in bulk and may come back again after few days/time to make a buy.

Preconditions: None.

4.6.2 Stimulus(S)/Response(R) Sequences

S: User clicks the 'Add to Cart' button.

R: Item becomes available for checkout.

4.6.3 Functional Requirements

This option is available as a part of the navbar which appears on every page rendering. User clicks the 'Add to Cart' button and the system adds item to the cart which could be removed or bought. The items added to the cart remains there until explicitly removed.

4.9 View shopping cart

4.7.1 Description and Priority

The view shopping cart feature allows the users of the software to view the list of items added to the cart.

Preconditions: None.

4.7.2 Stimulus(S)/Response(R) Sequences

S: User clicks the 'Edit your cart' button.

R: Shopping cart is displayed and the user can review the cart items.

4.7.3 Functional Requirements

User clicks the 'Edit your cart' button after adding item to the cart. The system displays list of items available in the shopping cart. Suppose, if the user had not added any item before clicking on the aforesaid button then a message stating 'Cart is empty gets displayed' with a button of 'Add some'.

4.10 Proceed to checkout

4.8.1 Description and Priority

The proceed to checkout feature allows the users of the software to make payment and complete order.

Preconditions: None.

4.8.2 Stimulus(S)/Response(R) Sequences

S: User clicks the 'Proceed to Checkout' button.

R: User is ready to checkout item.

4.8.3 Functional Requirements

User clicks the 'Proceed to Checkout' button. The System displays the checkout window with summary of the order, payment and delivery method.

4.11 Enter method of delivery

4.9.1 Description and Priority

The enter method of delivery feature allows the user to specify where and how the item(s) will be delivered.

Preconditions: None.

4.9.2 Stimulus(S)/Response(R) Sequences

S: User clicks on the shipping address or the link 'change'.

R: A window with all necessary input fields is displayed..

4.9.3 Functional Requirements

When the user clicks the shipping address or the link 'change', the system shows a list of recently used addresses or an option to add a new address. As soon as the user selects the desired shipping address from the list or add a new one, it successfully completes a procedure.

4.12 Make Payment

4.10.1 Description and Priority

The make payment allows the user to pay for item(s) in the shopping cart.

Preconditions: None.

4.10.2 Stimulus(S)/Response(R) Sequences

S: User clicks the 'Pay' button.

R: System shows all the methods available to make a payment.

4.10.3 Functional Requirements

User clicks the 'Pay' button. The System shows list of credit/debit cards or an option to add a credit or debit card. It also shows other payment methods such a bank account, gift card and coupon code. The user then selects the desired payment method from several options.

4.13 Review and order item

4.11.1 Description and Priority

The review and order item feature allows the user to complete the order.

Preconditions: None.

4.11.2 Stimulus(S)/Response(R) Sequences

S: User clicks the 'place your order' button.

R: A message showing 'Thank you for shopping with us' is shown with a link to track the order.

4.11.3 Functional Requirements

This option is available when the user clicks on the make payment option. As the user clicks 'place and order' button after reviewing the order, he/she successfully completes an order with OneLook.

4.14 Settings

4.11.1 Description and Priority

The Settings button is available as a part of the navbar which is sticky in nature and appears on displaying any page.

Preconditions: None.

4.11.2 Stimulus(S)/Response(R) Sequences

S: User clicks the Settings button.

R: A new screen is displayed with the options of Notification, Language, Permissions, Customer Service and Logout.

S: User clicks on any of the available options.

R: A dialog box appears which prompts the user to enter his/her preference.

4.11.3 Functional Requirements

User can click on the Settings tab to change the default settings. He/She can change the login credentials, Language(default- English), Notifications, can opt for customer services and can even log out from the system.

4.15 Logout

4.11.1 Description and Priority

The logout options helps the user to logout from the software.

Preconditions: None.

4.11.2 Stimulus(S)/Response(R) Sequences

S: User clicks the Logout button.

R: User gets logged out of the system and the login window is displayed again with the availability of creating a new account or already a customer.

4.11.3 Functional Requirements

The logout button is available as a part of the Settings button which could be used to log out from the software.

4.16 Customer Service

4.11.1 Description and Priority

The Customer Service button helps the user to contact the service providers in case of any kind of inconvenience caused.

Preconditions: None.

4.11.2 Stimulus(S)/Response(R) Sequences

S: User clicks the 'customer service' button.

R: A form appears which prompts the user to enter the necessary details about the product.

4.11.3 Functional Requirements

The Customer Service button as part of the Settings button which could be used in case of any disturbance caused while ordering and delivery of the item.

4.17 User Account

4.11.1 Description and Priority

The user account button lets the user to keep track of the delivery or cancel the order. User can also check its previously delivered items.

Preconditions: None.

4.11.2 Stimulus(S)/Response(R) Sequences

S: User clicks the 'place your order' button.

R: A message showing 'Thank you for shopping with us' is shown with a link to track the order.

4.11.3 Functional Requirements

The User Account option is available as a part of the main UI and it appears as a sticky navbar when the user clicks on any page. It lets the user to keep track of the delivery or cancel the order. User can also check its previously delivered items.

5. Other Nonfunctional Requirements

5.1 Performance Requirements

The software should not lag and should handle all the major errors and the traffic load on it. Besides that, it should have a clean and self-explanatory UI which do not confuses the user using it. Performance and responsiveness is a must. Minimum usage specifications and requirements could help a large audience to make the use of it.

5.2 Safety Requirements

The Software should ensure the safety of its customers. User information must be kept encrypted and secured. It must possess rigid algorithms to make it safe to use thereby preventing any kind of malpractices.

5.3 Security Requirements

Apart from all the points mentioned under the safety requirements, it should not provide the consumer's detail to the delivery authorities. Any communication between the client and the delivery agent must be done through the company.

5.4 Software Quality Attributes

The software should be easy to use so that it does not require any pre-requisite/knowledge from the user's end to make use of it. The target of the entire software is to make it a happy and reliable platform for the customers in every aspect.

5.5 Business Rules

The software must render different UIs and functionalities based on the type of login the user has made. Any affect on one side should not hamper the experience of the others.

Appendix A: Glossary

SRS- Software Requirement Specifications

S- Stimulus

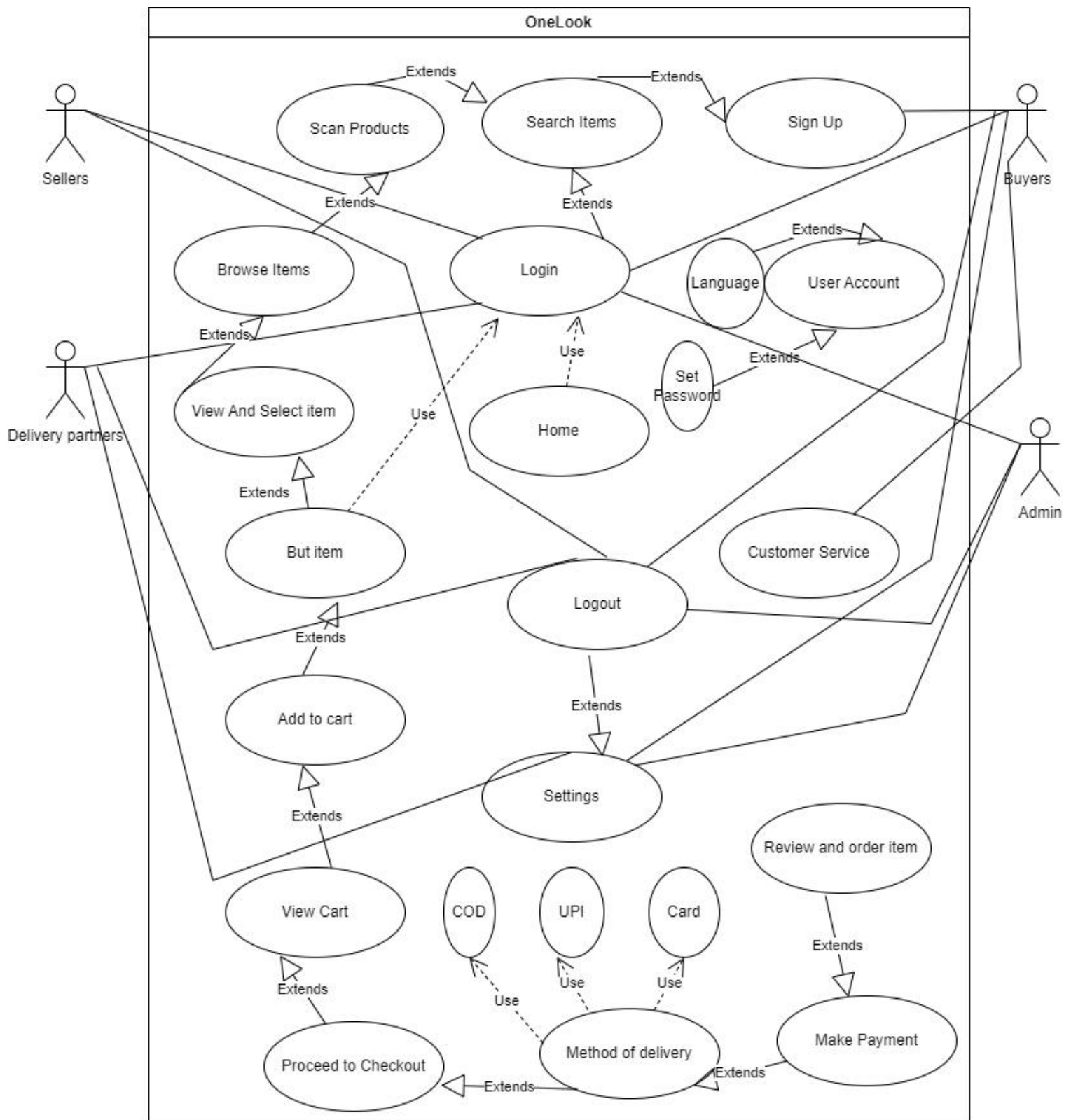
R- Response

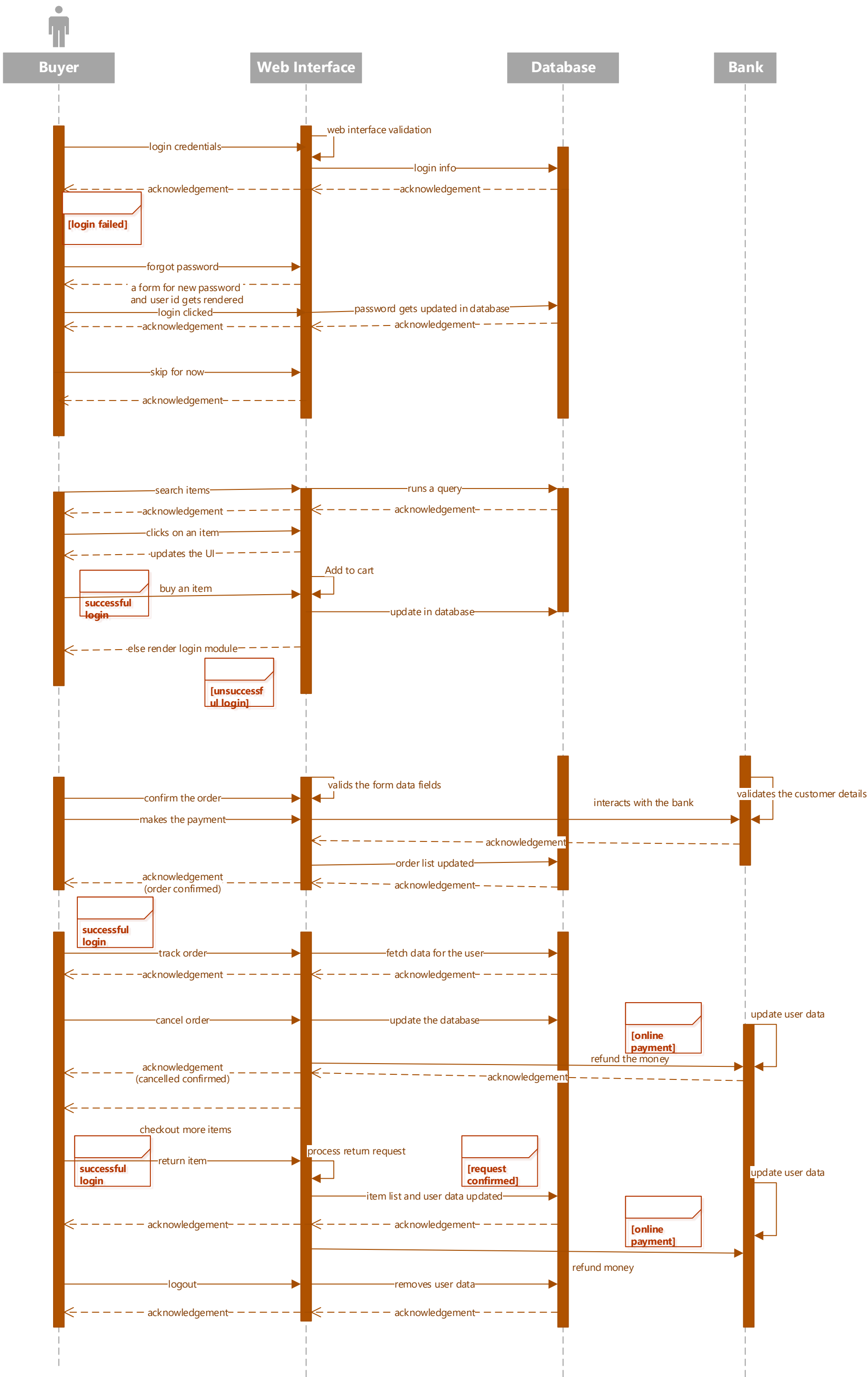
UI- User Interface.

Appendix B: Analysis Models

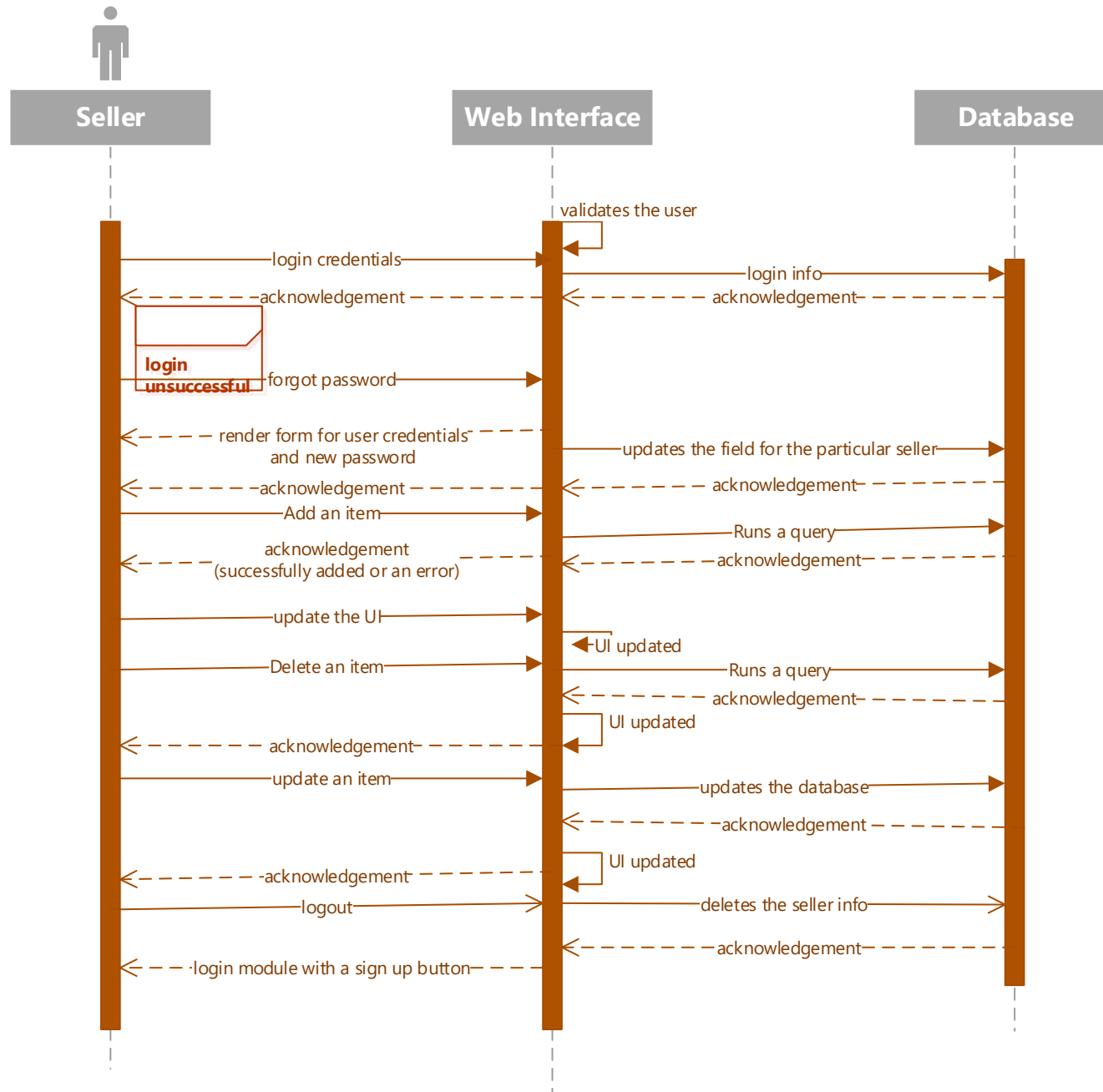
Appendix C: To Be Determined List

Use Case Diagram

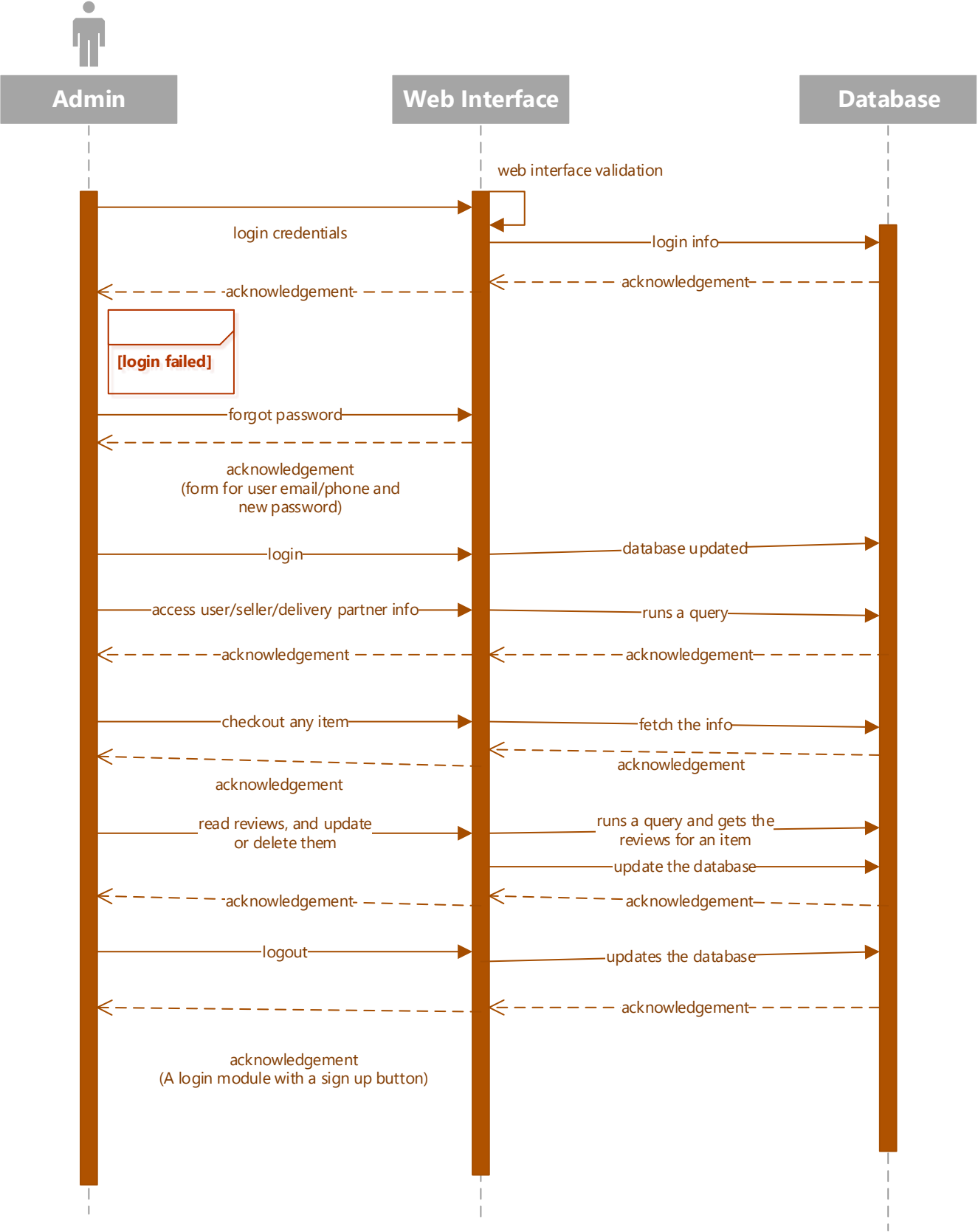




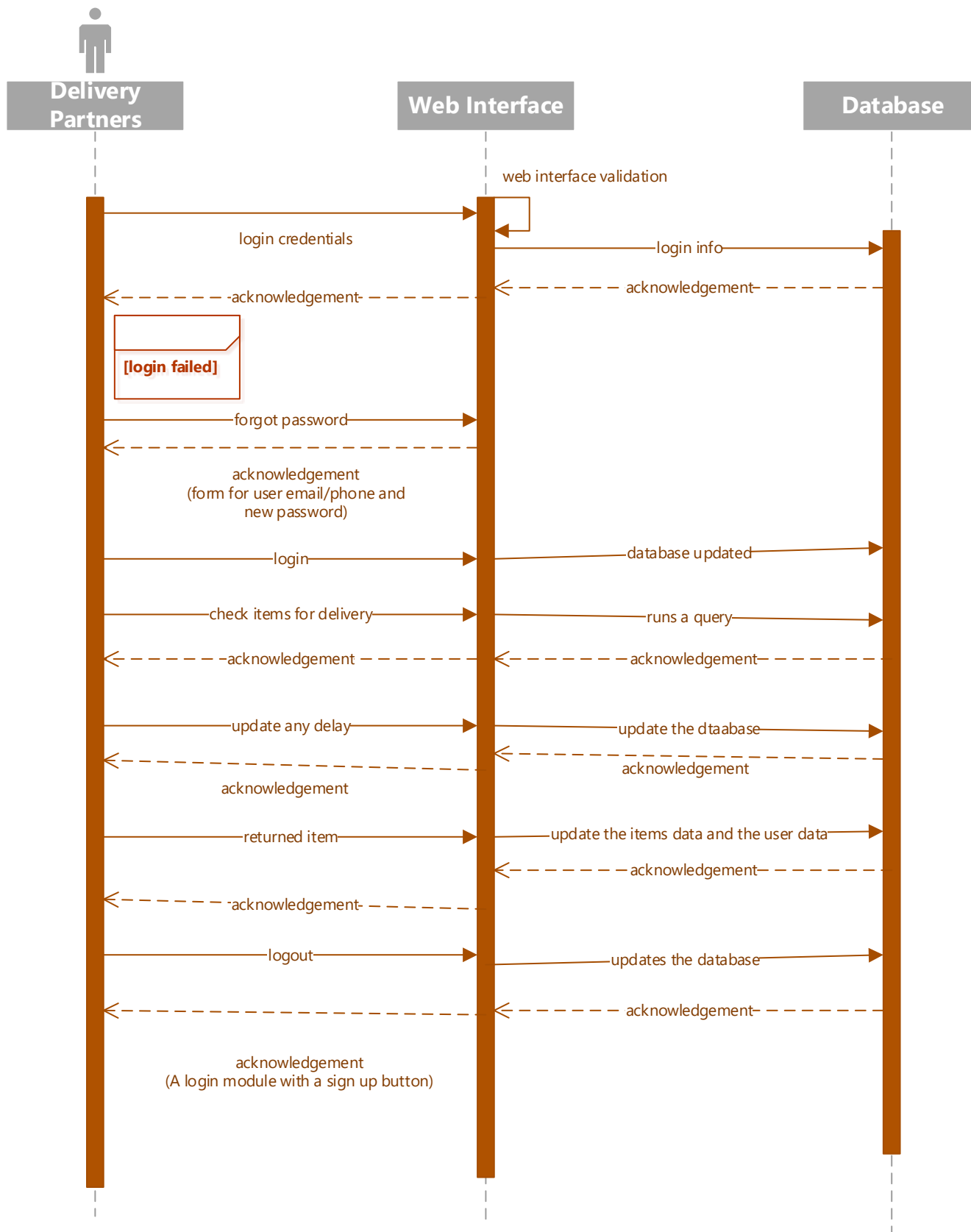
Sequence Diagram



Sequence Diagram

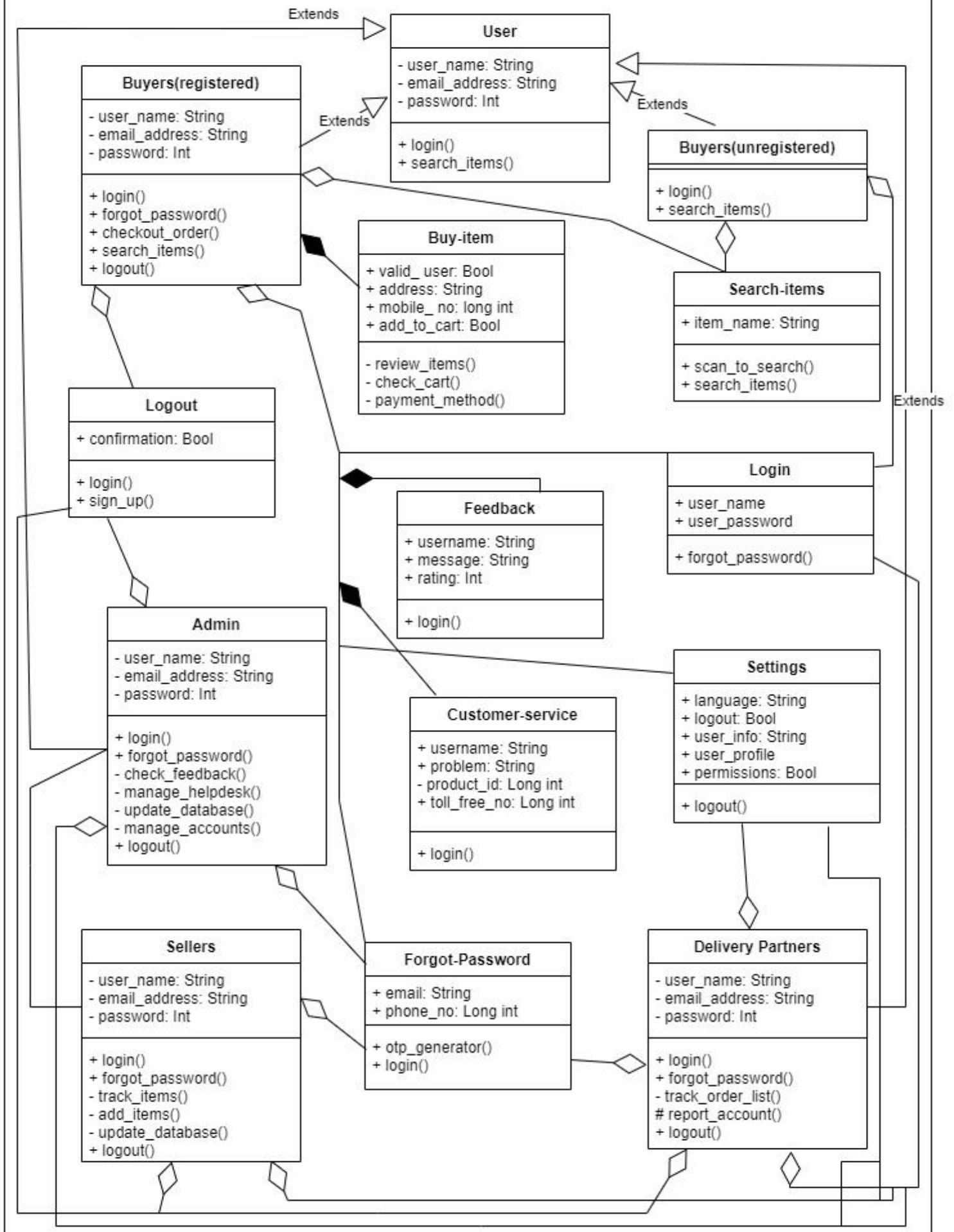


Sequence Diagram



Sequence Diagram

Class Diagram for OneLook



Test Cases

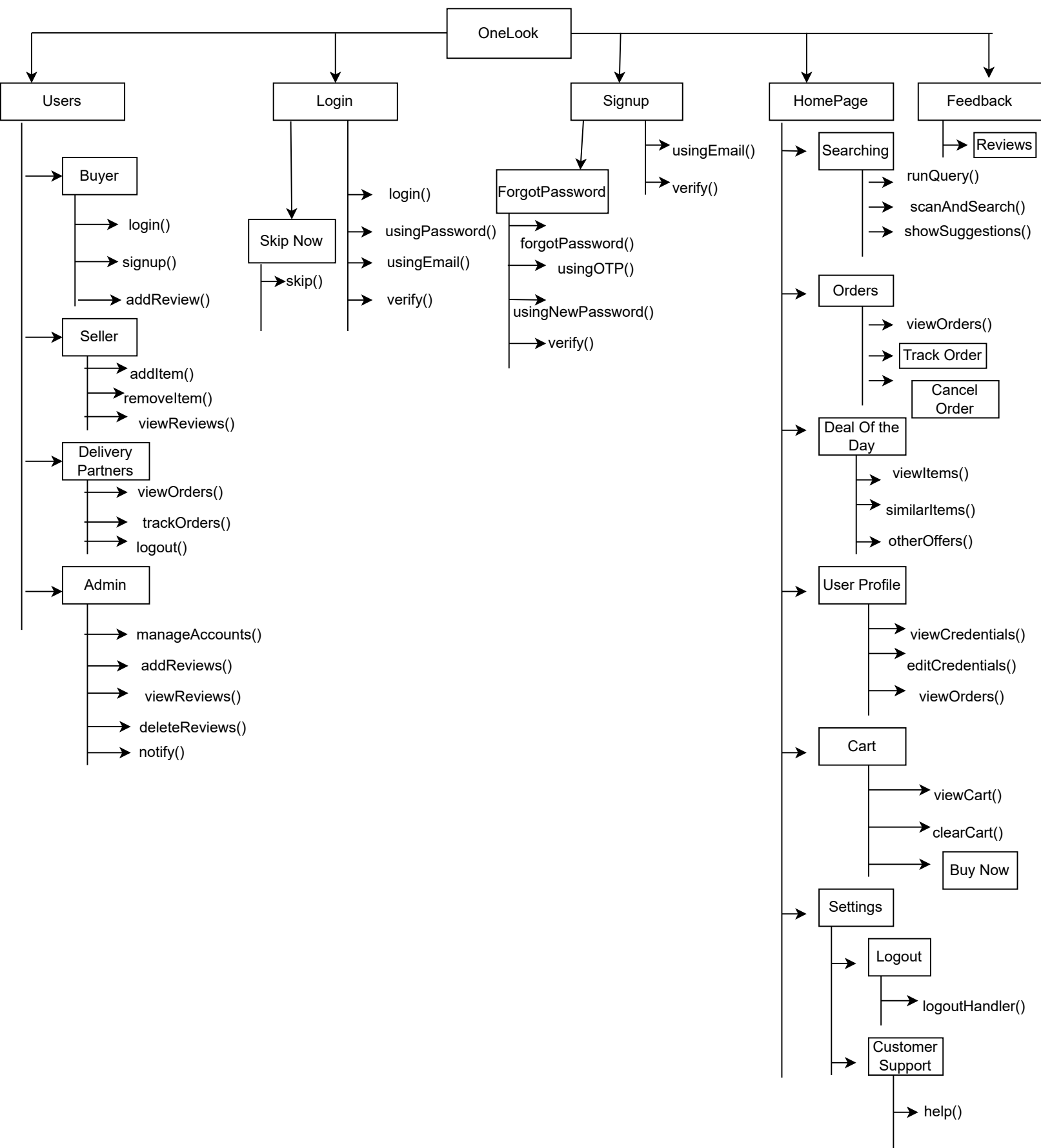
Test Cases for: <i>OneLook</i>					
Author	<i>Ayesha Solanki</i>				
Date Created	<i>14-Feb-23</i>				
Last Updated	<i>Not Applicable</i>				
Prerequisites:		<i>User does not enter as a guest user</i>			
System Module:		<i>Login</i>			
Test Case #	Test Case Description	Test Procedure	Input Data	Expected Result	Comments
1	Allows the client to use the product as a registered user	1. User enters an email id. 2. User enters a password. 3. OTP Generation to validate the user.	Valid email addresss(of the correct email format) Password more than 6 characters that contains an unique symbol, atleast 1 uppercase and lowercase letter and a number Enter the correct OTP sent to the user	Successful login	Entered fields are of the correct format
2	Cases for unsuccessful login	1. User enters an email id. 2. User enters a password. 3. OTP Generation to validate the user.	1. Valid email addresss (of the correct email format) Password more than 6 characters that contains an unique symbol, atleast 1 uppercase and lowercase letter and a number Invalid OTP	Unsuccessful Login	Enter a valid OTP
			2. Valid email addresss (of the correct email format) Password is not of the correct format Enter the correct OTP sent to the user	Unsuccessful Login	Enter a valid password
			3. Invalid email Password more than 6 characters that contains an unique symbol, atleast 1 uppercase and lowercase letter and a number Enter the correct OTP sent to the user	Unsuccessful Login	Enter a valid email
			4. Incorrect email and password Correct OTP	Unsuccessful Login	Enter a valid email and password
			5. Valid email Invalid password and OTP	Unsuccessful Login	Enter a valid password and OTP
			6. Incorrect OTP and email Valid password	Unsuccessful Login	Enter a valid email and OTP
			7. Incorrect email, password and OTP	Unsuccessful Login	All fields are invalid.

Test Cases

Test Cases for:		OneLook				
Author	Ayesha Solanki					
Date Created	14-Feb-23					
Last Updated	Not Applicable					
Prerequisites:		Successful Login				
System Module:		Buy an item				
Test Case #	Test Case Description	Test Procedure	Input Data	Expected Result	Comments	
1	Search an item or scan the item	User starts typing in the required item and a list of the related item gets displayed	Enter a string	Searched item is displayed if exists otherwise other related or previously searched items are shown.	Successful search	
			User enters a number	All those items that has a similar number associated with it are shown	Successful search	
			User enters some special characters	No suggestion is displayed and prompt to enter more to it	No item is there	
2	View and select item	User can click on the item displayed to see the specifications mentioned with it	Click the item	Item is displayed	Successful display	
3	Add to Cart	User needs to add the item to the cart to check overall purchased item before buying	Click on Add to Cart	All the cart items are displayed	Items added to cart successfully	
4	Buy Now	1. User clicks on the Buy Now button after viewing the cart	Click on Buy Now	A form gets displayed	Fill the form to complete the process	
		2. All the input fields needs to be filled	1. Enter a valid address, mode of payment and phone number	Submit button is enabled	Successful buy	
			2. Phone number is less than 10 digits and invalid card details if chosen	Submit button remains disabled	Enter valid details	

Test Cases

Test Cases for:	OneLook				
Author	Ayesha Solanki				
Date Created	14-Feb-23				
Last Updated	Not Applicable				
Prerequisites:	1. User clicks on Buy Now Button 2. Good Internet connection 3. Mode of payment is Card or UPI				
System Module:	Transaction				
Test Case #	Test Case Description	Test Procedure	Input Data	Expected Result	Comments
1	Sending money	1. User enters the card number/UPI id or number and click on confirm	Valid card/UPI details	Amount of money to be paid is shown	
		2. User clicks on Proceed to Pay	Click on Procced to Pay button	Specified amount gets deducted from Bank	Message is sent for confirmation.
2	Sending money	1. User enters the card number/UPI id or number and click on confirm	Invalid card/UPI details	Couldn't connect to the bank associated with card/ UPI id	Invalid details
3	Sending money	1. User enters valid card details/UPI id or number and confirms	Valid card/UPI details	Amount of money to be paid is shown	
		2. User clicks on Proceed to Pay	Click on Proceed to Pay	Associated account has not enough money to pay	Transaction failed



MODULARIZATION

List of Functions:

Login:

1. Login()
2. usingPassword()
3. usingEmail()
4. verify()

Signup:

1. signupHandler()
2. usingEmail()
3. usingPassword()
4. verify()

Forgot Password:

1. forgotPasswordHandler()
2. usingOTP()
3. verify()
4. usingNewPassword()
5. submit()

Skip Now:

1. skip()

Homepage:

1. `viewPage()`
2. `viewSearchBar()`
3. `viewCart()`
4. `viewProfile()`
5. `viewSettings()`
6. `viewDealOfTheDay()`
7. `viewOrders()`
8. `showItems()`

Settings:

1. `selectLanguage()`
2. `selectPreferences()`
3. `logoutHandler()`
4. `help()`
5. `addAccount()`

Logout:

1. `logoutHandler()`
2. `login()`

Searching:

1. viewSearchBar()
2. showPreviouslySearchedItems()
3. runQuery()
4. sort()
5. displayListOfItems()
6. showSuggestions()
7. scanAndSearch()
8. uploadAnItem()
9. displaySelectedItem()

View Cart:

1. viewCart()
2. displayItems()
3. displayBuyNow()
4. checkoutItems()
5. viewReviews()
6. viewRating()
7. clearCart()

Buy Now:

1. buyNowHandler()
2. generateForm()
3. calculateGST()

4. generateTotalAmount()
5. generateAvailableCoupons()
6. formHandler()
7. enterPaymentOptions()
8. verification()
9. confirmOrder()
10. successPage()
11. errorPage()

User Profile:

1. viewCredentials()
2. editCredentials()
3. viewOrders()

Orders:

1. viewOrder()
2. trackItems()
3. cancelOrder()

Track Order:

1. trackDelivery()
2. viewMap()
3. viewOrderedItems()

4. viewDetails()

Cancel Order:

1. cancelOrder()
2. removeItem()
3. confirmCancellation()
4. notifyAdmin()

Customer Support:

1. help()
2. showHelplineNo()
3. textFeedback()

Feedback:

1. generateReviews()
2. addReview()

Reviews:

1. writeReview()
2. viewReview()
3. submitReview()

Buyer:

1. login()
2. signup()
3. addItemToCart()
4. searchItem()
5. checkProfile()
6. configureSettings()

Seller:

1. login()
2. signup()
3. addItem()
4. removeItems()
5. viewFeedbacks()
6. updateItemAmount()
7. updateItemQuantity()

Delivery Partners:

1. login()
2. signup()
3. trackOrders()
4. viewOrders()
5. contactAdmin()

Admin:

1. login()
2. signup()
3. verifyUser()
4. removeUser()
5. manageAccount()
6. viewReviews()
7. notifyUsers()
8. deleteReviews()
9. viewOrders()
10. cancelOrders()

Function Point Analysis (FPA) Worksheet

Measurement Parameter	Count				Weightage				FP Count	
	Simple	Average	Complex		Simple	Average	Complex			
# of External Inputs (EI)	40	1	1	X	3	4	6	=	130	
# of External Outputs (EO)	13	5	0	X	4	5	7	=	77	
# of External Inquiries (EQ)	2	1	5	X	3	4	6	=	40	
# of Internal Logical Files (ILF)	0	0	1	X	7	10	15	=	15	
# of External Interface Files (EIF)	3	4	0	X	5	7	10	=	43	
Unadjusted Function Points (UFP)									UFP = 305	
General System Characteristics (GSC): - rate each factor below on a scale of 0 to 5 for DI	0 = No Influence	1 = Incidental	2 = Moderate							
Degree of Influence (DI)	3 = Average	4 = Significant	5 = Essential							
01. Does the system require reliable backup and recovery?										DI
02. Are data communications required?										5
03. Are there distributed processing functions?										4
04. Is performance critical?										5
05. Will the system run in an existing, heavily utilized operational environment?										3
06. Does the system require on-line data entry?										1
07. Does the on-line data entry require the input transaction to be built over multiple screens or operations?										5
08. Are the master files updated on-line?										1
09. Are the inputs, outputs, files, or inquiries complex?										5
10. Is the internal processing complex?										3
11. Is the code designed to be reusable?										3
12. Are conversion and installation included in the design?										5
13. Is the system designed for multiple installations in different organizations?										0
14. Is the application designed to facilitate change and ease of use by the user?				3						
Total DI =									48	
Value Adjustment Factor (VAF)									VAF = 1.13	
Adjusted Function Points (AFP)									AFP = 345	

Any Assumptions made should be listed below.

Constructive Cost Model (COCOMO)

Modules	Number of Functions
1. Login	4
2. Signup	4
3. Forgot Password	5
4. Skip Now	1
5. Homepage	8
6. Settings	5
7. Logout	2
8. Searching	9
9. View Cart	7
10. Buy Now	11
11. User Profile	3
12. Orders	3
13. Track Order	4
14. Cancel Order	4
15. Customer Support	3
16. Feedback	2
17. Reviews	3

18. Buyer	6	
19. Seller	7	
20. Delivery	5	
Partners	10	
21. Admin	106	
Total:		

Project Type: SemiDetached

Each function should have approx. 10 lines of code (loc)

Therefore, Total loc = 106 x 10 = 1060 loc

KLOC = 1060/1000 = 1.06

Effort = $3.0 \times (\text{KLOC})^{1.12}$ PM = $3.0 \times (1.06)^{1.12} = 3.0 \times 1.06 = 3.20$

~ 4 PM

$T_{\text{dev}} = 2.5 \times (\text{Effort})^{0.35}$ M = $2.5 \times (4)^{0.35} = 2.5 \times 1.62 = 4$ M

Intermediate COCOMO- COCOMO'91

Cost Drivers	Ratings
Product Attributes:	
Required Software Reliability	Nominal(1)
Size of application database	High(1.08)
Complexity of the product	Nominal(1)
Hardware Attributes:	
Run-time performance constraints	Nominal(1)
Memory Constraints	Nominal(1)
Volatility of the virtual machine environment	Low(0.87)
Required turnabout time	Nominal(1)
Personnel Attributes:	
Analyst Capability	Nominal(1)
Application experience	Nominal(1)
Software engineer capability	Nominal(1)
Virtual machine experience	Low(1.1)
Programming language experience	Nominal(1)

Project Attributes:	
Application of software engineering methods	Nominal(1)
Use of software tools	Nominal(1)
Required development schedule	Nominal(1)

Effort Adjustment Factor(EAF): $(1 \times 1.08 \times 1 \times 1 \times 1 \times 0.87 \times 1 \times 1 \times 1 \times 1.1 \times 1 \times 1 \times 1 \times 1) = 1.03$

Effort: $3.0 * ((\text{KLOC}) ^ 1.12) * (\text{EAF}) \text{ PM} = 3.0 \times (1.06)^{1.12} * 1.03$
 $\text{PM} = 3.29 \sim 4 \text{ PM}$

(Person Month)