Software Requirements Specification

for

BuyStyle

Version 1.0 approved

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21.1.23

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Revision History

Name	Date	Reason For Changes	Version
BuyStyle	21.1.23	NA	1.0

1. Introduction

1.1 Purpose

The purpose of this app is to create design templates for various purposes such as invitation cards, entrepreneur logos, menu cards for restaurants, posters, etc. and then selling the desired requirements to interested buyers. This platform provides a wide range of templates and reduces the stress of buyers while they search in markets which is a fairly hectic job to do.

1.2 Document Conventions

This document was created based on the IEEE template for System Requirement Specification Documents. The system features are written in functional point of view.

1.3 Intended Audience and Reading Suggestions

Intended Audience

- Designers can design templates to attract buyers and provide them a wide variety of choices to select from.
- Users can also use the templates to create designs on their own.
- Buyers have the privilege to buy certain designs based on their expectations and they don't have to suffer the hassle which they had to if they roamed from stall to stall for selecting designs.

Reading Suggestions

- This SRS contains every major and minor details of the Application.
- Users should read beginning with the overview sections and proceeding through the System features to understand the proper way of using the app
- Developers should read beginning with the overview sections and proceeding through the overall description, system features, non-functional features.

1.4 Product Scope

Features like earning brownie points for creators enhances their designs to be recommended to buyers and saves the cost of going store to store or hiring personal designers. Thus time being the primary concern, our app provides for an instant suggestion of a wide collection of designs which can be delivered to the required audience as and when they require.

1.5 References

None.

2. Overall Description

2.1 Product Perspective

The perspective of this application came from observing certain real life problems that some people in search of designs suffer. Offline stores are not helpful to the extent that this application would be as the former could provide only a limited choice. Also the new designers could get a platform to showcase their talent to the world and thus their value gets increased. This also gives them the confidence that they are often not getting in the offline world.

2.2 Product Functions

The major functions of this application are:

- Content creators can create their own designs and templates
- Users can use the templates and add their own items
- Using the templates of creators adds to their talent value points
- Buyers get an idea of the expert content creators and their designs which they can select for their own purpose

2.3 User Classes and Characteristics

- Content creators (people who makes the designs on a whiteboard and displays them for attracting buyers)
- Users (people who makes their own designs based on ideas given by creators for their personal interests)
- Buyers (people who buys their required designs)
- Delivery Executive (looks over the delivery functions of the application)
- Admin (looks over all the functions of the application)

2.4 Operating Environment

Software Requirements – Android OS 5.0 or above.
Hardware Requirements – Android device, Internal memory or Micro SD card of capacity atleast 5 GB

2.5 Design and Implementation Constraints

The application development would require knowledge of HTML, CSS, Javascript, and C++.

2.6 User Documentation

A manual containing step by step activities of how to use the application for different functions should be provided in the app.

2.7 Assumptions and Dependencies

- It is assumed that users have a stable internet connection and required memory space while using the app.
- It is also assumed that content creators and normal users understand the difference between different symbols that appear when they wish to create any new design (for eg. pen, pencil, brush, etc.).

3. External Interface Requirements

3.1 User Interfaces

The mobile application will be quite interactive and help users in whatever way possible. BuyStyle will be completely menu driven and user friendly. App will be designed so that with the minimum number of clicks/ searches, users should be able to access desired choices. There will be many other features in the Home Page of the application like “My Account”, “Create Design”, “My Orders”, “Search”, etc. which all will be described in the subsequent stages.

3.2 Hardware Interfaces

Hardware Requirements – Mobile Phone/Computer – Processor: Intel Pentium, RAM: 1GB, ROM: 1 GB

3.3 Software Interfaces

Computer: Windows XP or above, MacOS, Linux, Unix. Mobile phones/Tablets: Android OS 5.0 or above, iOS 12 or above (relevant iPadOS). Software will be required for Internet server and Database Management (MySQL and PostgreSQL), LDAP directory services, application frameworks, email and text messaging servers, etc. User will be able to access the application using updated web browsers (i.e., Google Chrome, Microsoft Edge, Opera, Mozilla Firefox Internet Explorer). For mobile devices, a software-based QR code scanner will also be utilized and Android or iOS GPS facilities.

3.4 Communications Interfaces

All types of communication happen through emails and automated text messages to the verified phone number of the user. Also, the product will need a web browser to work and a stable internet connection in order to access information within the servers.

4. System Features

This section describes the system features of the application in detail.

4.1 Select Language

4.1.1 Description *and* Priority

This feature helps to select the preferred language of the user using the application.

4.1.2 Stimulus/Response Sequences

1. S: The user opens the app for the first time.
   R: A page appears containing a list of all the regional languages.
2. S: The user selects his preferred language.
   R: Another page appears where there is a welcome message in the selected language. After the homepage appears containing the Login, Create new BuyStyle account, Forgotten password.

4.1.3 Functional Requirements

REQ-1: Select language: This was required to allow the user to use the app in his desired language.

4.2 Login

4.2.1 Description and Priority

The user logs in to his account entering his personal details which he used while creating the account.

4.2.2 Stimulus/Response Sequences

1. S: The user enters the login page.
   R: A page appears containing a form where the user enters his phone number/account name and his corresponding password.
2. S: The user enters the details and requests to enter his account.
   R1: The user enters his account if the login details are entered correctly.
   R2: The application displays an error message if the details are incorrect.

3. S: The user clicks on forgotten password if he forgets the password.
   R: The application allows the user to set up a new password for his account.

4.2.3 Functional Requirements

REQ-1: **Enter Email/Phone number** - The system shall allow the user to enter their registered email/phone number to login.
REQ-2: **Enter Password** - The system shall allow the user to enter their password (OTP if phone number is used) for successful login.
REQ-3: **Log in** - The application shall redirect the user to their home page, or if invalid email/password, user shall be able to see the proper error message.
REQ-4: **Wrong Password** - The application shall allow the user to set a new password for their account

4.3 Create New BuyStyle Account

4.3.1 Description and Priority

The user creates a new account in the application.

4.3.2 Stimulus/Response Sequences

1. S: The user requests for creator mode.
   R: A page appears containing a form requesting for profile picture, phone number/email id, name, set password, confirm password, date of birth, gender, OTP, business name.
2. S: The user requests for normal user mode.
   R: A page appears containing a form requesting for phone number/email id, name, set password, confirm password, date of birth, OTP.
3. S: The user requests for buyer mode.
   R: A page appears containing a form requesting for profile picture, phone number/email id, name, date of birth, gender, set password, confirm password, OTP, state, city, pin code.

4.3.3 Functional Requirements

REQ: **Creating new account** - The system shall allow the new user to create an account in the app to get all the benefits of the application.

4.4 Search Box

4.4.1 Description and Priority

This feature is for normal users and buyers. The normal users search for templates to work upon and the buyers search for designs according to their interests.

4.4.2 Stimulus/Response Sequences

4.4.2.1 For normal users

1. S: The user clicks on the search box.
   R: The keypad and a list of recommendations for designs appear.
2. S: User selects or types out the desired option.
   R: A list of designs based on the mentioned option appears.

4.4.2.2 For buyers

1. S: User clicks on the search box.
   R: A list of recommendations for a variety of requirements appears asking what to choose from, from the list.
2. S: User selects on the desired choice.
   R: The keypad appears asking the user to enter the requirements for that particular choice.
3. S: User types the requirements.
   R: A list of designs based on the mentioned requirements appears.

4.4.3 Functional Requirements

REQ: **Searching:** User gets to search the database for designs based on his requirements.

4.5 Create Design

4.5.1 Description and Priority

This feature is for creators and normal users who wish to create designs.

4.5.2 Stimulus/Response Sequences

1. S: The user clicks on the plus sign situated at the lower right side of the device screen.
   R: A list appears asking the user the measurements of the whiteboard on which he issues to work upon.
2. S: User clicks on the desired measurements.
   R: A whiteboard appears based on the desired measurements.
3. S: Once a design is created by an expert level creator, he clicks on Sell.
   R: A page named Sell Design appears where the creator has to fill in the required information.

4.5.3 Functional Requirements

REQ: **Creating new designs:** The system allows the creator to create a design of his choice and present it to the users and buyers of the application.

4.6 Brownie Points

4.6.1 Description and Priority

This feature increases the brownie points of the creators based on how many times their designs have been used by users. The buyers can buy only those creators' designs who are marked expert by the software.

4.6.2 Stimulus/Response Sequences

1. S: Normal user selects a design on which he wishes to work upon.
   R: 5 points for each selection of a design by a creator gets added to the previously earned brownie point(s) by the creator. The creator gets a message from the software mentioning his increase in points. The admin gets a message from the software mentioning an increase in brownie points and the creator whose points got increased.
2. S: The creator clicks on the message.
   R: The creator gets redirected to a page where an index marks the total updated brownie points received by the creator till date.
3. S: Admin clicks on the message.
   R: The admin gets redirected to a page where the profile names of all the creators and their brownie points are mentioned.
4. S: Creator gets 100 points.
   R1: An "Expert Level Reached" message appears in the creator's device.
   R2: The increase in brownie points gets updated in the software's database and his name gets automatically enlisted in the Expert Level category of the software's database.

4.6.3 Functional Requirements

REQ-1: **Earning brownie points** – Once there is an increase in the brownie points, it gets updated in the database. This increases the talent value of the creator and thus helps him earn more customers. Also, the profiles reaching expert level are recommended to new users.
REQ-2: **Better designers to select from** – The brownie points also helps the buyers in resolving conflicts in his mind about which designer to go to.

4.7 Sell Design

4.7.1 Description and Priority

This feature is for the creators who have reached the expert level, since only they have the permission to sell their designs.

4.7.2 Stimulus/Response Sequences

1. S: Expert level creator enters information related to the design he has created.
   R: The information about the design gets updated in the database.
2. S: The creator then enters the price and also related discounts (if he wishes) at which he wants to sell the design.
   R: The price then gets updated in the database.
3. S: A buyer selects the design then requests the creator to sell it.
   R: The creator accepts the request.
4. S: The design once ready, creator selects Notify.
   R: A message is sent to the buyer notifying that his order is ready.
5. S: Creator selects Track Delivery.
   R: A webpage tracking the delivery of his item is shown to the creator.

4.7.3 Functional Requirements

REQ1- **Information about design-** The information about the design are mainly keywords that the buyer types in the search box while searching for his desired requirements about the design.
REQ2- **Pricing-** The price gives the buyer an idea about how much to pay if he buys the designs in bulk.
REQ3- **Notify-** When the creator selects notify, a message notification is sent to the buyer as well as the delivery executive. The delivery executive then picks up the order from the creator and sends it for delivery to the buyer.
REQ4- **Track delivery-** The creator should be able to track the delivery of his items till it reaches the buyer.

4.8 Buy Design

4.8.1 Description and Priority

This feature is for buyers who wish to buy a desired design.

4.8.2 Stimulus/Response Sequences

1. S: User after selecting a design clicks on the "Buy Design" button.
   R: The selected design gets added to the user's cart.
2. S: User selects the number of designs.
   R: The number of designs increases and accordingly the price increases.
3. S: User enters the address where the design cards have to be delivered.
   R: The application then asks for any specific instructions for the cards.
4. S: User types out some extra instructions to be shown in the design.
   R: A page with select payment method appears.
5. S: User selects online payment.
   R: User gets forwarded to a third party.
6. S: User selects Cash on delivery.
   R: A message "Order placed successfully" will be displayed and that product is added to user's orders list and database.
7. S: User selects Track Delivery.
   R: Delivery information will be displayed along with the Order details, last checked destination of the package, contact of the logistics and estimated arrival date.

4.8.3 Functional Requirements

REQ-1: **Buying the design:** The system allows the buyer to buy any design cards based on his choice.
REQ-2: **Cash on Delivery:** This system allows the user to make the payment after he has received his ordered goods physically.
REQ-3: **Online payment:** This system allows the user to make the payment online before he has received his ordered goods.

4.9 Cancel Delivery

4.9.1 Description and Priority

This feature allows the buyer to cancel only undelivered order(s) (only within 3 hours of ordering the design).

4.9.2 Stimulus/Response Sequences

1. S: User selects on "My Orders".
   R: A page appears containing all the previous orders whether delivered or not.
2. S: User selects the order which is undelivered and he wishes to cancel it (within 3 hours of ordering).
   R1: The order will be cancelled and notification will be sent to creator and buyer (if buyer selected COD).
   R2: The order will be cancelled and notification will be sent to creator and buyer (if buyer already paid the amount, the third party will be notified about it for payment refund).

4.9.3 Functional Requirements

REQ: **Cancelling delivery:** This system allows the user to cancel the delivery if he is not satisfied with his ordered goods. This however should be done within 3 hours of his order.

4.10 Track Delivery

4.10.1 Description and Priority

This feature is important to track the delivery of an order both by the creator and the buyer.

4.10.2 Stimulus/Response Sequences

1. S: Creator selects on track delivery.
   R: A list of all the items out for delivery appears.
   S: He selects the order whose delivery he wishes to track.
   R: A webpage appears where the delivery status is mentioned.
2. S: Buyer selects on track delivery.
   R: A list of all the items he has bought appears.
   S: He selects the order whose delivery he wishes to track.
   R: A webpage appears where the delivery status is mentioned.

4.10.3 Functional Requirements

REQ1- **Track Delivery-** Since the delivery status of the design is given, in case of any discrepancies related to its delivery, the buyer or the creator can contact the delivery executive of the region where the order's current status is shown.

4.11 Chat

4.11.1 Description and Priority

This feature is only for buyers and expert content creators whose designs are qualified to be sold or presented to buyers.

4.11.2 Stimulus/Response Sequences

1. S: Buyer clicks on a preferred design.
   R: Information about the design and also the creator who made the design appears.
2. S: Interested buyer then clicks on the profile picture of the creator.
   R: A page appears containing detailed information about the creator. Also a chat symbol appears at the bottom of the screen.
3. S: The buyer clicks on the symbol.
   R: The chat box appears where the buyer can request to send a message to the creator. The message gets conveyed to the creator's account.
4. S: The creator clicks on the new message.
   R: The chat room appears with two options: a. Accept, b: Decline.
5. S1: The creator clicks on Accept.
   R: The application allows the creator to type a message via the keypad.
   S2: The creator clicks on Decline.
   R: The application does not allow the creator to type any message.

4.11.3 Functional Requirements

REQ: **Chatting:** The system allows the buyers to chat that is strictly asking questions related to the products (in this case designs) to be bought.

4.12 Help Centre

4.12.1 Description and Priority

This feature enables the application to be available 24x7 help desk service with an active team which solves any kind of issues suffered by the user.

4.12.2 Stimulus/Response Sequences

1. S: User clicks on the question mark symbol at the upper right hand corner of the homepage.
   R: User gets redirected to FAQs section.
2. S: User clicks on Other Issues if his problem doesn't match with the issues mentioned.
   R: A page appears where the user is requested to type his problem within a dialogue box.
3. S: The user types out his issue and clicks on the submit button.
   R: An auto generated mail is sent to the admin citing the issue faced by the user.

4.12.3 Functional Requirements

REQ-1: **FAQs**-User should be able to access the FAQs and Other Frequently asked question.
REQ-2-**Sending written issues** -User must be able to contact with the Help Desk agent to resolve their written issues.

4.13 Manage Accounts

4.13.1 Description and Priority

This feature enables the Admin to view the activities of all types of users and update their accounts. This feature can be accessed only by the user logged in on Admin mode.

4.13.2 Stimulus/Response Sequences

1. S: Admin requests the details of User accounts.
   R: All the details of the Users of all modes are displayed category wise.
2. S: If the user is inactive for more than 3 months, Admin selects for Notify.
   R: A notification will be sent to the User's registered phone or mail.
   S: If User is still inactive for one month after sending notification, Admin requests to remove the account.
   R: The User's account will be removed from the database and User will be notified of the same.
3. S: During signup, let's suppose the OTP is not entered on time or not entered correctly.
   R: The admin requests for halting the account creation.

4.13.3 Functional Requirements

REQ-1: **View details**- The application shall allow the admin to view the details of all the users having an account in the app or signing up for the app.
REQ-2: **Notify**- The application shall send the required notification to User on their registered phone number or mail id.
REQ-3**: Cancel Account**- The application shall allow the admin to cancel a particular user's account from database.
REQ-4: **Creating Account-** Till the OTP is not entered correctly account creation is not possible. The user will get maximum 5 attempts to enter the OTP correctly.

4.14 Manage Orders:

4.14.1 Description and Priority

The feature Manage Orders enables the Admin to handle the Buy and Sell features and monitor the Logistics. This feature can be accessed only by the user logged in on Admin mode.

4.14.2 Stimulus/Response Sequences

1. S: Admin requests to view Shopping List items of buyers.
   R: A page containing all the items, their details and the buyer(s) who bought them is displayed.
2. S: If an order for some quantity of a product is made, Admin requests for Update Number of Items.
   R: The quantity will be updated.
3. S: Admin requests for View Order.
   R: The app displays all the details about the order.
   S: When an order has been placed, Admin selects Delivery executive based on the location.
   R: A delivery executive will be assigned to that particular order based on location.

4.14.3 Functional Requirement

REQ-1: **View Shopping List**- The platform shall allow Admin to view all the products available for Shopping.
REQ-2: **Update-** The platform shall allow the Admin to update the different information regarding a product and the available quantity of the product.

REQ-3**: Remove-** The platform shall allow the Admin to remove products, if required.
REQ-4: **View orders**- The platform shall allow Admin to view all the details of a particular order.
REQ-5: **Assign Delivery Executive-** The platform shall allow the Admin to select a delivery executive for an order.
REQ-6: **Refund-** The platform shall allow the user to refund the payment amount to User if there is any discrepancy in payment method.

4.15 Delivery:

4.15.1 Description and Priority

The feature Delivery enables the Logistics/Delivery Executives to confirm or cancel delivery request, contact Buyer or Seller and submit feedback. This feature can be accessed only by the user logged in on Admin mode.

4.15.2 Stimulus/Response Sequences

1. S: The Logistics requests for View Order details.
   R: The order details of each customer are displayed.
2. S: The Logistics selects Confirm Delivery.
   R: The Buyer and Seller are notified and an estimated timeline is displayed by when the order should be completed.
3. S: The Logistics selects Cancel Delivery**.**
   R: The particular order is removed from their My Orders List.
4. S: The Logistics selects Contact Buyer/Seller**.**
   R: The phone number and email address of the Buyer/Seller are displayed and the logistics can choose to contact the concerned party.

4.15.3 Functional Requirement

REQ-1: **View Order Details-** The platform shall allow the user to view the order details.

REQ-2: **Confirm/Cancel Delivery-** The platform shall allow the user to confirm/cancel their delivery requests.

REQ-3: **Contact Buyer/Seller-** The platform shall allow the users to contact the buyer/seller.

4.16 My Profile

4.16.1 Description and Priority

This feature will allow the user to edit his profile.

4.16.2 Stimulus/Response Sequences

1. S: User clicks on My Profile at the bottom of the Homepage.
   R: A page appears containing Edit Profile, My Designs/My Searches, Settings, LogOut, etc. appears.
2. S: User does the required changes and clicks on Confirm button at last.
   R: The details are updated in the database.

4.16.3 Functional Requirements

REQ-1: **Editing the profile-** Application allows the user to edit his profile that his personal details which he entered at the time of account creation.
REQ-2: **My Designs/My Searches-** My Designs for creators and normal users are the fields where the designs made by them are present. My Searches for buyers are the fields where the designs the user have searched are present.
REQ-3: **Settings-** This allows the users to change some app settings.
REQ-4: **LogOut-** This allows the users to logout from the system.

4.17 LogOut

4.17.1 Description and Priority

This feature will help the creators, users and buyers to logout from his account in the application.

4.17.2 Stimulus/Response Sequences

1. S: Users will click on My Profile.
   R: User gets redirected to the page appears.
2. S: User clicks on LogOut at the bottom of the page.
   R: A message “Logged Out Successfully” appears and the Login page appears.

4.17.3 Functional Requirements

REQ- **LogOut-** In case of any discrepancies, user can logout from his account.

5. Other Nonfunctional Requirements

5.1 Performance Requirements

The application performs smoothly provided there is a stable internet connection from the user’s side. Any kind of incomplete work not saved before switching off the internet connection automatically gets updated in the database system.

5.2 Safety Requirements

- The information provided by the users should be stored in a database whose privacy should be maintained at all costs.

- The application should be free of any kind of vulnerabilities to ensure that it runs safely in the user's device and does not hamper the functioning of the device after its installation.

5.3 Security Requirements

- The software should be able to handle any kind of unauthorized access to the software.
- The software should not authenticate any user without his name and phone number.

5.4 Software Quality Attributes

SQA1 – **Usability:** The Screens should be designed for ease of use by non-technical users who do not have any android knowledge. The GUI design shall be intuitive and task-based without any superfluous design
SQA2 - **Availability**: The framework ought to be accessible constantly if one has sufficient internet.

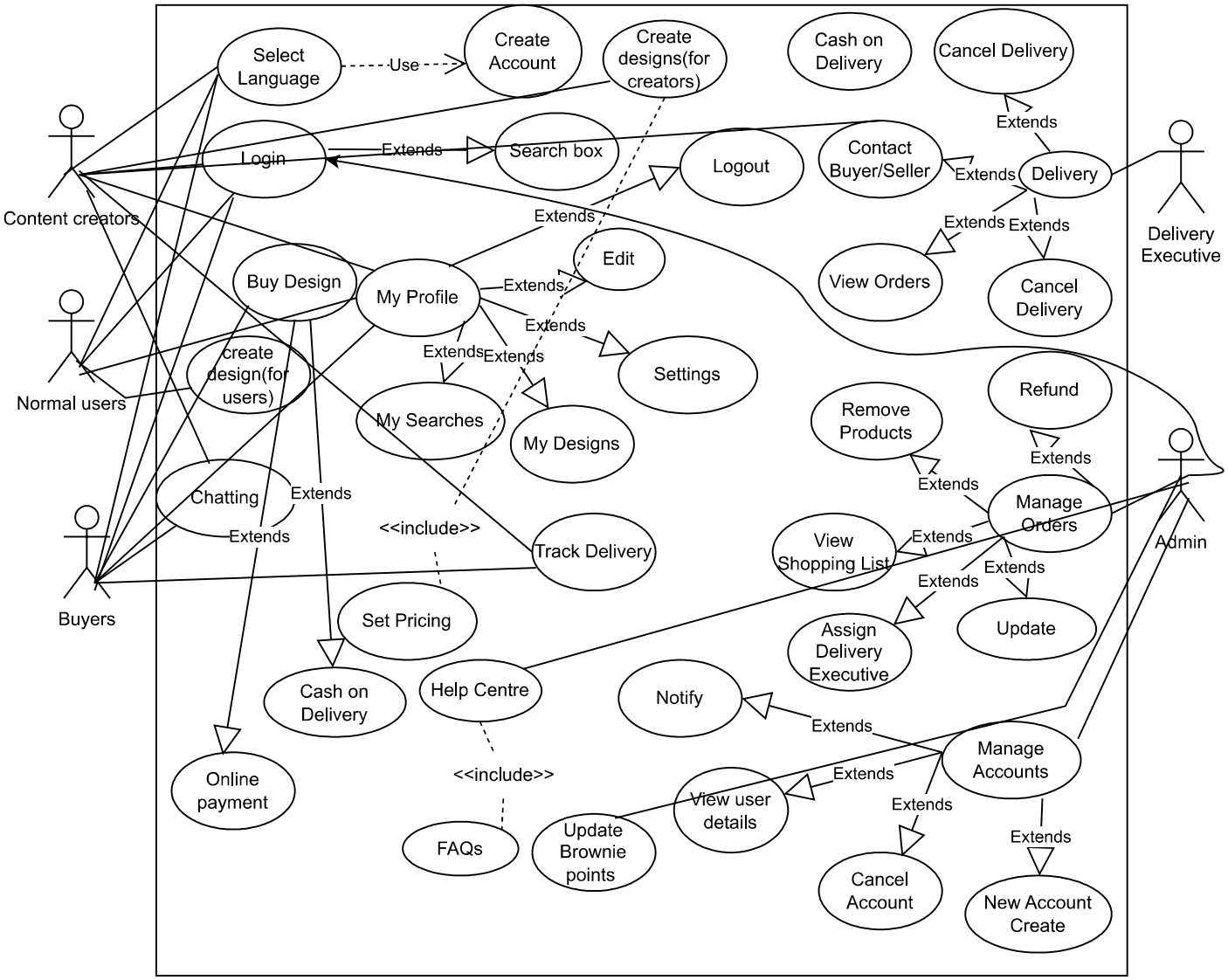
5.5 Business Rules

- B1 - Transactional Services.
- B2 - Metadata Synchronization.
- B3 - Self-Service.
- B4 - Content Workflow

Appendix A: Glossary

- S: Stimulus
- R: Response
- REQ: Requirements
- B: Business Rules
- SQA: Software Quality Attributes
- FAQ: Frequently Asked Questions
- COD: Cash on Delivery

BUYSTYLE


Select Language
Use
Create Account
Create designs(for creators)
Cash on Delivery
Cancel Delivery
Extends
Login
Extends
Search box
Logout
Contact Buyer/Seller
Extends
Delivery
Content creators
Delivery Executive
Extends
Extends
Extends
Edit
Buy Design
My Profile
Extends
Extends
Extends
Extends
Extends
View Orders
Cancel Delivery
Settings
create design(for users)
Normal users
My Searches
My Designs
Refund
Remove Products
Extends
Extends
Chatting
Extends
Extends
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Track Delivery
Manage Orders
Admin
View Shopping List
Extends
Extends
Extends
Buyers
Set Pricing
Assign Delivery Executive
Update
Cash on Delivery
Help Centre
Notify
Extends
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Online payment
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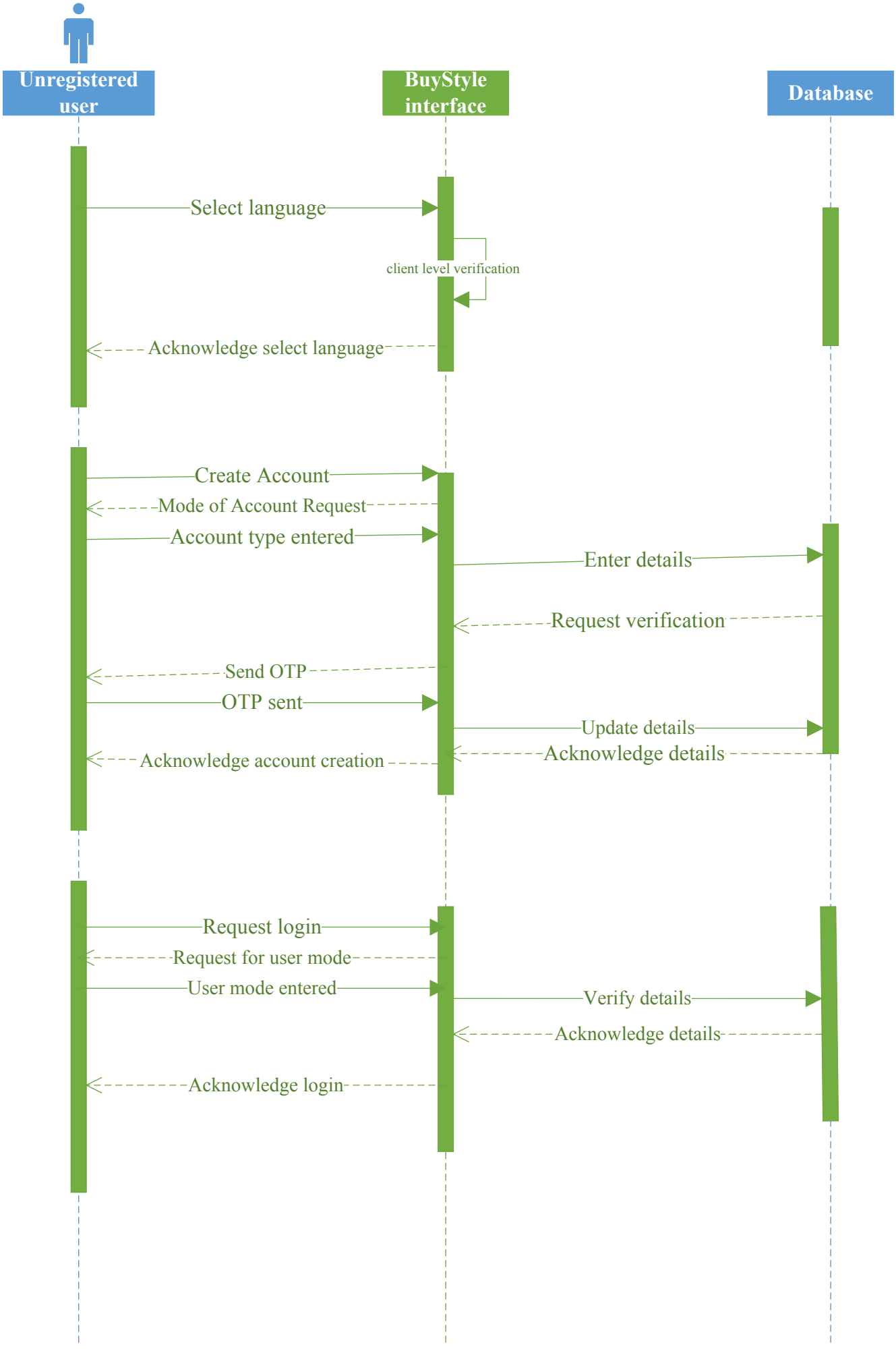
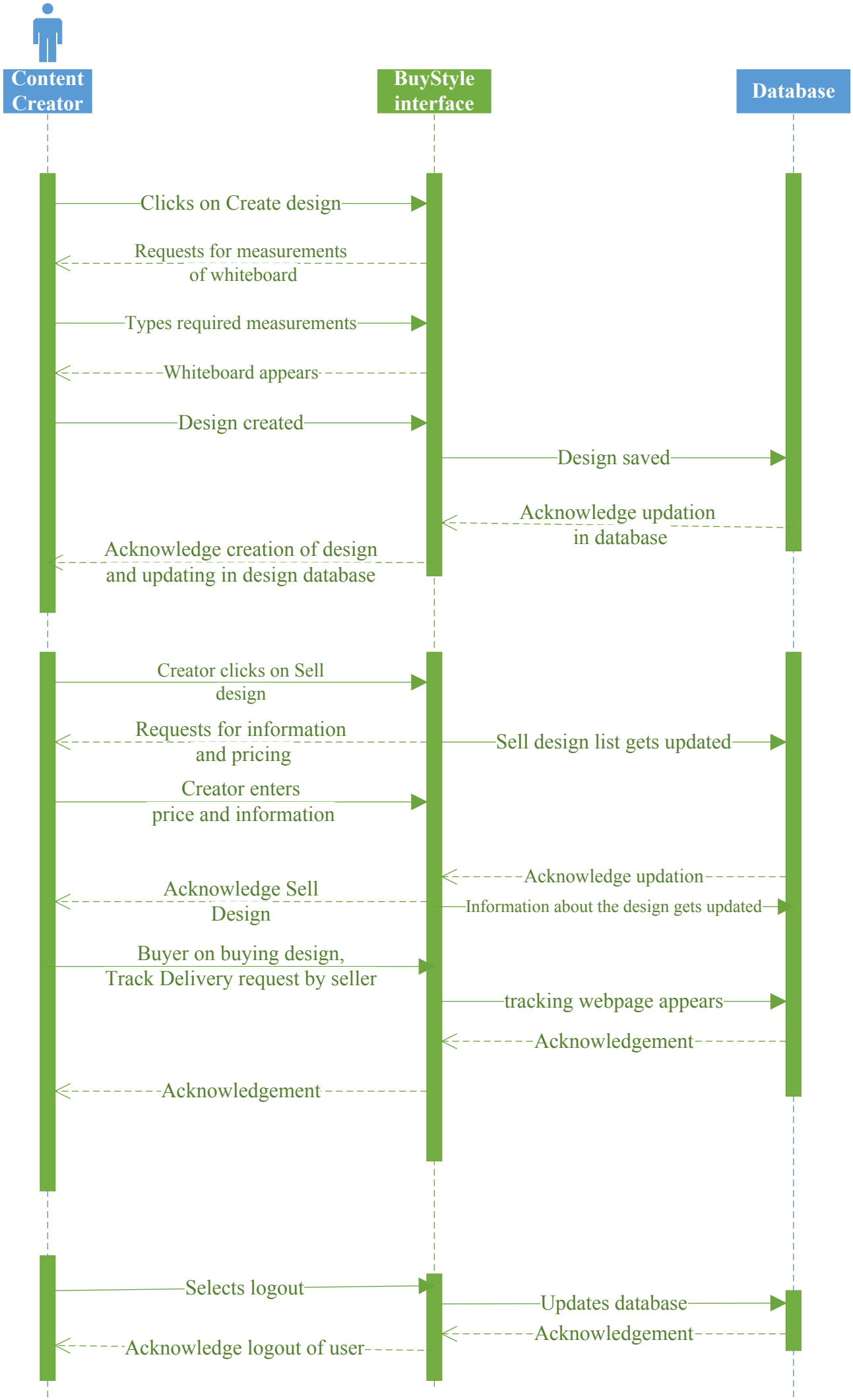
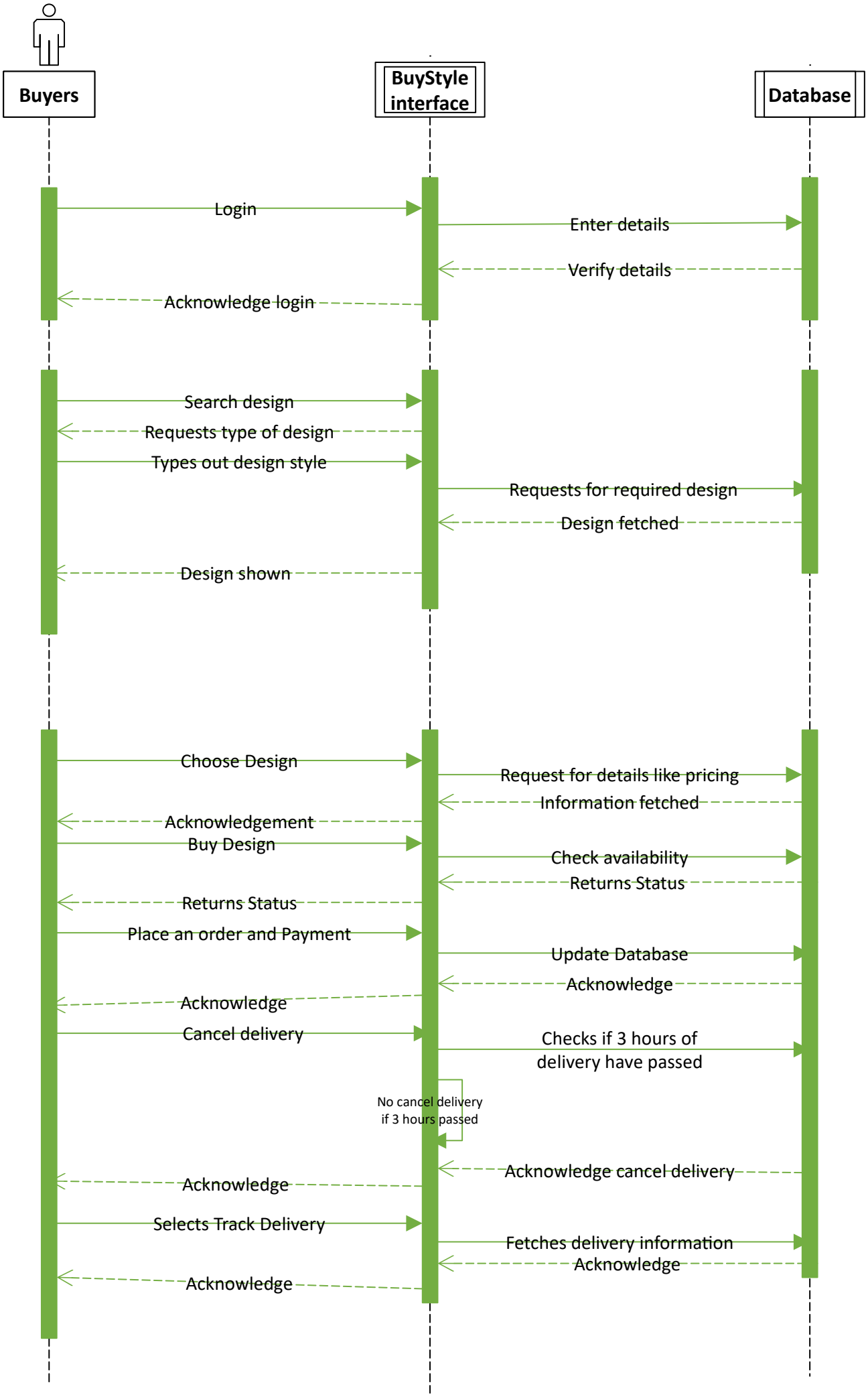
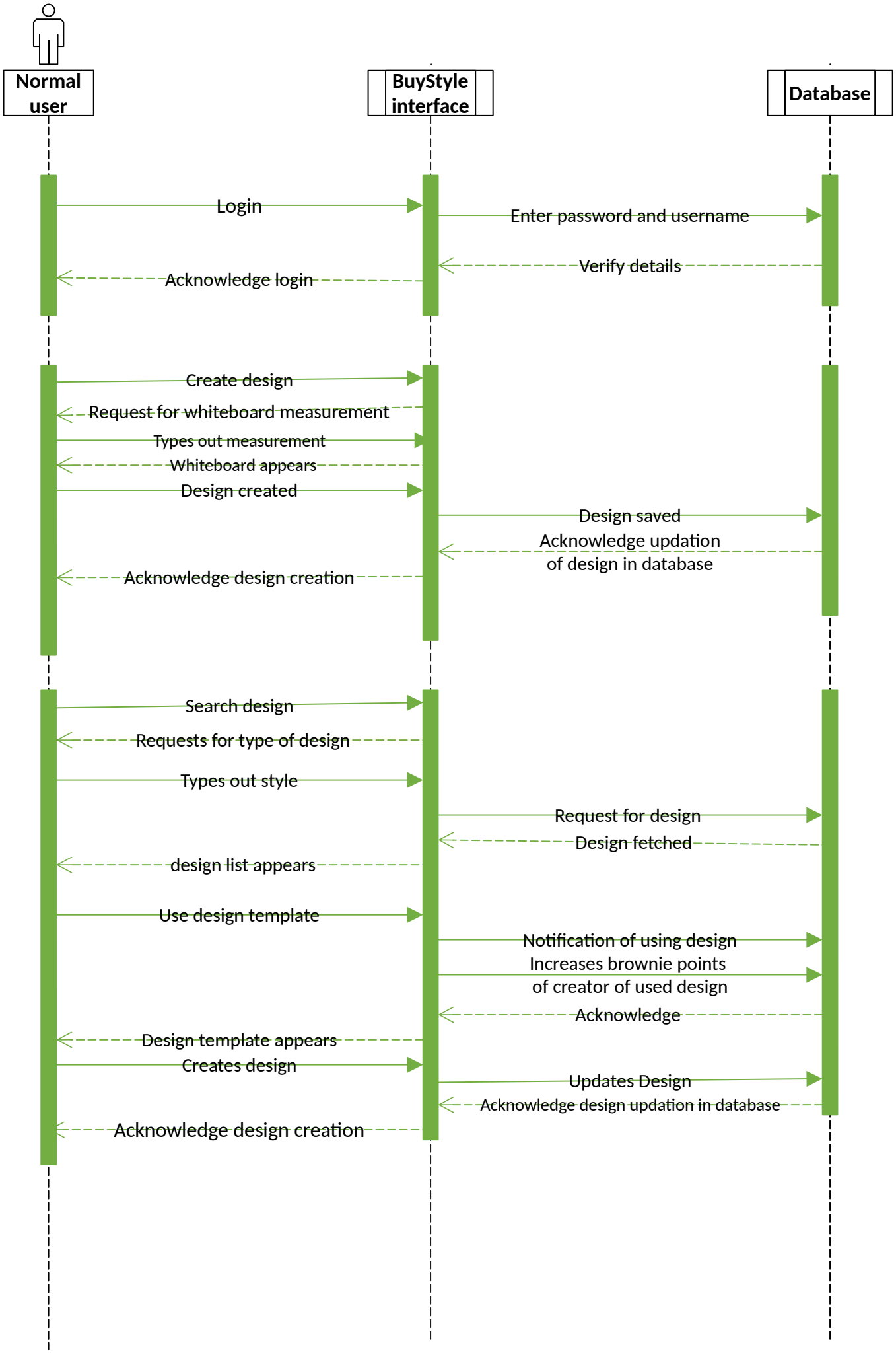
View user details
Extends
Extends
Extends
FAQs
Update Brownie points
Cancel Account
New Account Create

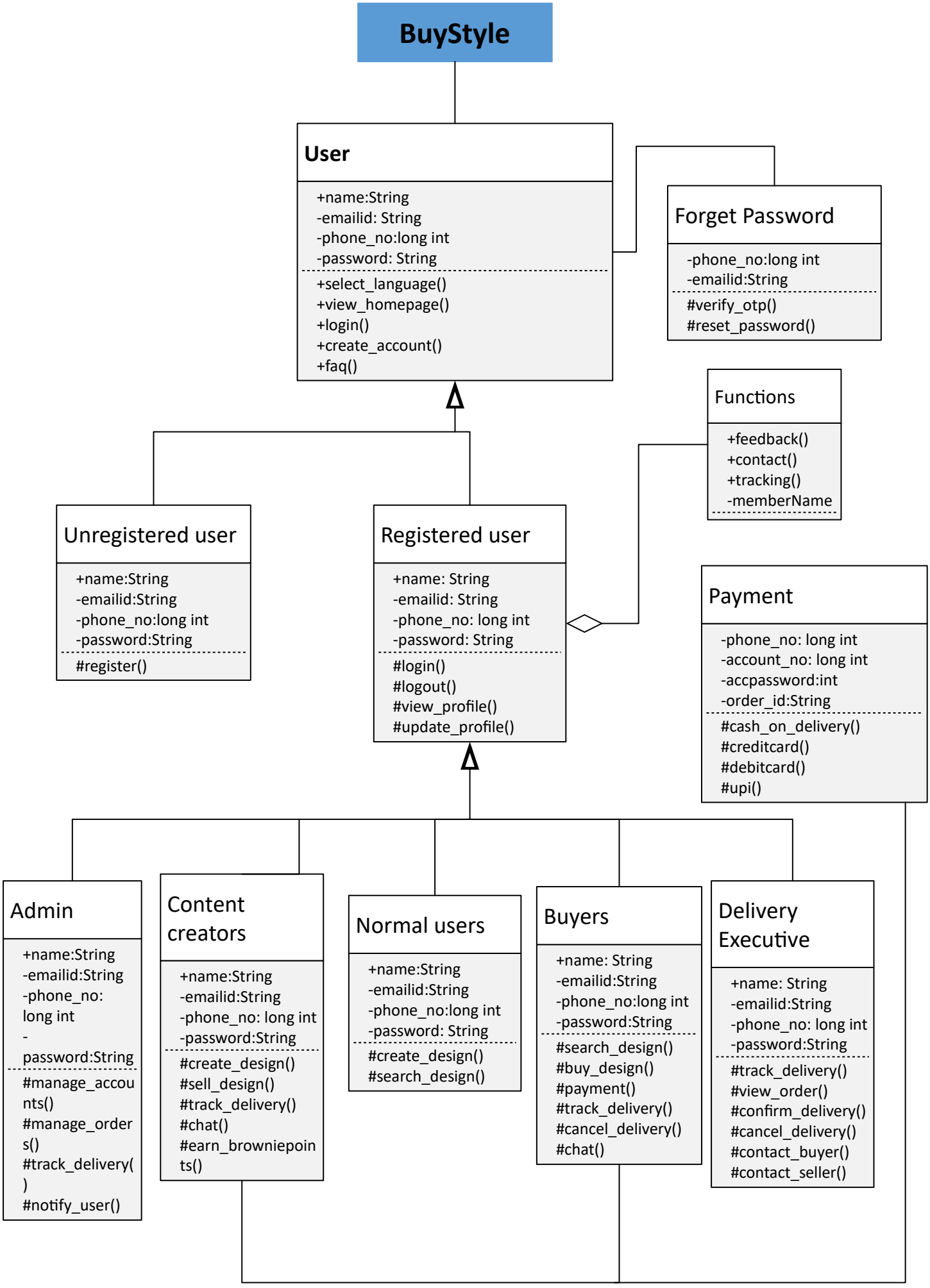

Unregistered user
BuyStyle interface
Database
Select language
client level verification
Acknowledge select language
Create Account
Mode of Account Request
Account type entered
Enter details
Request verification
Send OTP
OTP sent
Update details
Acknowledge details
Acknowledge account creation
Request login
Request for user mode
User mode entered
Verify details
Acknowledge details
Acknowledge login


Content Creator
BuyStyle interface
Database
Clicks on Create design
Requests for measurements of whiteboard
Types required measurements
Whiteboard appears
Design created
Design saved
Acknowledge updation in database
Acknowledge creation of design and updating in design database
Creator clicks on Sell design
Requests for information and pricing
Sell design list gets updated
Creator enters price and information
Acknowledge updation
Acknowledge Sell Design
Information about the design gets updated
Buyer on buying design, Track Delivery request by seller
tracking webpage appears
Acknowledgement
Acknowledgement
Selects logout
Updates database
Acknowledgement
Acknowledge logout of user

Admin
BuyStyle interface
Database
Requests login
return if error
Enter details
Verify details
Acknowledge login
Manage accounts
Add or remove users
Request for user details
Details returned
Users list appears
Manage Orders
Request for order details
Information returned
List of orders
Checks new orders, delivery status and payments
Request for details sent
Information received
List of all details requested appears
Help centre
requested for FAQs
FAQs list returned
Acknowledgement
Requets logout
Updates database
Acknowledgement
Acknowledge logout of user


Buyers
BuyStyle interface
Database
Login
Enter details
Verify details
Acknowledge login
Search design
Requests type of design
Types out design style
Requests for required design
Design fetched
Design shown
Choose Design
Request for details like pricing
Information fetched
Acknowledgement
Buy Design
Check availability
Returns Status
Returns Status
Place an order and Payment
Update Database
Acknowledge
Acknowledge
Cancel delivery
Checks if 3 hours of delivery have passed
No cancel delivery if 3 hours passed
Acknowledge cancel delivery
Acknowledge
Selects Track Delivery
Fetches delivery information
Acknowledge
Acknowledge


Normal user
BuyStyle interface
Database
Login
Enter password and username
Verify details
Acknowledge login
Create design
Request for whiteboard measurement
Types out measurement
Whiteboard appears
Design created
Design saved
Acknowledge updation of design in database
Acknowledge design creation
Search design
Requests for type of design
Types out style
Request for design
Design fetched
design list appears
Use design template
Notification of using design
Increases brownie points of creator of used design
Acknowledge
Design template appears
Creates design
Updates Design
Acknowledge design updation in database
Acknowledge design creation


BuyStyle
User
+name:String
-emailid: String
-phone_no:long int
-password: String
+select_language()
+view_homepage()
+login()
+create_account()
+faq()
Forget Password
-phone_no:long int
-emailid:String
#verify_otp()
#reset_password()
Functions
+feedback()
+contact()
+tracking()
-memberName
Unregistered user
+name:String
-emailid:String
-phone_no:long int
-password:String
#register()
Registered user
+name: String
-emailid: String
-phone_no: long int
-password: String
#login()
#logout()
#view_profile()
#update_profile()
Payment
-phone_no: long int
-account_no: long int
-accpassword:int
-order_id:String
#cash_on_delivery()
#creditcard()
#debitcard()
#upi()
Admin
+name:String
-emailid:String
-phone_no:
long int
-
password:String
#manage_accounts()
#manage_orders()
#track_delivery()
#notify_user()
Content creators
+name:String
-emailid:String
-phone_no: long int
-password:String
#create_design()
#sell_design()
#track_delivery()
#chat()
#earn_browniepoints()
Normal users
+name:String
-emailid:String
-phone_no:long int
-password: String
#create_design()
#search_design()
Buyers
+name: String
-emailid:String
-phone_no:long int
-password:String
#search_design()
#buy_design()
#payment()
#track_delivery()
#cancel_delivery()
#chat()
Delivery Executive
+name: String
-emailid:String
-phone_no: long int
-password:String
#track_delivery()
#view_order()
#confirm_delivery()
#cancel_delivery()
#contact_buyer()
#contact_seller()

Test Cases

Test Cases	*BuyStyle*
Author	*Prerana Saha*
Date Created	*28-Feb-23*
Last Updated	*Not Applicable*
Prerequisites:	*1) A valid user account(for login). 2) A new user account(for Registration) 3) Stable Internet Connection*
System Module:	*Login,Registration*

Test Case #	Test Case Description	Test Procedure	Input Data	Expected Result	Actual Result	Comments
1	Registration using email	1)Enter name. 2)Email . 3)Password . 4)Confirm Pssword. 5)OTP. 6)User Type.	Name:Tuli Saha Email:tuli07@gmail.com Password:****** Confirm Password:****** User Type: Content creator OTP:****	Successful Registration.	Successful Registration.	Test case passes. Registration was successful.
2	Registration using Ph no.	1)Enter name. 2)Ph no. 3)Password . 4)Confirm Pssword. 5)OTP. 6)User Type.	Name:Tuli Saha Ph no:824******* password:****** Confirm Password:****** User Type: Normal User OTP:****	Successful Registration.	Successful Registration.	Test case passes. Registration was successful.
3	Login Using Email	1)Enter Email. 2)Enter Password.	Email:tuli07@gmail.com Enter Password:******	Successful Login.	Successful Login.	Test case pass. Login was Successful.
4	Login Using Ph No.	1)Enter ph no. 2)Enter Password.	Ph No:824******* Enter Password:******	Successful Login.	Successful Login.	Test case pass. Login was Successful.
5	Login using invalid email or password	1)Enter wrong Email. or 2)Enter wrong Password.	Email:tuli09@gmail.com Enter Password:****	Failed to login	Failed to Login	Test case pass. Login was not Successful.
6	Login using invalid ph no or password	1)Enter wrong Ph no. or 2)Enter wrong Password.	Ph No:865******* Enter Password:******	Failed to login	Failed to login	Test case pass. Login was not Successful.

Test Cases

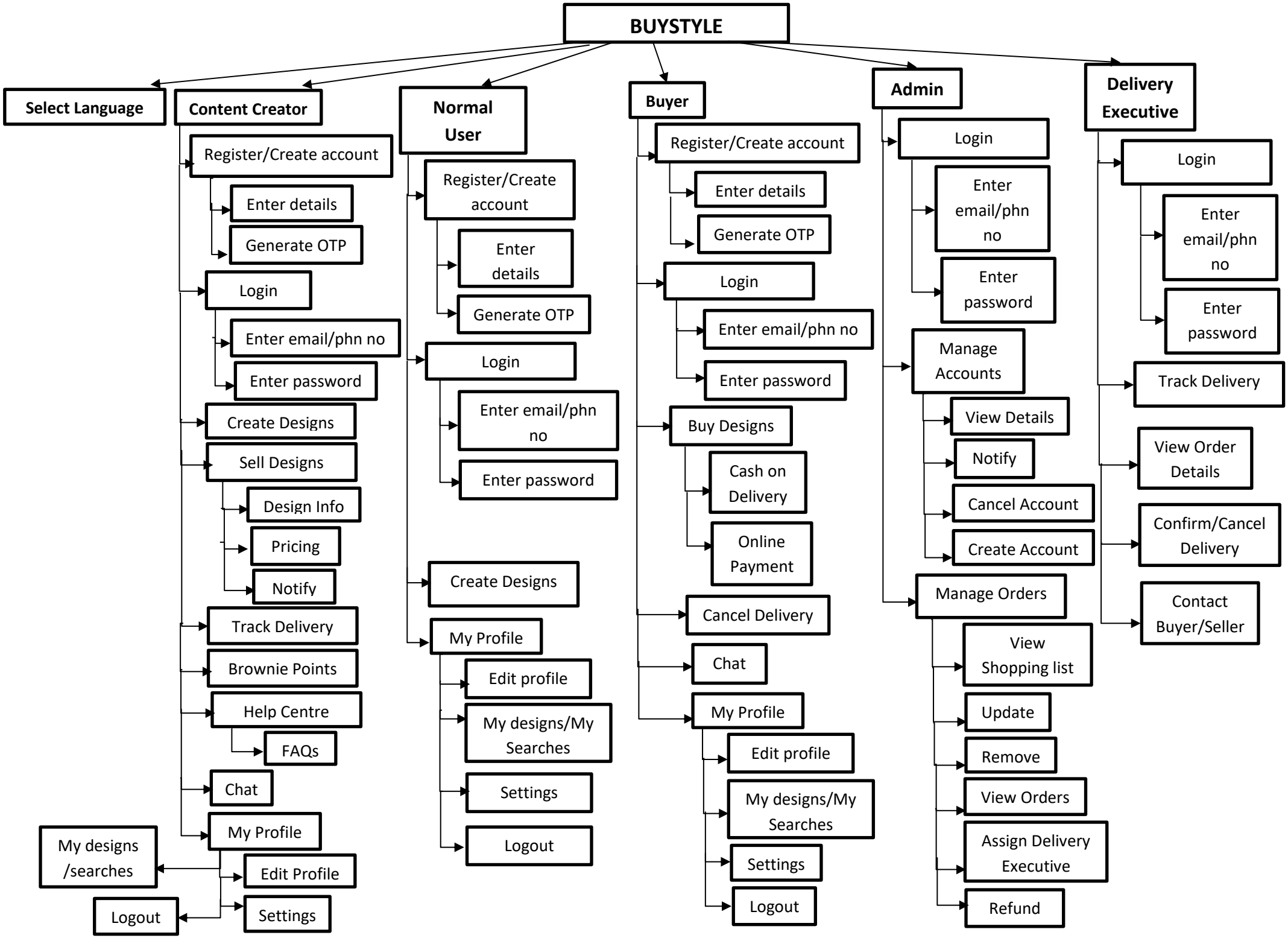
Test Cases	*BuyStyle*
Author	*Prerana Saha*
Date Created	*28-Feb-23*
Last Updated	*Not Applicable*
Prerequisites:	*Content creator ,Stable Internet.*
System Module:	*Create Design*

Test Case #	Test Case Description	Test Procedure	Input Data	Expected Result	Actual Result	Comments
1	Creating designs.	1. Click on plus sign at lower right side of screen. 2. Click on desired measurements.	1.Click on the plus sign. 2. 5cm. by 8cm.	A whiteboard of the desired measurements will appear.	A whiteboard of the desired memasurements will appear.	Test case passes. Whiteboard appears.

Test Cases

Test Cases	*BuyStyle*
Author	*Prerana Saha*
Date Created	*28-Feb-23*
Last Updated	*Not Applicable*
Prerequisites:	*1)Stable Internet , 2)Content creator account, 3) Buyer account, 4)Online Banking System*
System Module:	*Track Delivery*

Test Case #	Test Case Description	Test Procedure	Input Data	Expected Result	Actual Result	Comments
1	Tracking delivery from content creator account.	1. Enter item id of the delivered item to be tracked.	Item id: 23A8UH95	A webpage containing the tracking of the delivered item will appear.	A webpage containing the tracking of the delivered item appears.	Test case pass. Delivery can be tracked.
2	Tracking delivery from buyer account	1. Click on the item id whose delivery is to be tracked.	Item id: 23A8UH95	A webpage containing the tracking of the delivered item will appear.	A webpage containing the tracking of the delivered item appears.	Test case pass. Delivery can be tracked.


BUYSTYLE
Select Language
Content Creator
Register/Create account
Enter details
Generate OTP
Login
Enter email/phn no
Enter password
Create Designs
Sell Designs
Design Info
Pricing
Notify
Track Delivery
Brownie Points
Help Centre
FAQs
Chat
My Profile
My designs /searches
Edit Profile
Logout
Settings
Normal User
Register/Create account
Enter details
Generate OTP
Login
Enter email/phn no
Enter password
Create Designs
My Profile
Edit profile
My designs/My Searches
Settings
Logout
Buyer
Register/Create account
Enter details
Generate OTP
Login
Enter email/phn no
Enter password
Buy Designs
Cash on Delivery
Online Payment
Cancel Delivery
Chat
My Profile
Edit profile
My designs/My Searches
Settings
Logout
Admin
Login
Enter email/phn no
Enter password
Manage Accounts
View Details
Notify
Cancel Account
Create Account
Manage Orders
View Shopping list
Update
Remove
View Orders
Assign Delivery Executive
Refund
Delivery Executive
Login
Enter email/phn no
Enter password
Track Delivery
View Order Details
Confirm/Cancel Delivery
Contact Buyer/Seller

1. Select language	default() import_regional_language() drop_down_list()
2. Enter mode of account	enter_account_mode() menu()
3. Create new BuyStyle account(content creator mode)	enter_name() enter_email_id() enter_ph_no() enter_dob() choose_gender() choose_nationality() choose_state() enter_address() enter_brand_name() set_brand_logo() set_profile_photo() choose_from_galery() set_from_camera() set_password() confirm_password() choose_bank() enter_bank_acc_no() generate_otp() resend_otp() timer_otp() submit_otp() validate_otp()
4. Create new BuyStyle account(normal user mode)	enter_name() enter_email_id() enter_ph_no() set_password() confirm_password() generate_otp() resend_otp() timer_otp() submit_otp() validate_otp()
5. Create new BuyStyle account(buyer mode)	enter_name() enter_email_id() enter_ph_no() enter_dob() choose_gender() choose_nationality() choose_state() enter_address() choose_bank() enter_bank_acc_no() set_password() confirm_password() generate_otp() resend_otp()

	Logouttimer_otp() submit_otp() validate_otp()
6. Login	enter_email_id() enter_password() verify_password() forget_password() send_verification_mail() enter_code_ofmail() verify_code()
7. Search box	enter_requirements() choose_requirements()
8. Create designs	choose_whiteboard_requirements() enter_whiteboard_requirements() import_drawing tools() select_a_drawing_tool() save_design_in_gallery() save_design_in_account() insert_text() insert_photo_from_gallery() insert_photo_online() use_colour() save_drafts_in_account()
9. Sell designs	enter_design_details() enter_price() enter_availability() enter_date_of_delivery_since_ordered() notify_when_buyer_selects()
10. My Profile	my_designs() my_searches() edit_profile() change_user_mode() change_settings() logout()
11. Logout	logout_without_save_password() logout_with_save_password()
12. Help Centre	enter_questions() faqs() choose_from_faqs()
13. Track Delivery	generate_map_link_for_specific_order() see_current_location() see_tracking_details() contact_delivery_executive() contact_buyer() contact_seller() confirm_delivery()
14. Brownie Points	increase_brownie_points() see_brownie_points() mark_as_expert() notify_when_expert() notify_when_increase_brownie_points()

15. Chat	send_message_to_buyer() receive_message_from_buyer() upload_image() download_image()
16. Search Designs(normal user mode)	search_design() click_design() add_to_favorites() increase_brownie_points()
17. Buy Designs	search_design() buy_design() increase_quantity() increase_price() add_instructions() notify_order_details() select_payment_method() select_online_payment() select_cod() payment_by_debit() payment_by_upi() enter_pin_no() enter_amount() enter_bank()
18. Cancel delivery	cancel_delivery() refund() check_order_time() reason_for_cancelling() menu_for_cancelling() write_reason()
19. Manage Accounts	view_account_details() notify_when_inactivity() cancel_account() check_five_attempts() check_inactive_period()
20. Manage Orders	view_shopping_list() view_availabilty() update_details() remove_products() view_orders() select_delivery_executive() menu_delivery_executive()

Function Point Analysis (FPA) Worksheet									
Measurement Parameter	**Count**				**Weightage**				**FP Count**
	Simple	Average	Complex		Simple	Average	Complex		
# of External Inputs (EI)	45	34	29	X	3	4	6	=	445
# of External Outputs (EO)	56	49	28	X	4	5	7	=	665
# of External Inquiries (EQ)	20	16	7	X	3	4	6	=	166
# of Internal Logical Files (ILF)	37	20	13	X	7	10	15	=	654
# of External Interface Files (EIF)	34	15	23	X	5	7	10	=	505
Unadjusted Function Points (UFP)								**UFP =**	2,435
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					**DI**	
01. Does the system require reliable backup and recovery?								4	
02. Are data communications required?								3	
03. Are there distributed processing functions?								3	
04. Is performance critical?								3	
05. Will the system run in an existing, heavily utilized operational environment?								2	
06. Does the system require on-line data entry?								5	
07. Does the on-line data entry require the input transaction to be built over multiple screens or operations?								3	
08. Are the master files updated on-line?								4	
09. Are the inputs, outputs, files, or inquiries complex?								3	
10. Is the internal processing complex?								2	
11. Is the code designed to be reusable?								3	
12. Are conversion and installation included in the design?								2	
13. Is the system designed for multiple installations in different organizations?								4	
14. Is the application designed to facilitate change and ease of use by the user?								1	
							Total DI =	42	
Value Adjustment Factor (VAF)								**VAF =**	1.07
Adjusted Function Points (AFP)								**AFP =**	2,605

Any Assumptions made should be listed below.									

Constructive Cost Effective Model (COCOMO)

Basic COCOMO:

Modules	No. of Functions
1. Select language	3
2. Enter mode of account	2
3. Create new BuyStyle Account	22
4. Login	7
5. Search box	2
6. Create designs	11
7. Sell designs	5
8. My Profile	6
9. Logout	2
10. Help Centre	3
11. Track Delivery	7
12. Brownie Points	5
13. Chat	4
14. Search Designs	3
15. Buy Designs	14
16. Cancel Delivery	6
17. Manage Accounts	5
18. Manage Orders	7
TOTAL	**114**

Type of Project: Organic

Assumption (based on Coding Standards/Guidelines): Each function has approximately 10 lines of code(LOC)

Total lines of Code (LOC) : 114*10 = 1140

Thus, KLOC = 1140/1000 = 1.14

Effort: 2.4 * (KLOC)^1.05 PM = 2.4 * (1.14)^1.05 PM = 2.75 ~ 3PM

Development Time: 2.5 * (Effort)^0.38 mnths = 2.5 * (2.75)^0.38 mnths = 3.67 mnths ~ 4 mnths

Intermediate COCOMO

Cost Drivers	**Ratings**
Product Attributes:	
Required Software Reliability (RELY)	High(1.15)
Size of Application Database (DATA)	Very High(1.16)
Complexity of the Product (CPLX)	Low(0.85)
Hardware Attributes:	
Run-time performance constraints (TIME)	Nominal(1.00)
Memory Constraints (STOR)	High(1.06)
Volatility of the virtual machine environment (VIRT)	Nominal(1.00)
Required turnabout time (TURN)	Low(0.87)
Personnel Attributes:	
Analyst Capability (ACAP)	Nominal(1.00)
Applications experience (AEXP)	High(0.91)
Software engineer capability (PCAP)	High(0.86)
Virtual machine experience (VEXP)	Low(1.10)
Programming language experience (LEXP)	High(0.95)
Project Attributes:	
Application of software engineering methods (MODP)	Low(1.10)
Use of software tools (TOOL)	Nominal(1.00)
Required development schedule (SCED)	High(1.04)

Effort Adjustment Factor (EAF): (1.15 * 1.16 * 0.85 * 1.00 * 1.06 * 1.00 * 0.87 * 1.00 * 0.91 * 0.86 * 1.10 * 0.95 * 1.10 * 1.00 * 1.04) = 0.98

Effort = 2.4 * (KLOC)^1.05 * EAF = 2.4 * (1.14)^1.05 * 0.98 = 2.70 ~ 3PM