System Requirements Statement (SRS) – Online Furniture Store

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Introduction

This document explains the system requirements and scope for developing Online Furniture Store.

Online Furniture Store can divide the four main parts, Seller part, Carpenter part, Admin part, and Customer part.

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Functional Requirements

The Account part of the Online Furniture Store has four modules which are divided into 19 processes described below.

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2.1 Seller Module

Seller is the user of the system who wants to clear their inventory and wants an online presence.

They are able to register their account and sell their products.

2.1.1 Account Creation Process

Online Furniture Store compels Sellers to create their accounts before using our site. So, our website must provide a function that makes account creation as seamless as possible.

When the Seller creates a new account, the function demands the information described below.

The Registration information consists of some items described below.

- 1. UserID
- 2. Password
- First Name
- 4. Last Name
- 5. E-mail address
- 6. Contact Number
- 7. State
- 8. City
- 9. Aadhar Number
- 10. Upload their Aadhar card Photo

All items are mandatory. These details serve to uniquely identify the Seller and serve as Consumer Protection.

User ID

Input type of the User-id is 'text'. The User ID should be unique. If the User ID is not case-sensitive to another previously registered user ID should not be registered as an account.

Password

Input type of the Password is 'password'. The Password has constraints that make the Password consists of more than or equal to 8 and less than or equal to 16 characters including characters described below.

Numeric figure (at least one)

Capital alphabet (A-Z) (at least one)
Small alphabet (a-z) (at least one)
Special character (#, \$, %, &, etc.) (at least one)

The Password is masked by dummy characters. The re-entering Password is demanded.

First Name

The input type of the First Name will be 'text'. First Name has a constraint that makes the first name consists of a maximum of 16 characters and the first character must be in uppercase.

- 1. Capital alphabet (A-Z) (at most one)
- 2. Small alphabet (a-z) (at least one)

Last Name

The input type of the Last Name will be 'text'. Last Name has a constraint that makes the last name consists of a maximum of 16 characters and the first character must be in uppercase.

- 1. Capital alphabet (A-Z) (at most one)
- 2. Small alphabet (a-z) (at least one)

E-mail address

The input type of Email will be 'email'. E-mail Address has constraint which makes the email address consists of uppercase, lowercase, numeric and special characters. It must separate the local part and the domain name with @ character.

- 1. Uppercase (A-Z) and lowercase (a-z) English letters.
- 2. Digits (0-9).
- 3. Characters! # \$ % & ' * + / = ? ^ _ `{ | } ~
- 4. Character. (period, dot, or full stop) provided that it is not the first or last character and it will not come one after the other.

Contact Number

Input type for the contact no will be number.

- 1. The first digit should contain numbers between 6 to 9.
- 2. The rest of the 9 digits can contain any number between 0 to 9.

3. The mobile number can have 11 digits also by including 0 at the start.

4. The mobile number can be 12 digits also by including 91 at the starting

City

The input type of city will be 'Dropdown'. City has constraint which makes it consists of alphabets only.

State

The input type of city will be 'Dropdown'. State has constraint which makes it consists of alphabets only and the input type is Select box.

Aadhar Number

A 12-digit unique number is assigned to every individual in India who registers themselves with UIDAI. Aadhar Number allows the site Admin to only allow authentic individuals to register to the site and conduct commerce activities, thus increasing the legitimacy of the website.

Upload Photo

Input type of photo is an image. Aadhar Card photo allows the Admin to authenticate the user.

2.1.2 Login Process

Our website always compels user authentication before allowing access except when a new account is successfully created.

The user authentication demands a User ID and Password. The User ID and the Password should be checked in the following way:

First, the User ID and the Password combination should exist and be correct.

If the User ID and the Password are not equal to what the user has registered, the user authentication cannot be provided and the user is placed on the same page.

Only when the two checks are successfully completed, the Seller can be placed on the respective page.

The "Seller Home" provides the items described below.

- 1. A trigger to log out
- 2. A trigger to update Inventory

- 3. A trigger to Update Inventory stock
- 4. A trigger to manage Orders
- 5. A trigger to Check ratings

2.1.3 Seller Account Updation

Online Furniture Store should provide a function to update Seller Account information so that the Seller information can stay up to date.

The information Seller could update is described below:

- 1. Password
- 2. First Name
- 3. Last Name
- 4. Email Address
- 5. Contact Number

2.1.4 Seller Inventory Updation

Online Furniture Store should provide a function that allows Sellers to post their entire inventory for sale online and update their inventory. The information that the Seller could add and update is described below.

- 1. Details about the Inventory that Seller possesses.
- 2. Upload images of inventory items.
- 3. Dimensions of inventory
- 4. Stock quantity of each item in inventory.

2.1.5 Seller Stock Updation

Online Furniture Store will provide the functionality to Sellers to update the following information about inventory stock:

- 1. Estimated time of stock arrival.
- 2. New Stock arrival

2.1.6 Seller Order Viewing and Confirmation

Sellers will be able to view and confirm orders. It will be displayed in a legible format making it easy to view and manage. Information that will be provided to the Seller is as follows:

- 1. Pending Orders
- 2. Approved Orders
- 3. Rejected Orders

2.1.7 View Customer Rating

Sellers will be able to view the following information in this section:

- 1. Last 10 positive ratings
- 2. Last 10 Critical ratings
- 3. Reviews pertaining to the ratings

2.2 Carpenter Module

2.2.1 Apply for Account Creation

Online Furniture Store compels users to create an account before using it. So, the website should provide a function that makes Carpenters create a new account.

When carpenters create a new account, the function demands the information described below.

Registration information

- 1.User ID
- 2.Password
- 3. First Name
- 4. Last Name
- 5. E-mail address
- 6. Contact Number
- 7. State
- 8. City
- 9. Aadhar Number
- 10. Aadhar Card Photo

All items are mandatory. These details serve to uniquely identify the Carpenters and provide protection for the customers.

User ID

The input type of the user ID will be 'text'. The User ID should be unique. If the User ID is not case-sensitive to another previously registered user ID should not be registered as an account.

The User ID and the Password should exist and be correct.

If the User ID and the Password are equal to what the user has registered, then user authentication can be provided and the user can be placed on "Carpenter Home".

Password

The input type of Password will be 'password'. The Password has constraints that make the Password consists of more than or equal to 8 and less than or equal to 16 characteristics including characters described below.

- 1. Numeric figure (at least one)
- 2. Capital alphabet (A-Z) (at least one)
- 3. Small alphabet (a-z) (at least one)
- 4. Special character (#, \$, %, &, etc.) (at least one)

The Password is masked by dummy characters. The re-entering Password is demanded.

First Name

The input type of the First Name will be 'text'. First Name has a constraint that makes the first name consists of a maximum of 16 characters and the first character must be in uppercase.

- 1. Capital alphabet (A-Z) (at most one)
- 2. Small alphabet (a-z) (at least one)

Last Name

The input type of Last Name will be 'text'. Last Name has a constraint that makes the last name consists of a maximum of 16 characters and the first character must be in uppercase.

- 1. Capital alphabet (A-Z) (at most one)
- 2. Small alphabet (a-z) (at least one)

E-mail address

The input type of Email will be 'email'. E-mail Address has constraint which makes the email address consists of uppercase, lowercase, numeric and special characters. It must separate the local part and the domain name with @ character.

- 1. Uppercase (A-Z) and lowercase (a-z) English letters.
- 2. Digits (0-9).
- 3. Characters! #\$%&'*+-/=?^_`{|}~
- 4. Character. (period, dot, or full stop) provided that it is not the first or last character and it will not come one after the other.

Contact Number

Input type for the contact no will be number.

- 1. The first digit should contain numbers between 6 to 9.
- 2. The rest of the 9 digits can contain any number between 0 to 9.
- 3. The mobile number can have 11 digits also by including 0 at the start.

4. The mobile number can be 12 digits also by including 91 at the starting.

City

The input type of city will be 'Dropdown'. City has a constraint which makes it consists of alphabets only. (it should be in a select box)

State

The input type of city will be 'Dropdown'. State has a constraint that makes it consists of alphabets only.

Aadhar Number

A 12-digit unique number is assigned to every individual in India who registers themselves with UIDAI. Aadhar Number allows the site Admin to only allow authentic individuals to register to the site and conduct commerce activities, thus increasing the legitimacy of the website.

Upload Photo

Input type of photo is an image. Aadhar Card photo allows the Admin to authenticate the user.

Registration information should be entered on one screen.

2.2.2 Login Process

Online Furniture Store always compels Carpenter authentication before allowing access except when a new account is successfully created.

The user authentication demands a User ID and Password. The User ID and the Password combination should match the database combination.

If the user is rejected, user authentication is not provided for Carpenter.

Only if authentication is successful, the Carpenter will be allowed to proceed.

The "Carpenter Home" provides the items described below.

- 1. A trigger to log out
- 2. A trigger to approve/reject Orders
- 3. A trigger to upload previous work details
- 4. A trigger to manage current orders

- 5. A trigger to update current Order Status
- 6. A trigger to view Customer Ratings

2.2.3 Update Account Details

Online Furniture Store should provide a function to update Carpenter Account information so that the Seller information can stay up to date.

The information Carpenter could update is described below:

- 1. Password
- 2. First Name
- 3. Last Name
- 4. Email Address
- 5. Contact Number

2.2.4 Upload Previous Work Details

Online Furniture Store should provide a function that allows carpenters to Upload their previous works.

This allows customers to gauge the competence of Carpenters.

The information that the carpenter can provide

- 1. Type of items produced previously
- 2. Images of previous orders

2.2.5 Approve/View Customer Requests

Carpenters will be able to view and confirm orders. It will be displayed in a legible format making it easy to view and manage. Information that will be provided to the Carpenter is as follows:

- 1. Pending Orders
- 2. Approved Orders
- 3. Rejected Orders

2.2.6 Update Order Status

Carpenters are able to Update the details of the orders they have accepted. This serves as a form of communication between the Customer and the Carpenter.

Carpenters will have the option to

- 1. Upload images of the work they have done.
- 2. Send a message on the status of the order.
- 3. Inform the customer when the order is ready.

2.2.7 View Customer Rating

Carpenters will be able to view the following information in this section:

- 1. Last 10 positive ratings
- 2. Last 10 Critical ratings
- 3. Reviews pertaining to the ratings

2.3 Admin Module

2.3.1 Login Process

Online Furniture Store always compels user authentication before using itself except when a new account is successfully created. The user authentication demands UserID and Password. The UserID and the Password should be checked in three ways.

First, The UserID and the Password should exist and be correct.

If the UserID and the Password are not equal to what the admin has registered, the Admin authentication cannot be provided.

Second, the User Type linked to the UserID should be "Admin". When the user Type is "Admin", the user can be placed on "Admin Home".

Finally, UserID should be available.

The Admin account should live for as long as the duration is decided by Admin.

Only when the three checks are successfully completed, Admin can be placed on the respected page.

The "Admin Home" provides the items described below.

- 1. A trigger to log out
- 2. A trigger to View Seller and Carpenters awaiting approval
- 3. A trigger to view Carpenters and Sellers
- 4. A trigger to generate Transaction Reports

2.3.2 Seller and Carpenter Approval

The Admin will be able to approve or reject Sellers and Carpenters after checking the data provided by them. This allows the Admin to approve only authentic individuals to conduct commerce on the website.

A page will be provided to allow the Admin to approve/reject applications.

Feedback must be given in case an application is rejected.

2.3.3 View Sellers and Carpenters

Admin will be able to view a list of all the Carpenters and Sellers on the website. This will give a bird's eye view and allow easy maintenance of the website. Any individual Carpenter or Seller can be sent messages from the Admin.

2.3.4 Transaction Report Generation

The Sellers, Carpenters, and Customers can get a details Transaction Report from the admin. The report will have the following data:

- 1. Name of the Seller/Carpenter/Customer.
- 2. Type of Order
- 3. Order Amount
- 4. Advance amount paid
- 5. Order Date
- 6. Order Status

2.4 Customer Module

2.4.1 Account Creation

Online Furniture Store compels users to create an account before using it. So, the website should provide a function that makes Customers create a new account.

When the Customer creates a new account, the function demands the information described below.

Registration information

- 1. User ID
- 2. Password
- 3. First Name
- 4. Last Name
- 5. E-mail address
- 6. Contact Number
- 7. State
- 8. City

All items are mandatory. These details serve to uniquely identify the Customers.

User ID

The input type of the user ID will be 'text'. The User ID should be unique. If the User ID is not case-sensitive to another previously registered user ID should not be registered as an account.

The User ID and the Password should exist and be correct.

If the User ID and the Password are equal to what the user has registered, then user authentication can be provided and the user can be placed on "Customer Home".

Password

The input type of Password will be 'password'. The Password has constraints that make the Password consists of more than or equal to 8 and less than or equal to 16 characteristics including characters described below.

- 1. Numeric figure (at least one)
- 2. Capital alphabet (A-Z) (at least one)

- 3. Small alphabet (a-z)(at least one)
- 4. Special character (#, \$, %, &, etc.) (at least one)

The Password is masked by dummy characters. The re-entering Password is demanded.

First Name

The input type of the First Name will be 'text'. First Name has a constraint that makes the first name consists of a maximum of 16 characters and the first character must be in uppercase.

- 1. Capital alphabet (A-Z) (at most one)
- 2.Small alphabet (a-z) (at least one)

Last Name

The input type of Last Name will be 'text'. Last Name has a constraint that makes the last name consists of a maximum of 16 characters and the first character must be in uppercase.

- 1. Capital alphabet (A-Z) (at most one)
- 2. Small alphabet (a-z) (at least one)

E-mail address

The input type of Email will be 'email'. E-mail Address has constraint which makes the email address consists of uppercase, lowercase, numeric and special characters. It must separate the local part and the domain name with @ character.

- 1. Uppercase (A-Z) and lowercase (a-z) English letters.
- 2. Digits (0-9).
- 3. Characters! #\$%&'*+-/=?^ `{|}~
- 4. Character. (period, dot, or full stop) provided that it is not the first or last character and it will not come one after the other.

Contact Number

Input type for the contact no will be number.

- 1. The first digit should contain numbers between 6 to 9.
- 2. The rest of the 9 digits can contain any number between 0 to 9.
- 3. The mobile number can have 11 digits also by including 0 at the start.
- 4. The mobile number can be 12 digits also by including 91 at the starting

City

The input type of city will be 'Dropdown'. City has a constraint which makes it consists of alphabets only. (it should be in a select box).

State

The input type of city will be 'Dropdown'. State has a constraint that makes it consists of alphabets only.

Registration information should be entered on one screen.

2.4.2 Login Process

Online Furniture Store always compels Carpenter authentication before allowing access except when a new account is successfully created.

The user authentication demands a User ID and Password. The User ID and the Password combination should match the database combination.

If the user is rejected, user authentication is not provided for Carpenter.

Only if authentication is successful, the Carpenter will be allowed to proceed.

The "Customer Home" provides the items described below.

- 1. A trigger to log out
- 2. Product Catalog on the Home Page
- 3. A trigger to update account Details
- 4. A trigger to place Orders
- 5. A trigger to check current Order Status

2.4.3 Update Account Details

Online Furniture Store should provide a function to update Customer Account information so that the Customer information can stay up to date.

The information Customer could update is described below:

- Password
- 2. First Name
- 3. Last Name
- Email Address
- Contact Number

2.4.4 View Product Catalog

Customers should be able to view the entire catalog available on the website with no restrictions. Special care must be taken to make the site responsive, fast and easy to navigate. Products will be listed in categories that may have subcategories. Customers can also view Carpenters and their previous works if they want a custom order. Carpenters' email addresses will be visible beside their names. From this page, customers can view products and place their orders there.

2.4.5 Order Placement

An add to cart button will be on every product page. This will allow easy access to the feature. A Customer need only choose their products and press the button which will add the product to their cart of the customer. While checking out the customer can order the entire cart at once thus saving them a hassle.

2.4.6 Customer Payment

Customers can pay with their preferred method. Payment of a small amount (around 30%) needs to be done while placing the order, as advanced payment is pretty standard in the woodwork business. The remaining amount will be calculated automatically and relayed to the Seller/Carpenter and Customer in the receipt.

2.4.7 Order Tracking and Details

Customer can track their orders and monitor every detail. Customers can see the order status that is updated by the Carpenters and Sellers.

2.4.8 Receipt Generation

Receipts will be given by the Admin. These receipts will be received by the buyers and sellers. The Receipt will have the following details:

- 1. Name of the Seller/Carpenter/Customer.
- 2. Type of Order
- 3. Order Amount

- 4. Advance amount paid
- 5. Order Date
- 6. Order Status

2.4.9 Feedback

Customers can give ratings and reviews. Ratings will give out 5 stars. Reviews can be given to Carpenters and Sellers. This serves to build an ecosystem where Sellers and Carpenters can receive valuable feedback.

2.5 Use Case Diagrams

Seller:

- 1. In the Seller use case diagram Seller is the Actor.
- 2. Seller can handle the following use cases:
 - A. Apply for account creation
 - B. Login Process
 - C. Update Account Details
 - D. Seller Inventory Updation
 - E. Seller Stock Updation
 - F. Seller Order Viewing and Confirmation
 - G. View Customer Ratings

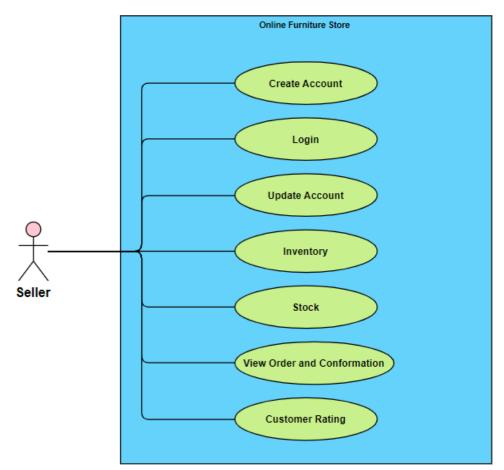


Fig. Use case diagram for Seller Model

Carpenter:

- 1. In the Carpenter use case diagram Carpenter is the Actor.
- 2. Carpenter can handle following use cases:
- A. Apply for account creation
- B. Login Process
- C. Update Account Details
- D. Upload Previous Work Details
- E. Approve/View Customer Requests
- F. Update Order Status
- G. View Customer Ratings

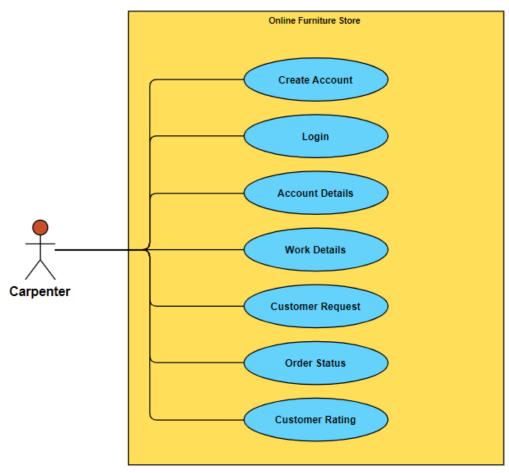


Fig. Use case diagram for Carpenter Model

Admin:

- 1. In the Admin use case diagram Admin is the Actor.
- 2. Carpenter can handle following use cases:
 - A. Login Process
 - B. Seller and Carpenter Approval
 - C. View Carpenters and Sellers
 - D. Transaction Report Generation

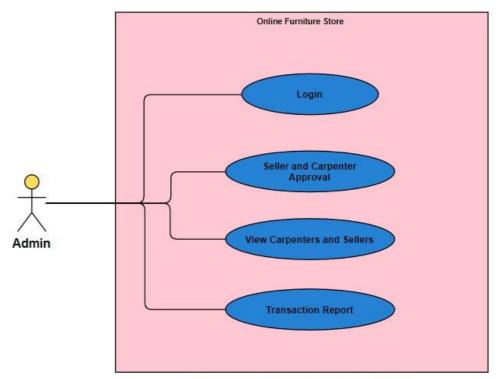


Fig. Use case diagram for Admin Model

Customer:

- 1. In the customer use case diagram, Customer is the Actor.
- 2. Customer can handle following use cases:
- A. Account Creation Process
- B. Login Process
- C. Update Account Details
- D. View Product Catalog
- E. Order Placement
- F. Order Tracking and Details
- G. Customer Payment
- H. Feedback

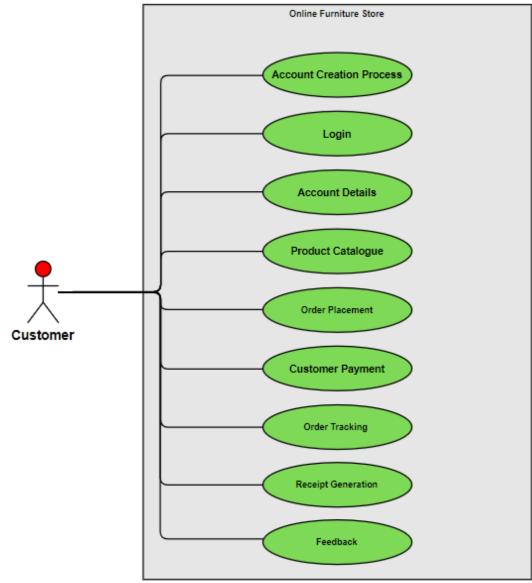


Fig. Use case diagram for Customer Model