

## Use Cases and queries for MyAmazon E-commerce Application

### Signup:

ID:	1
Title:	Signup
Description:	A new user needs to signup before being able to make purchases on the application. A user profile will be generated and the details of the user will be added to the database.
Primary Actor:	New User/Customer
Preconditions:	The new user should have a valid email id.
Postconditions:	The user will now be able to log in and make purchases on the application.
Main Success Scenario:	<ol style="list-style-type: none"><li>1. The user will input a valid email id and other details and submit.</li><li>2. The details will be added to the database and an account will be created.</li><li>3. The user can now log in and make purchases on the website.</li></ol>
Extensions:	<ol style="list-style-type: none"><li>1. The signup will fail if the user does not have a valid email id or if an account with that email id already exists.</li><li>2. The signup will fail if the password is too weak.</li></ol>
Frequency of Use:	This use case will only be used once by a particular user. The frequency will approximately be equal to the number of new users in a particular time frame.
Priority:	High

Query:	Add the new user to the database. Username, email, mobile, name, address, password (hashed), payment method(optional)

### Login:

ID:	2
Title:	Login
Description:	Login to myAmazon by entering username/email and password, which will be checked by the backend myAmazon servers.
Primary Actor:	Consumer.
Preconditions:	System will be displaying home page.
Postconditions:	System will again be displaying the home page, but the products displayed will be personalized based on user's past purchases and searches.
Main Success Scenario:	<ol style="list-style-type: none"> <li>1) User will enter their username/email id and password.</li> <li>2) System will show that the user has logged in successfully.</li> <li>3) User will be directed to the personalized home page.</li> </ol>
Extensions:	<ol style="list-style-type: none"> <li>1) Login will fail if user is not registered.</li> </ol>

	2) Login will fail in case of incorrect email id/ password.
Frequency of Use:	This use case will be used every time a consumer wishes to use this service.
Priority:	High
Query:	1) Select username from db where username="XYZ" 2) Select password from db where username="XYZ" if(password!="123") throw error;

### **Browse products:**

ID:	3
Title:	Browse products
Description:	User will browse products based on their requirements. They can select various categories like fashion, electronics, decor, etc. They can also filter based on the brands, prices, availability, etc.
Primary Actor:	Consumer, user.
Preconditions:	System will be displaying home page, or the latest page it had been on.
Postconditions:	System will display the results after applying all the filters mentioned by the user.

Main Success Scenario:	<ol style="list-style-type: none"> <li>1) User will either open a category from given categories or will enter their choice in the search bar.</li> <li>2) System will show these results to the user.</li> <li>3) User can enter further enter filters like price range, availability, brand name, etc. and system will show those results.</li> </ol>
Extensions:	None.
Frequency of Use:	This use case will be used every time a user wishes to browse any product.
Priority:	Moderate
Query:	<ol style="list-style-type: none"> <li>1. Select all products from db where productName like 'abc%'</li> <li>2. Select all products from db of a particular category</li> <li>3. Select all products from db where category=decor and price&lt;7000.</li> <li>4. Select all products from db within a price range.</li> <li>5. Select all products where rating&gt;3.5</li> <li>6. Select all or some details of a particular item (availability, feedback, rating, exchange date, mrp, brand name, category, discounted price, discount)</li> </ol> <p>And other such browsing related queries.</p>

**View reviews:**

ID:	4
Title:	View Reviews
Description:	User can view reviews of any products in myAmazon.
Primary Actor:	Consumer, user.
Preconditions:	A product should be selected whose reviews a user wants to see.
Postconditions:	System will show ratings as well as reviews of the product selected by the user. User can add any reviews.
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. User will select any product from myAmazon catalogue.</li> <li>2. User can select on reviews.</li> <li>3. System will show all reviews of that product.</li> <li>4. User can add reviews.</li> </ol>
Extensions:	None.
Frequency of Use:	This use case will be used only if a user wishes to see reviews of the product, or add any reviews.
Priority:	Low
Query:	<ol style="list-style-type: none"> <li>1. Select all reviews from db where productId="123"</li> <li>2. Add a rating and review for a product from a consumer.</li> </ol>

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### Buy now:

ID:	5
Title:	Buy now
Description:	User can buy any product instantly using this feature.
Primary Actor:	User
Preconditions:	None.
Postconditions:	System will proceed to the add delivery address page.
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. User will browse any product.</li> <li>2. User will proceed to buy that product.</li> <li>3. User will be prompted to add delivery address.</li> </ol>
Extensions:	None.
Frequency of Use:	This use case will be used whenever a user wishes to buy a product instantly.
Priority:	High.
Query:	<ol style="list-style-type: none"> <li>1. Add order to the database. (insert {orderID, productDetails, userID, paymentMethod, amountPaid, ShippingDetails} to db)</li> </ol>

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### Add to cart:

ID:	6
Title:	Add to cart
Description:	User can add any product to their cart, upto 50.
Primary Actor:	User
Preconditions:	System will be in the latest condition that user will be using.
Postconditions:	Product will be added in cart. User can view their cart, continue browsing, or proceed to buy items in the cart.
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. User will browse any product.</li> <li>2. User will proceed to add that product in the cart.</li> <li>3. User can now continue browsing or proceed to buy items in the cart.</li> </ol>
Extensions:	<ol style="list-style-type: none"> <li>1. System will show an error if there are more than 50 products in the cart.</li> <li>2. System will show an error if the user proceeds to buy without any items in the cart.</li> <li>3. There will be an extension of the empty cart which will empty the user's cart.</li> </ol>
Frequency of Use:	This use case will be used whenever a user will want to add any products in their cart, to save items for the future.

Priority:	Moderate.
Query:	<ol style="list-style-type: none"> <li>1. Add product to cart. (insert userID, productID, qty, totalPrice to cart)</li> <li>2. Select all products from cart where userID=current userID.</li> <li>3. Delete all from cart where userID is current userID.</li> <li>4. Select sum(price) from cart where userID=current userID</li> <li>5. Select productID from cart where brand name="xyz"</li> <li>6. Select product details from cart where productID="123" and userID=current userID.</li> <li>7. Add products from cart to the wishlist.</li> </ol> <p>And other such selection queries.</p>

#### **Add to wishlist:**

ID:	7
Title:	Add to wishlist
Description:	User can add any products to their wishlist
Primary Actor:	User
Preconditions:	System will be in the latest condition that user will be using.



Postconditions:	Products will be added in the wishlist. User can view their wishlist, continue browsing, or proceed to add items in the cart.
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. User will browse any product.</li> <li>2. User will proceed to add that product in the wishlist, if user does not wish to buy it soon.</li> <li>3. User can now continue browsing or proceed to add items in the cart.</li> </ol>
Extensions:	<ol style="list-style-type: none"> <li>1. There will be an extension of empty wishlist.</li> </ol>
Frequency of Use:	This use case will be used whenever a user will want to add any products in their wishlist, to save items for the future.
Priority:	Low.
Query:	<ol style="list-style-type: none"> <li>1. Add product to cart. (insert userID, productID, qty, totalPrice to cart)</li> <li>2. Select all products from wishlist where userID=current userID.</li> <li>3. Delete all from wishlist where userID is current userID.</li> <li>4. Select sum(price) from wishlist where userID=current userID</li> <li>5. Select productID from wishlist where brand name="xyz"</li> <li>6. Select product details from wishlist where productID="123" and userID=current userID.</li> <li>7. Add products from wishlist to the cart.</li> </ol> <p>And other such selection queries.</p>

**Add delivery address:**

ID:	8
Title:	Add delivery address
Description:	Add delivery address to the system for products to be delivered, and save it for future reference.
Primary Actor:	Consumer
Preconditions:	System will be default state.
Postconditions:	After a consumer has added their delivery address, system will show the delivery page where user can save or update their address, or add multiple addresses.
Main Success Scenario:	<ol style="list-style-type: none"><li>1. Initially the system will be default state.</li><li>2. In case a consumer proceeds to buy, or a user wishes to add or update their address, address page will be opened by the system.</li><li>3. Address is entered/ updated/ deleted by the user.</li><li>4. System will then go to payment details in case of a consumer selecting proceed to buy, or will go back to its default state.</li></ol>
Extensions:	None.
Frequency of Use:	Adding address use case will be used once or a few times in case addresses have changed. Selecting an address will be used every time consumer proceeds to buy an item.

Priority:	High
Query:	<ol style="list-style-type: none"> <li>1. Update address for the current user.</li> <li>2. Select “add1” from address where userID=current userID and make it default address.</li> <li>3. Delete address where userID=current userID.</li> <li>4. Display all addresses.</li> </ol>

### Place an order:

ID:	9
Title:	Place an order
Description:	Consumer can use proceed to buy whenever they wish to buy any myAmazon DB products selected by them.
Primary Actor:	Consumer
Preconditions:	System will either be displaying shopping cart, or product selected by the consumer.
Postconditions:	System will redirect to the payment page where user can select their delivery address, promo codes, payment details.
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. User can click on proceed to buy from their shopping cart, or from a selected product.</li> </ol>

	<ol style="list-style-type: none"> <li>2. Consumer will add required details like select delivery address, payment details, etc .</li> <li>3. System will redirect to a confirmation page showing an order is placed.</li> </ol>
Extensions:	None.
Frequency of Use:	This use case will be used by the consumer whenever they proceed to buy any products.
Priority:	High
Query:	<ol style="list-style-type: none"> <li>1. Select a product from cart; then place an order.</li> <li>2. View order summary (product IDs of all products selected, discounts applied, final price.)</li> </ol>

#### **Add payment info:**

ID:	10
Title:	Add payment info
Description:	Add credit card or bank details or select pay on delivery.
Primary Actor:	Consumer
Preconditions:	Some products will be selected by the consumer.

Postconditions:	System will display confirmation on the details user entered and will show proceed to buy. System will also review product details.
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. Consumer will select one or more products.</li> <li>2. Consumer will enter required payment details like credit or debit card info, bank info, paytm wallet, or pay on delivery.</li> <li>3. System will review product details.</li> </ol>
Extensions:	<ol style="list-style-type: none"> <li>1. It will show error if card details are wrong.</li> <li>2. It will show error if selected payment mode does not have enough balance.</li> <li>3. It will show error if selected card is expired.</li> </ol>
Frequency of Use:	This use case will be used everytime a consumer proceeds to buy any product.
Priority:	High
Query:	<ol style="list-style-type: none"> <li>1. Display all payment methods registered by the user.</li> <li>2. Add a new payment method.</li> <li>3. Update an existing payment method.</li> <li>4. Select payment type.</li> <li>5. Select order id</li> <li>6. Select date of delivery</li> </ol>

## Checkout:

ID:	11
Title:	Checkout
Description:	Checkout page will be shown when an order is placed. Consumer can then review orders, cancel order, track any order, or replace order.
Primary Actor:	Consumer
Preconditions:	Before checkout, system will be in confirm payment state.
Postconditions:	After confirming payment, system will redirect to checkout page. The system will now display review order, track order, cancel order, Buy again, archive order, etc.
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. Consumer will place an order.</li> <li>2. Checkout page will display review order, track order, cancel order, Buy again, archive order, etc.</li> </ol>
Extensions:	None.
Frequency of Use:	This use case will be used whenever a consumer places any orders, and when they wish to track, cancel, review their order.
Priority:	High
Query:	<ol style="list-style-type: none"> <li>1. Cancel order1 from orders</li> <li>2. Track order1 from orders</li> <li>3. Get payment details of order 1 from orders</li> <li>4. Repeat order1 from orders.</li> <li>5. Track order1 from orders</li> </ol>

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### Edit profile:

ID:	12
Title:	Edit profile
Description:	Edit profile is used to update email ID, name, contact details of the user.
Primary Actor:	User
Preconditions:	User should be logged in the system.
Postconditions:	Updated details are saved in the database.
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. User should be logged in.</li> <li>2. User will go to edit profile option.</li> <li>3. User will edit thier details like email id, contact number, name.</li> <li>4. These details will be saved in the database.</li> </ol>
Extensions:	None.
Frequency of Use:	This use case will be used whenever a user changes their email id or contact number, or wishes to save another name.
Priority:	High

Query:	<ol style="list-style-type: none"> <li>1. Display old email id, name, contact details.</li> <li>2. Store updated email id, name, contact details in the db.</li> <li>3. Display updated email id, name, contact details.</li> </ol>

### Order history:

ID:	13
Title:	Order history
Description:	User can view a summary of their previous orders.
Primary Actor:	User
Preconditions:	User should be logged in the system.
Postconditions:	System will show a summary of previous orders.
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. User should be logged in.</li> <li>2. User will go to order history option.</li> <li>3. User can view their past orders.</li> </ol>
Extensions:	None.
Frequency of Use:	This use case will be used whenever a consumer wishes to view their previous orders.
Priority:	High



Query:	<ol style="list-style-type: none"> <li>1. Select all orders from order history.</li> <li>2. Select sum(price) from order history where userID=current user ID. (display total amount spent till now)</li> <li>3. Select productID from orderHistory and repeat order.</li> </ol>

### **Seller registration:**

ID:	14
Title:	Seller registration
Description:	This use case can be used by any suppliers to register themselves on myAmazon.
Primary Actor:	Supplier
Preconditions:	None
Postconditions:	Supplier will be registered in to the system.
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. Supplier will register.</li> <li>2. Supplier details will be added into the database.</li> </ol>
Extensions:	<ol style="list-style-type: none"> <li>1. Contact details should be valid else the system will throw an error.</li> <li>2. Store or warehouse details should be valid else system will throw an error.</li> </ol>

Frequency of Use:	This use case will be used whenever a supplier wishes to register in myAmazon.
Priority:	High
Query:	<ol style="list-style-type: none"> <li>1. Add supplier to the database. (supplier will have details like supplier name, supplier ID, warehouse/store location, company name, etc.)</li> <li>2. Check if supplier ID exists in the database.</li> </ol>

#### **Edit seller details:**

ID:	15
Title:	Edit seller details
Description:	This use case can be used by any suppliers to edit their details.
Primary Actor:	Supplier
Preconditions:	Supplier should be registered in the system.
Postconditions:	Updated details will be reflected in the database.
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. Supplier will login to the system.</li> <li>2. Edit their details.</li> <li>3. Updated details can now be viewed in the database.</li> </ol>

Extensions:	None.
Frequency of Use:	This use case will be used whenever a supplier wishes to edit their details.
Priority:	High
Query:	<ol style="list-style-type: none"> <li>1. Update warehouse location.</li> <li>2. Delete “add2” from addresses where supplierID=current supplier ID.</li> <li>3. Select all details from db where supplier ID=current supplier ID.</li> <li>4. Select all products from db where supplier ID = current supplier ID.</li> </ol>

### **Add/edit product details:**

ID:	16
Title:	Add/edit product details.
Description:	This use case can be used by any suppliers to add products, or edit details of any existing products.
Primary Actor:	Supplier
Preconditions:	Supplier should be registered in the system.
Postconditions:	Updated/Added products will be reflected in the database.

Main Success Scenario:	<ol style="list-style-type: none"> <li>1. Supplier will login to the system.</li> <li>2. Supplier will add/edit products.</li> <li>4. Added Products can now be viewed in the system.</li> </ol>
Extensions:	None.
Frequency of Use:	This use case will be used whenever a supplier wishes to add products.
Priority:	High
Query:	<ol style="list-style-type: none"> <li>1. Add products to the database. (it will have details like product image, product ID, product name, brand name, quantity, price, discount, product category, subcategory)</li> <li>2. Edit product quantity where product ID="23"</li> <li>3. Update availability status of a product where product id="123"</li> <li>4. Delete a product from db where supplier ID="xyz" and product ID="123"</li> <li>5. Add new variants and images of the products.</li> </ol>

### Shipping agency:

ID:	17
Title:	Shipping agency.
Description:	Shipping agency can register in myAmazon DB, and update order status for consumer to track.

Primary Actor:	Shipping agency.
Preconditions:	1. Shipping agency should be registered.
Postconditions:	System will store details like name of the shipping agency, location in their database. Shipping agency will keep updating order status. Consumer can view the status of their orders.
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. Shipping agency will register in myAmazon DB.</li> <li>2. Their details will be stored in the system.</li> <li>3. Agency will update status of order.</li> <li>4. Consumer can view the status of their orders.</li> </ol>
Extensions:	None.
Frequency of Use:	This use case will be used whenever an agency wished to register and update order status.
Priority:	High
Query:	<ol style="list-style-type: none"> <li>1. Add shipping agency to the database.</li> <li>2. Update location of shipping agency.</li> <li>3. Add a new location for shipping agency.</li> </ol>