Team:

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Title:

Breaking Bread

Project Summary:

Breaking Bread is an online bakery store with a catalogue of bakery utensils, merchandise, and customizable baked goods that are shipped directly to your home.

Project Requirements:

User Requirements

- UR-01: As a customer or admin, I can use my email to sign up
- UR-02: As a customer or admin, I can search for available products
- UR-03: As a customer, I can add items to my cart
- UR-04: As a customer, I can delete items from my cart
- UR-05: As a customer, I can submit orders
- UR-06: As a customer, I can view my orders
- UR-07: As a customer, I can customize items
- UR-08: As a customer, I can cancel orders
- UR-09: As an admin, I can remove products
- UR-10: As an admin, I can add new products
- UR-11: As an admin, I can modify products
- UR-12: As an admin, I can add temporary deals to products
- UR-13: As an admin, I can view customer accounts
- UR-14: As an admin, I can remove customer accounts

Business Requirements

- BR-01: Login names must be the email used when signing up
- BR-02: Admins must use a company email to sign up

Functional Requirements

- FR-01: When a customer submits an order, the quantity of products should decrease accordingly
- FR-02: When a customer adds an item to cart they should be able to customize it
- FR-03: When a customer searches for products, they should be provided with matching products
- FR-04: When an admin signs on, they should be able to view a dashboard

Non-Functional Requirements

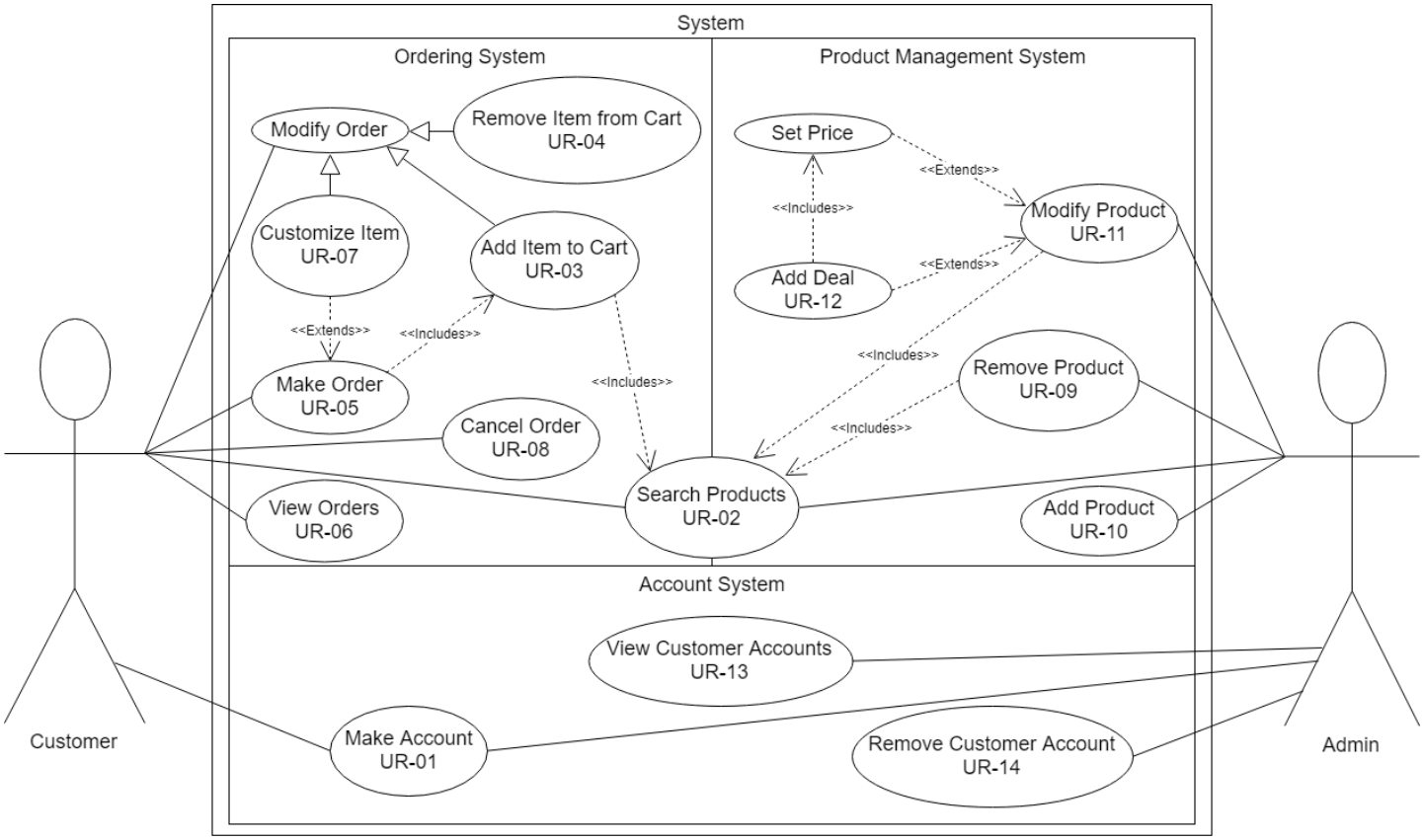
- NR-01: Support up to 200 concurrent users
- NR-02: Support up to 10,000 products
- NR-03: The system should be up 24/7
- NR-04: All user information should be encrypted

Data Storage:

MySql using JDBC

Use Cases:

Use Case Overview



Use Case Documents:

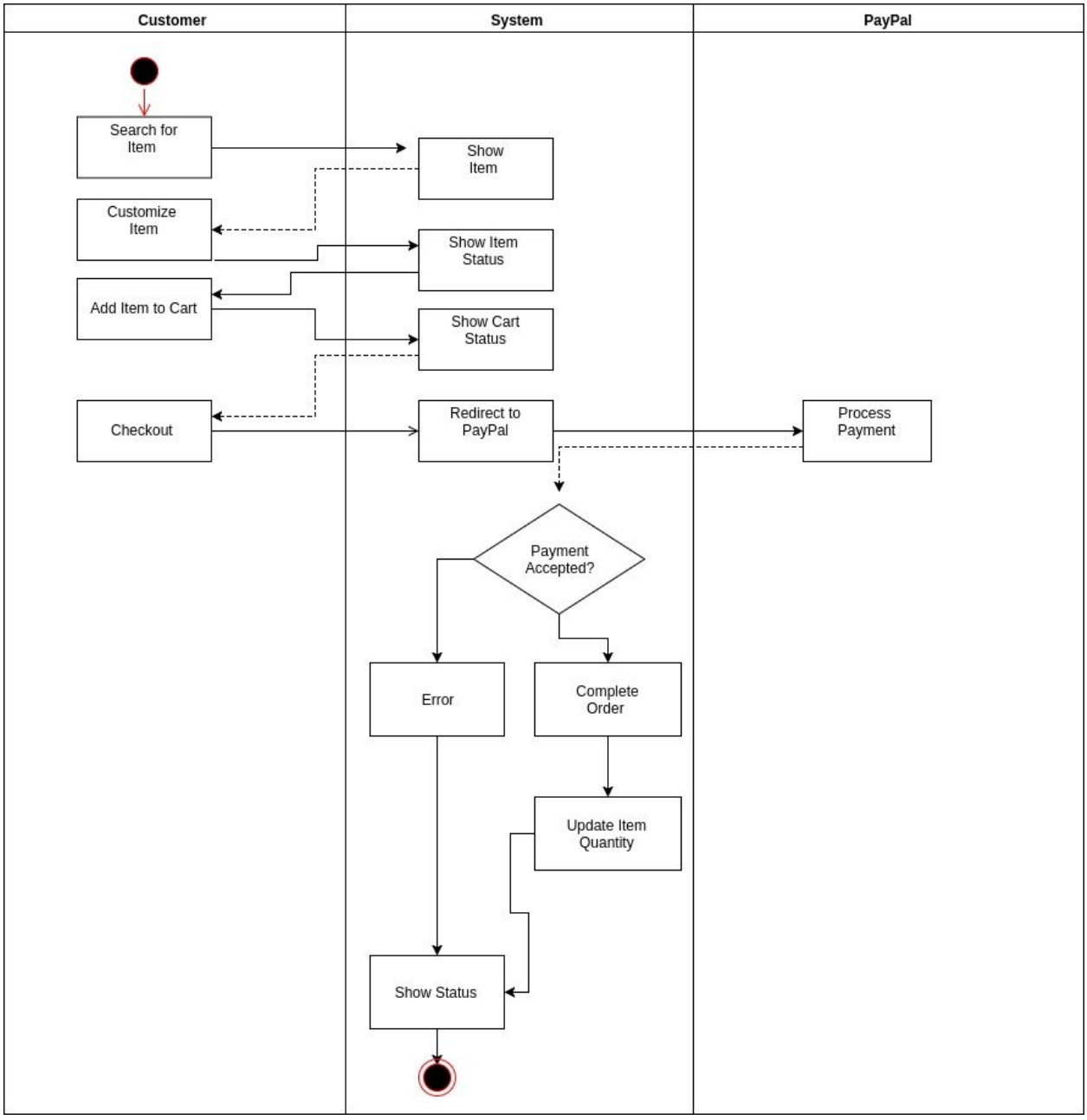
Use Case ID	**UR-05**		
Use Case Name	Make an order		
Description	Customer can find and purchase a set of products.		
Actors	Customers		
Pre-conditions	Customer is logged in. Selected products are in stock. Customer has valid shipping address. Customer has sufficient money to purchase products.		
Post-conditions	Product quantities are updated. Products are baked, if necessary, and then shipped to customer.		
Frequency of Use	Frequently throughout the day by customers.		
Flow of Events		**Actor Action**	**System Response**
	1	Click on search bar.	
	2	Enter keywords for desired product.	Displays relevant products.
	3	Click on desired product.	Display product information.
	4	Click on add to cart button.	Display quantity of items in Cart and subtotal.
	5	Click on checkout.	Display amount due. Confirm shipping address.
	6	Click confirm.	Ask for PayPal information.
	7	Enter PayPal information.	PayPal processes purchase. System displays success message. Products are shipped to shipping address.
Variations	**1.** Browse by category displayed on the homepage. **4.** Click on Customize button to customize product before adding to cart. **4.** Click on Buy Now button to immediately go to shipping address confirmation. **5.** Click on search bar again and repeat actions 1 through 4 to add additional items. **6.** Click Change button and enter new shipping address.		
Exceptions	**2.** Error message: No search results. **4.** Error message: Out of stock. **7.** Error message: Payment failed. **7.** Error message: Invalid PayPal account.		

Notes	Products are the generic class of objects sold and Items are instances of Products. Hence, you search for a Product, e.g., Birthday Cake, but buy an Item, e.g., the specific Birthday Cake 423.

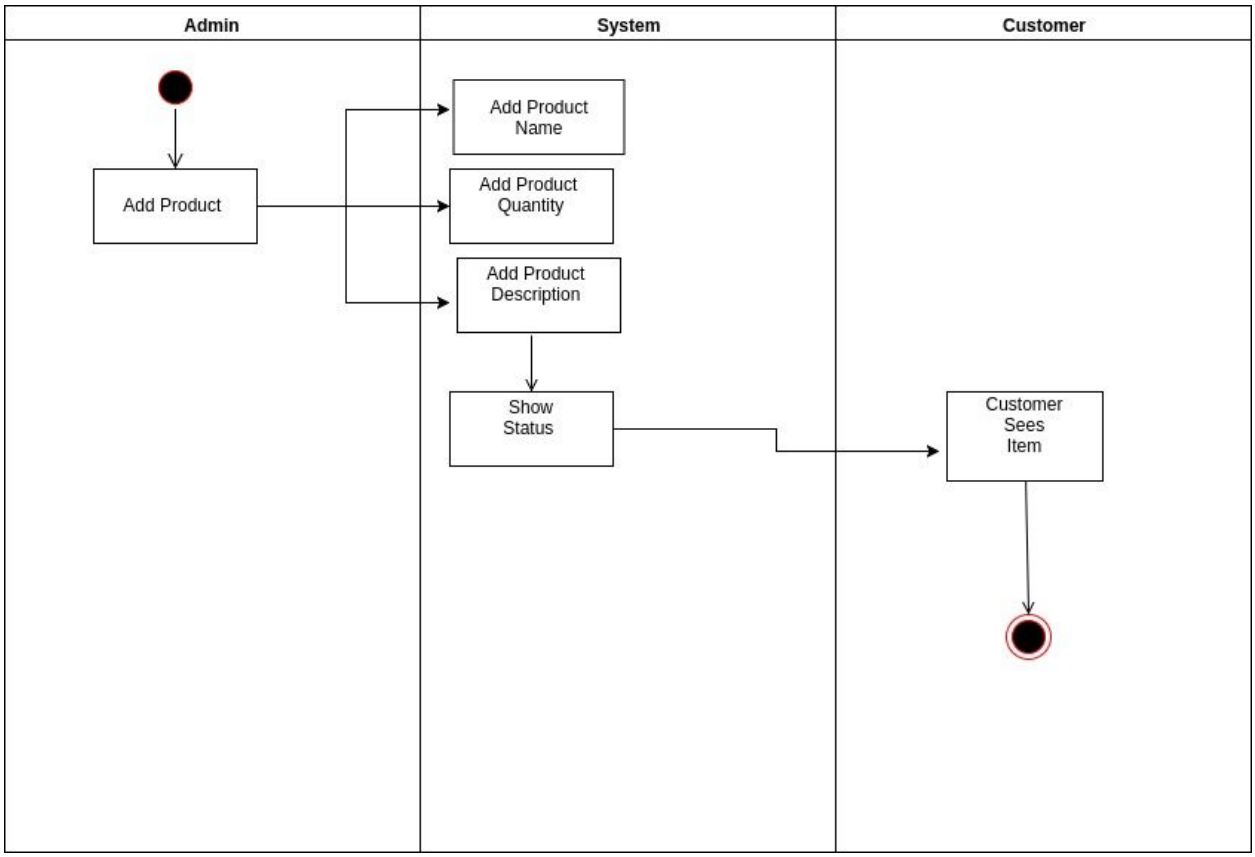
Use Case ID	**UR-10**		
Use Case Name	Add a product		
Description	Admin can add a product to the online catalog.		
Actors	Admin		
Pre-conditions	Admin is logged in. Store has ingredients/supplies for product. Store has image of product		
Post-conditions	Product is added to database Product is available on online store		
Frequency of Use	Occasionally every month by admins		
Flow of Events		**Actor Action**	**System Response**
	1	Click on add product button.	Ask for product title.
	2	Enter product title.	Ask for product quantity
	3	Enter product quantity.	Ask for product description.
	4	Enter product description.	Ask for product price.
	5	Enter product price.	Ask for image upload.
	6	Click on Upload Image.	Open local directory.
	7	Select image file.	Display and confirm image.
	8	Click on Yes	Display and confirm product store page.
	9	Click on Finished	Return to admin homepage.
Variations	**6.** Click on No Image to give product default image **8.** Click on Upload Images to add one or more images **9.** Click on Customize button to add customization options		
Exceptions	**2.** Error message: Name already taken **5.** Error message: Invalid price **7.** Error message: Unsupported file type		

Activity Diagrams:

Use Case UR-05: Making an Order

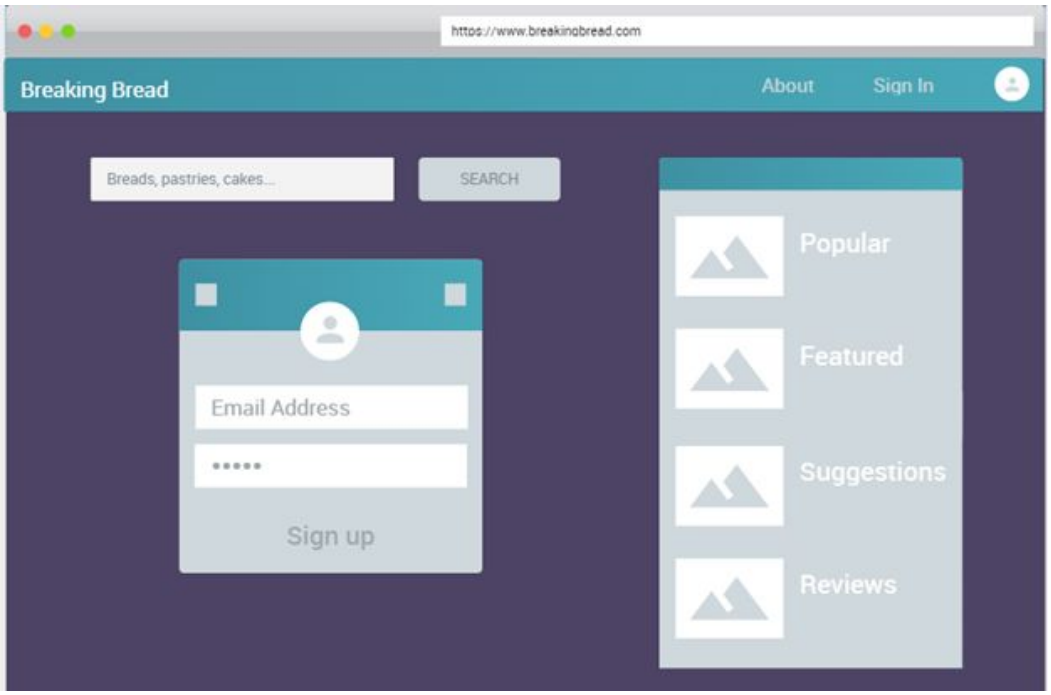


Use Case UR-10: Adding a new product

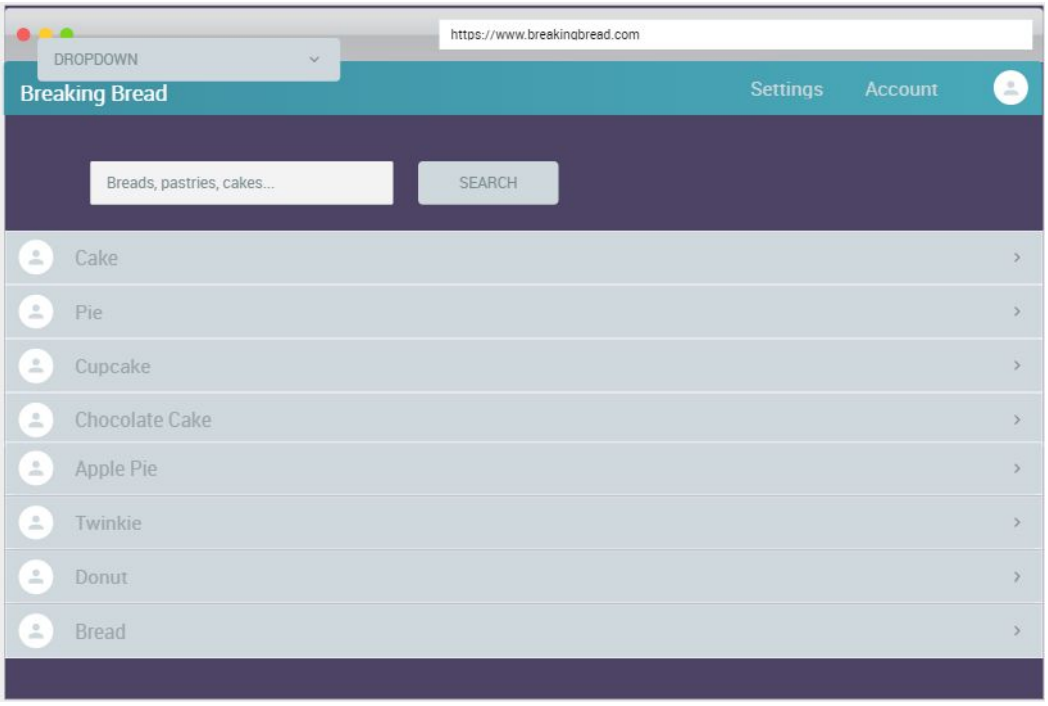


UI Mockups:

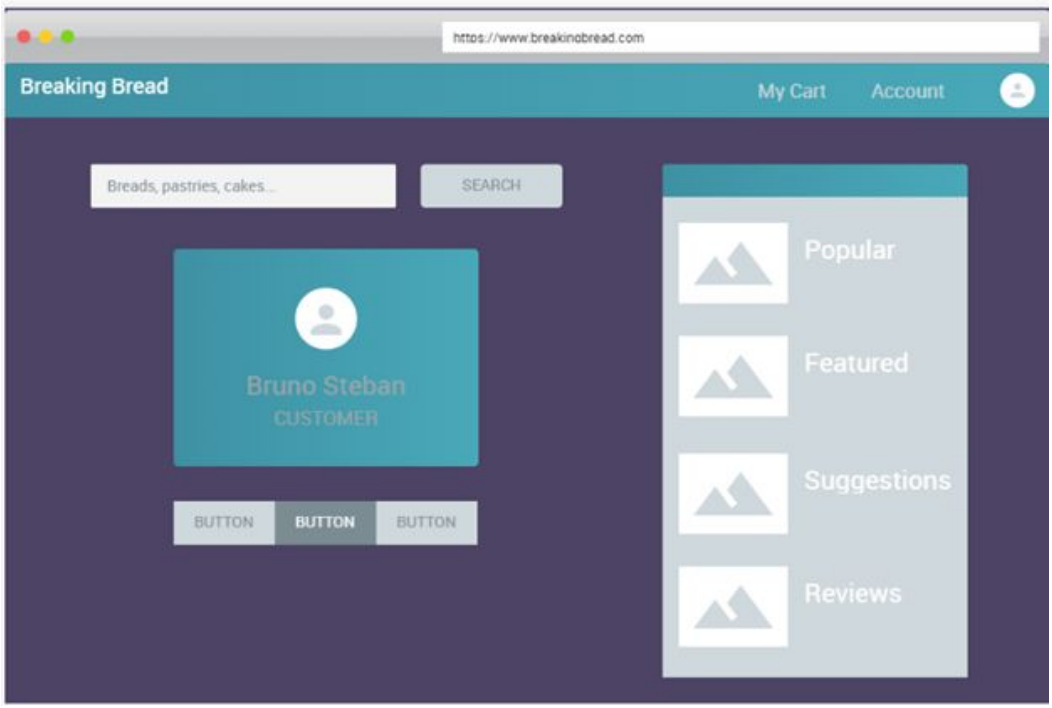
User Sign Up



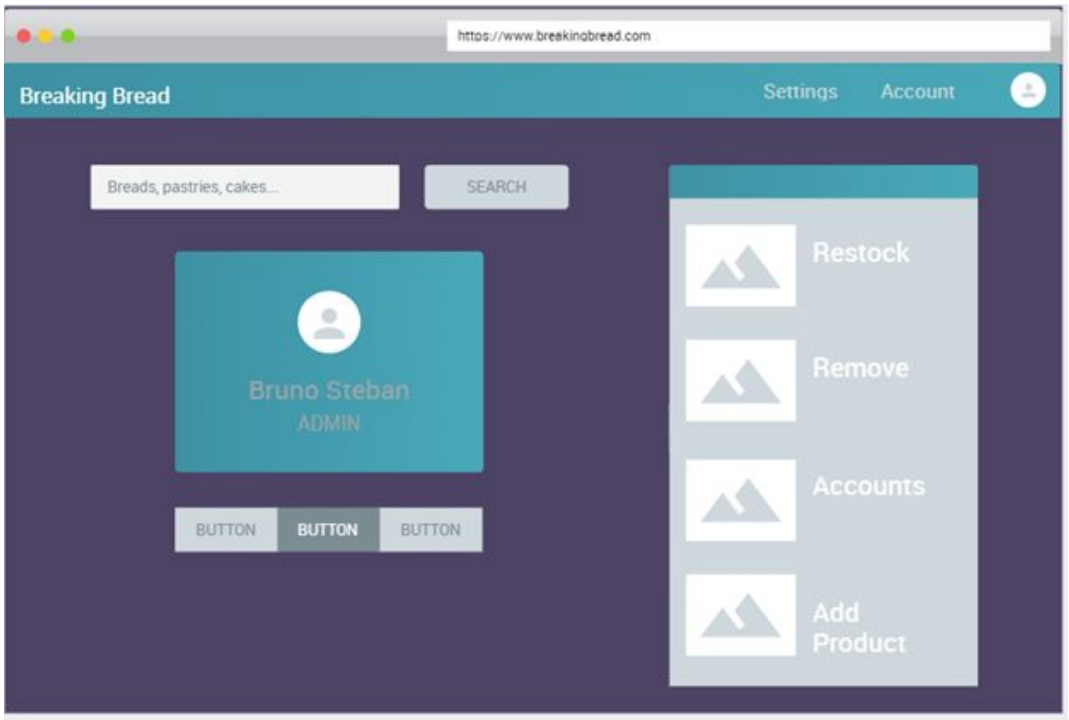
Search Result



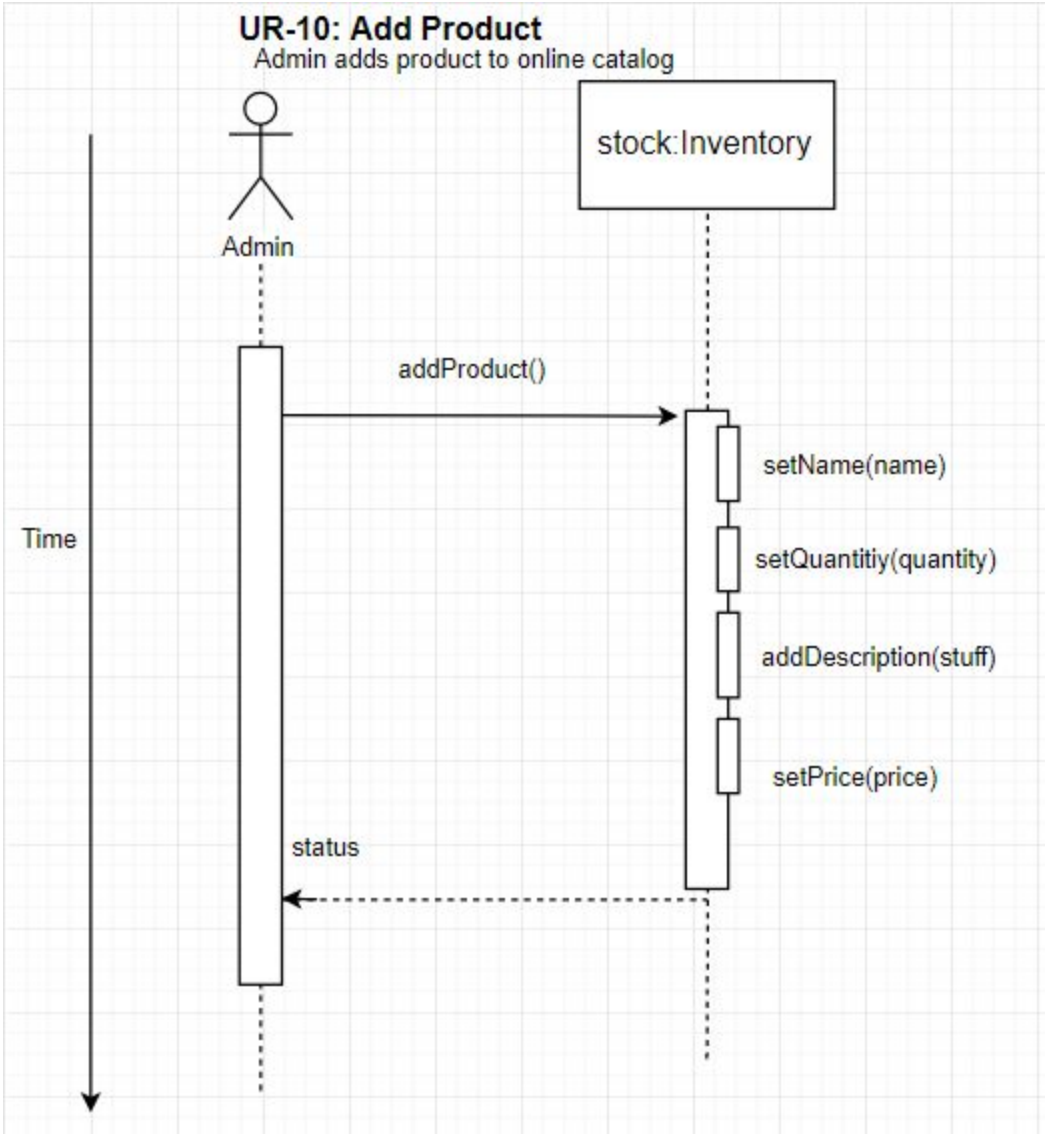
User Homepage

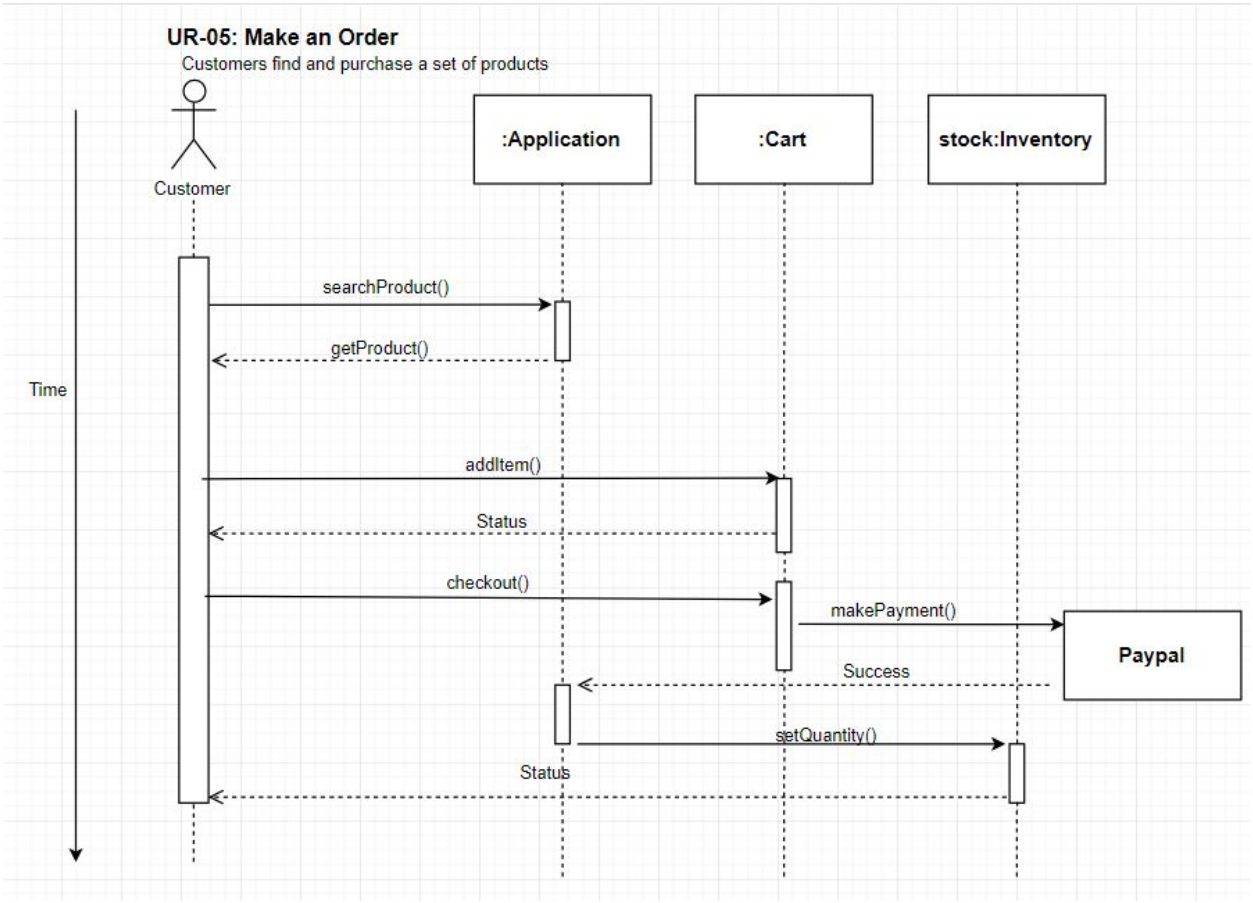
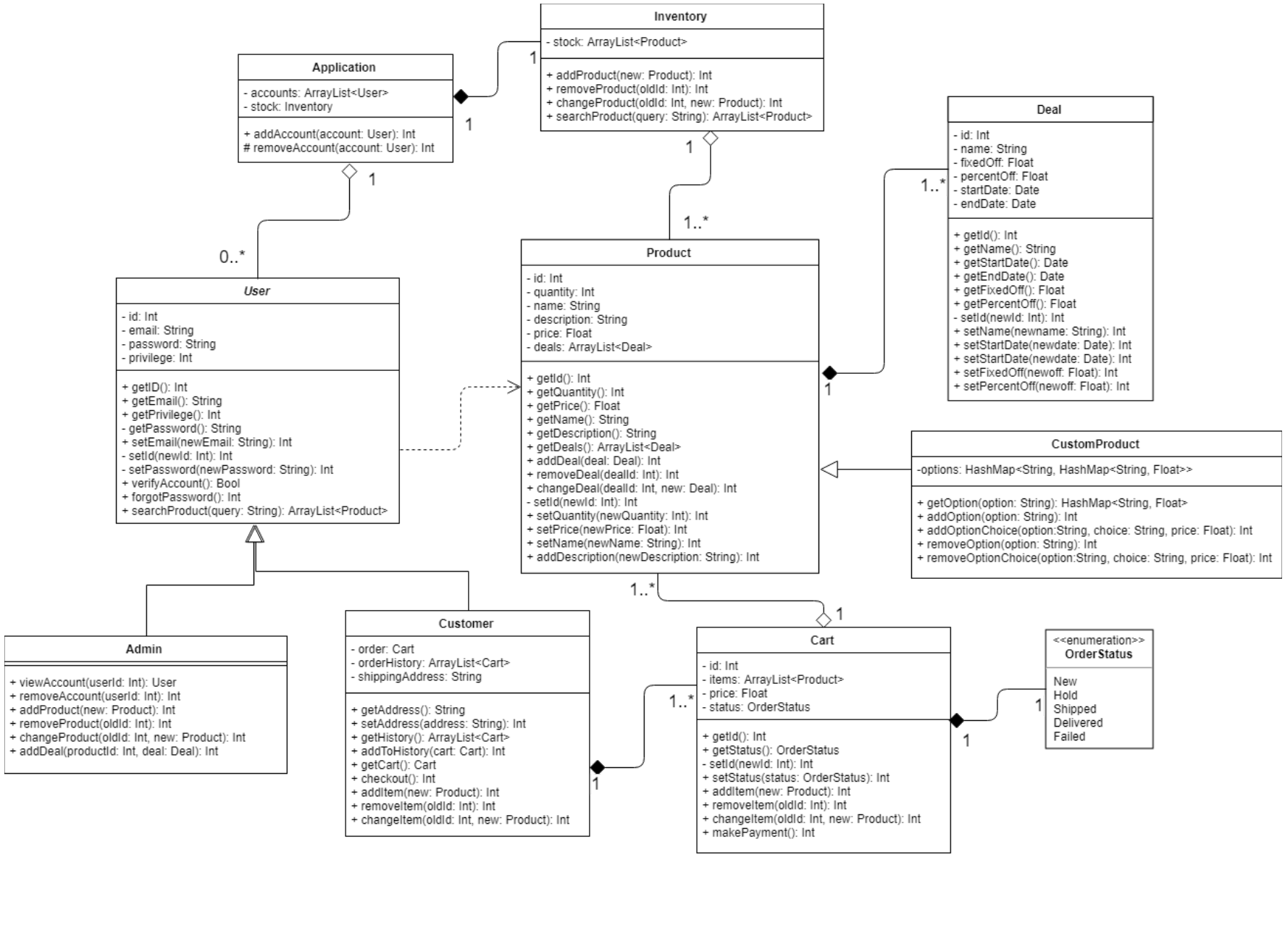


Admin Homepage



User Interactions:




UR-05: Make an Order
Customers find and purchase a set of products
Customer
:Application
:Cart
stock:Inventory
Time
searchProduct()
getProduct()
addItem()
Status
checkout()
makePayment()
Paypal
Success
setQuantity()
Status

Class Diagram: