

Database Design

UserInfo (uid, first_name, mid_name, last_name, email, address, password, balance)

Description and constraints:

- uid describes the unique ID assigned to each user and is the superkey
- emails must be unique

Seller (uid)

Description and constraints:

- a seller must also be a user

Products (product_id, category, name, descrip, img_link, price)

Description and constraints:

- Each product belongs to one category
- product_id is to uniquely identify each product
- Name, description, image, price cannot be null
- image must also be unique

SellProducts (seller_id, product_id)

Description and constraints:

- primary key is seller_id and product_id combined

Purchases (order_id, seller_id, product_id, date, uid, num_items, fulfillment_status)

Description and constraints:

- Each purchase has a unique order ID
- Dated so it can be sorted chronologically

UserCarts (uid, product_id, seller_id, quantity)

Description and constraints:

- No entry in the cart can agree on the user, product, and seller, since any repeat would be recorded as higher quantity but not an additional entry in the table
- Each entry in the cart refers to one product from one seller with a specific quantity

Feedback (buyer_id, product_id, rating, review, date)

Description and constraints:

- A review/rating will be uniquely identified by the user and product it is about

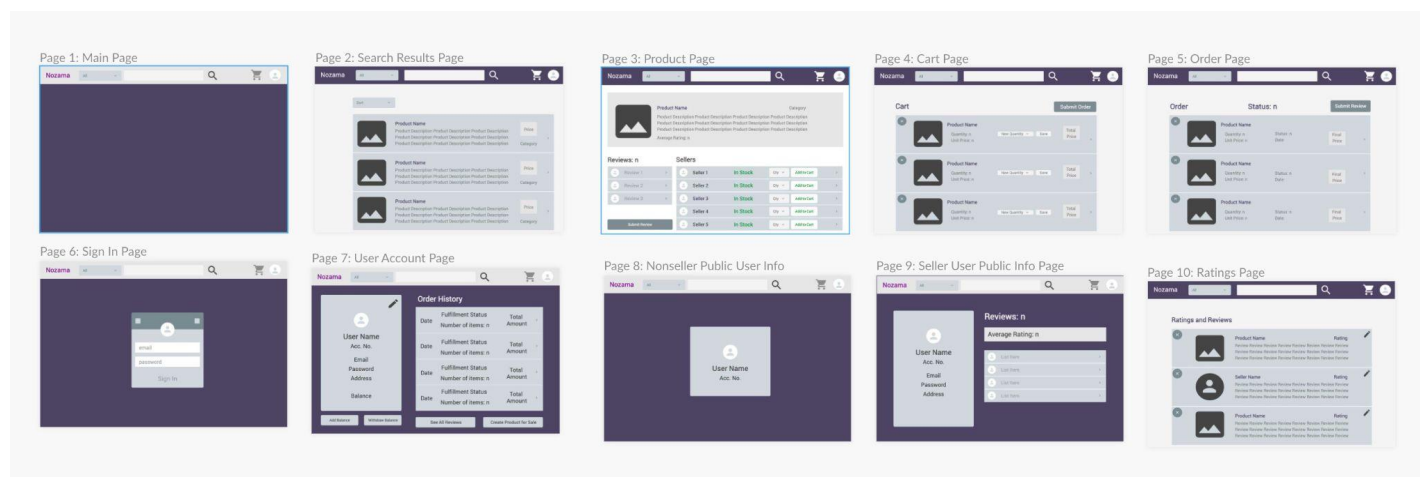
- A user cannot submit multiple ratings/reviews for the same product

SellerReviews (uid, seller_id, review,rating)

Description and constraints:

- A review/rating will be uniquely identified by the uid and seller_id where uid is the current user and seller_id is the seller being reviewed
- A user can only submit a single rating/review for a seller, provided that the user has ordered something from the seller

Original Mock up and Flow



1. Main Page
 - a. Acts as the homepage for our online retail website. Should include user-catered products and recommendations based on recently watched/purchased that lead directly into product pages (page 3). Also features a search bar which leads into page 2, a cart button that leads into page 4, and user button that leads into page 6 or page 7, depending on if the user is already signed in or not. All pages lead directly back to this page when the user clicks on the logo in the top left corner
2. Search Results Page
 - a. Shows products based on search query. Can be accessed from any other page when using the search bar on the top. Leads directly into page 3 when clicking on a product. Also leads into pages 1, 4, and 6/7 from the navigation bar on top.
3. Product Page
 - a. Shows description, price, and images of product. Leads into page 9 for information and other listings by seller and page 10 for ratings on given product. Also leads into pages 1, 2, 4, and 6/7 from the navigation bar on top
4. Cart Page
 - a. Lists all products that have been added to the cart by the user. Can adjust product quantity and remove any items from cart. Accessible from all pages via

the navigation bar. Leads directly into page 5 to order the items in the cart. Also leads into pages 1, 2, and 6/7 from the navigation bar on top.




5. Order Page
 - a. Lists all items that are currently in the cart. User inputs delivery address, payment info, and chooses shipping option. Also acts as a confirmation page for items from cart. User must already be logged in at this point. Accessible from page 4. Also leads into pages 1, 2, 4, and 7 from the navigation bar on top
6. Sign In Page
 - a. Allows user to log in to their account/sign up for an account if they don't already have one. Accessible from any other page if not already logged in and the account button in navigation bar is chosen. Leads back into page that the user was previously on. Also leads into pages 1, 2, and 4 from the navigation bar on top
7. User Account Page
 - a. Shows view history, purchase history, addresses, stored payment info. Accessible from any other page through navigation bar if already logged in. Also leads into pages 1, 2, and 4 from the navigation bar on top
8. Nonseller Public User Info
 - a. Shows name and basic contact info for non-sellers. Also lists the ratings/reviews that the users have previously left behind. Accessible from page 10 where the nonseller has left a review behind. Also leads into pages 1, 2, 4, and 6/7 from the navigation bar on top
9. Seller User Public Info Page
 - a. Gives average rating for the seller as well as a list of all products sold by the seller. Also gives contact information for users. Accessible from corresponding page 3 where product is sold by the seller and leads into all page 3s that are sold by the seller. Also leads into pages 1, 2, 4, and 6/7 from the navigation bar on top.
10. Ratings Page
 - a. Shows all the reviews and ratings for a particular item. Accessible from page 3 and leads back into page 3. Also leads into page 8 for users that leave ratings/reviews. Also leads into pages 1, 2, 4, and 6/7 from the navigation bar on top

Current Website Design

Main page:

Hello Stacey!

Products for sale:

	<p>scientist</p> <p>Night law occur certainly. Because fine nearly side arrive receive citizen. Change only involve lay. Your though American prevent step. Staff improve though bank power here onto.</p> <p>Category: a</p> <p>More Info</p>	\$2294.63
	<p>along</p> <p>Time significant example life collection several. Project world report others gun here. Hospital much care box middle operation.</p> <p>Category: c</p> <p>More Info</p>	\$2639.46
	<p>yourself</p> <p>Site strategy final recently. By together pretty even mind out learn. Know who add image military. Woman open stand. Him citizen nice plant campaign rate likely</p>	\$203.39

Sorted by price for category c

customer

Game morning marriage court dog. Pay piece include public. Well watch entire current.

Category: c

[More Info](#)

\$2898.85

blue

Benefit fill find this training office realize. Customer political network call within represent.

Category: c

[More Info](#)

\$2804.93

draw

Father to floor environmental support. Western for television. School receive hope suddenly nearly find ten pull. Daughter senior especially manage less. Perform our movie reduce against develop.

Category: c

[More Info](#)

\$2609.07

step

Dog firm rate general. Pull bar agree trip they black degree ok. It poor place shoulder. Student position home three. Professional prevent peace put deep course husband enter. Back brother film tell.

Category: c

[More Info](#)

\$2601.78

participant

Product Page:

Product Details:

	<p>blue</p> <p>Benefit fill find this training office realize. Customer political network call within represent.</p> <p>Average Rating: 4.00</p>	<div>\$2804.93</div> <div>Category: c</div>
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Product Reviews:

<div>Paul Jennifer Pugh</div> <div>11/15/2021</div> <div>Over common realize total set.</div>	<div>Rating: 5</div>
<div>James Jamie Fisher</div> <div>11/12/2021</div> <div>Former hair must do.</div>	<div>Rating: 3</div>

Product Sellers:

<div>Seller: Manuel Logan Tanner</div>	<div>1</div>	<div>Add to Cart</div>
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Product Page continued:

Product Reviews:

Paul Jennifer Pugh	11/15/2021	Rating: 5
Over common realize total set.		
James Jamie Fisher	11/12/2021	Rating: 3
Former hair must do.		
Paul Joseph Pruitt	11/3/2021	Rating: 4
Year yeah information both wear.		

Product Sellers:

Seller: Manuel Logan Tanner	1	Add to Cart
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Submit Review:

Rating out of 5:

Write a Review

What did you like or dislike?

Submit

Product Review Confirmation Page

Nozama

All

Search...

Search

Sort by Price

Log out

View Account

Cart

Thank you for leaving a review :)

You wrote: "My uncle chals loved this product!"
Your rating: 5/5

Back to Product

Login Page:

Nozama

All

Search...

Search

Sort by Price

Login

Cart

Login

Email

Password

Register

Sign In

Register page:

Nozama

All ▾

Search...

Search

Sort by Price

Log in

Cart

Register

First Name

Middle Name

Last Name

Email (Could be fake email address)

Password

Repeat Password

Address

Register

Successful register confirmation:

Nozama

All ▾

Search...

Search

Sort by Price

Log in

Cart

Login

Email

Password

- Congratulations, you are now a registered user!

Register

Sign In

View account page:

User Account Page

First Name: Stacey

Edit value

Submit Edit Value

Middle Name: Jeffrey

Edit value

Submit Edit Value

Last Name: Stevens

Edit value

Submit Edit Value

Email: frankstephanie@example.com

View account page continued:

Your recent purchases:

Account ID: 1
Order ID: 1566
Seller ID: 77
Quantity: 15
Fulfillment Status: Order received
Time Ordered: 2021-12-08 17:54:04.415581-05:00

Account ID: 1
Order ID: 1719
Seller ID: 498
Quantity: 19
Fulfillment Status: Delivered
Time Ordered: 2021-12-08 17:54:04.415581-05:00

Account ID: 1
Order ID: 1823
Seller ID: 95
Quantity: 19
Fulfillment Status: Shipped
Time Ordered: 2021-12-08 17:54:04.415581-05:00

Account ID: 1
Order ID: 1960
Seller ID: 140
Quantity: 11
Fulfillment Status: Order received
Time Ordered: 2021-12-08 17:54:04.415581-05:00

Public info page:

Non-Seller User Public Info

Stacey Jeffrey Stevens
frankstephanie@example.com
Account Id: 1

Seller private page:

Nozama

All

Search...

Search

Sort by Price

Log out

View Account

Cart

Seller: Stacey Jeffrey Stevens

frankstephanie@example.com

266 Rebecca Union Apt. 793 Bennettborough, UT 71543

Reviews






Number of Seller Ratings: 3

Average Seller Rating: 2.33


Student guess quality suggest second heavy.	Rating: 4
Section each fish more run.	Rating: 2
Professional us record much human each man of.	Rating: 1

Seller private page continued:

Products Currently Selling

	history Surface base myself. Often believe her behind. Near start whom peace. Agency newspaper bring station standard. Part value two.	\$977.84
	d hi lo mid	\$3.0
	cafe1 panera bread	\$3.0
	cafe2 Bella	\$4.0
		

Seller private page continued:

	cafe6 dunkin stars	\$2.0
		Category: 1 More Info

Add Item to Sell

<input type="text" value="name"/>	<input type="text" value="category"/>	<input type="text" value="description"/>	<input type="text" value="img_link"/>	<input type="text" value="price"/>	<input type="button" value="Add Item to Sell"/>
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Edit Product to Sell

<input type="text" value="name"/>	<input type="text" value="category"/>	<input type="text" value="description"/>	<input type="text" value="img_link"/>	<input type="text" value="price"/>	<input type="button" value="Edit Item to Sell"/>
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Delete Product to Sell

<input type="text" value="name"/>	<input type="button" value="Delete Item to Sell"/>
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My Reviews page:

Nozama	All	<input type="text" value="Search..."/>	<input type="button" value="Search"/>	Sort by Price	<input type="button" value="Log out"/>	<input type="button" value="View Account"/>	<input type="button" value="Cart"/>
My Reviews							
11/1/2021						Rating: 1	
Help between crime those growth.							
1							
New Rating							
<input type="text" value="Edit your review"/>							
<input type="button" value="Delete"/> <input type="button" value="Submit Edited Review"/>							

Seller Public View Page:

Nozama	All	<input type="text" value="Search..."/>	<input type="button" value="Search"/>	Sort by Price	<input type="button" value="Log out"/>	<input type="button" value="View Account"/>	<input type="button" value="Cart"/>
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Seller: Benjamin Daniel Brown

shawn22@example.org

918 Marcus Dale Suite 732 New Steve, NV 15676

Reviews

Number of Seller Ratings: 3

Average Seller Rating: 3.0

Person inside campaign born city.	Rating: 5
Out reason card rate some.	Rating: 2

Seller Public View Page continued:

Reviews

Number of Seller Ratings: 3
Average Seller Rating: 3.0

Person inside campaign born city.	Rating: 5
Out reason card rate some.	Rating: 2
Hold stock left throughout.	Rating: 2

Products Currently Selling

Cart:

Nozama

All

Search...

Search

Sort by Price

Log out


View Account

Cart

Cart:

Total: \$799.71

Checkout



\$36.16

Category:d

deal


Computer cover same green. A every beyond allow carry behind knowledge. Perform remain ever artist either. Evening common paper accept. Ask my garden yes carry see.

Quantity: 1

-

+

Delete



\$381.78

Category:c

fall

Note pattern cultural side which group we professor. Other television return coach trip public require test. Finish offer politics when bring. Image animal hard choose sometimes eye carry no.

Quantity: 2

-

+

Delete

Checkout Page:

Nozama

All

Search...

Search

Sort by Price

Log out

View Account

Cart

Shipping Information

First Name

Last Name

Address Line 1

Address Line 2

Zip Code

State

Country

Payment Information

Card Number

CVV

Month

Year

Shipping Options

Promo Code

Update

Current Balance: \$2537.97

Total: \$3090.39

Submit Order

Insufficient Funds Page:

Nozama

All

Search...

Search

Sort by Price

Log out

View Account

Cart

You have insufficient funds!

Successful Order Page:

Nozama

All

Search...

Search

Sort by Price

Log out

View Account

Cart

Thank you for submitting an order!

Total: \$36.16 Current Balance: \$2501.81

deal

Computer cover same green. A every beyond allow carry behind knowledge. Perform remain ever artist either. Evening common paper accept. Ask my garden yes carry see.

Quantity: 1

\$36.16

Category id

Features Implemented

Messaging/Feedback:

- Seller Page (Fully functional)

- Includes number of ratings, average ratings, and a list of ratings from buyers
- Includes a list of products this seller sells
- Functionality for a user to add a review for the seller provided that they have bought one of their products and don't already have an existing review
- Functionality for a user to edit/delete their existing review
- Product Page Review Section(Fully functional)
 - Lists all the product reviews for the product
 - Functionality to rate a product and leave a review
 - Functionality of a user to edit/delete their existing review
 - Takes the user to a confirmation page acknowledging
- My Reviews Page (Fully Functional)
 - Lists all the reviews of the current logged in user
 - Functionality to edit/delete their existing review

Account/Purchases:

- Implemented login functionality where user can login using existing email and password and remain logged in on the site (fully functional)
- Implemented register button to add new user and their info to Users table and allow them to login as new user (fully functional)
- Each user has a system-assigned ID (fully functional)
- Each account is associated with a balance. It starts out as \$0 for newly registered users, but can be edited by the user (fully functional)
- Implemented View User Account page, with user's name, id, email, address, balance, and sorted purchase history with summary (fully functional)
- Implemented edit functionality where user can edit all of their own info except id, and ensures a user has a unique email (fully functional)
- Provided a public view for a user. It shows the account number and name/other info (fully functional)
- If the user also acts as a seller, there are seller public and private views that show email, address, and all reviews for this seller (fully functional)

Carts/Order:

- Carts Page (Fully functional besides parts that interact with Inventory/Order Fulfillment. This is because we don't have a 5th member and were told we don't have to implement Inventory/Order Fulfillment)
 - Each user has a cart. The detailed product page provides a way of adding to the cart. Each line item in the cart refers to one product from one seller with a specific quantity. A detailed cart page lists all line items (quantities and unit prices) and the total price. Also provides ways to change quantities, remove line items, and submit the entire cart as an order. (fully functional)
 - The buyer's balance is decremented based on purchase and the seller's balance is increased based on purchase (fully functional)
 - The cart contents are persistent

- Checkout Page
 - Properly displays total and has working promo code feature (fully functional)
- Order Page
 - Detailed order page with final prices (fully functional besides order fulfillment)

Product:

- Main page shows list of all products there is (fully functional)
- User can browse, search, and filter for products (fully functional)
 - Search name by keyword (fully functional)
 - Search description by keyword (fully functional)
 - Filter by category (fully functional)
 - Search name/description by keyword while filtering by category (fully functional)
 - Sort search by price descending (fully functional)
- Detailed product page:
 - Shows more details about product (fully functional)
 - Shows average rating for the product (fully functional)
 - Shows list of reviewers, their ratings, their reviews, and their review date (fully functional)
 - Shows list of sellers who sell this product (fully functional)
 - Option to add n number of item from a particular seller to cart (fully functional)
- Sellers can create new products for sale (fully functional)
- Sellers can edit the description of the product they are selling (fully functional)
 - Limitation: must re-input category, description, image link, and price when editing, however, this is not too big of a problem because the list of items is shown right above, so copy and pasting would not be difficult (except for image link)
 - Limitation: product description is changed for everyone selling the exact same product.
- Sellers can stop selling a product from the list of items they are selling (fully functional)
 - Product is still in records and can be sold by other sellers (fully functional)