

Project Step 7 Portfolio Assignment

Group: Runtime Errors

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CS:340

Project Step 7 Final Version

Executive Summary

Based on the feedback we received during the first round of review by the TAs we made the following critical edits. We changed the vendorsID to FK rather than a PK, changed some data types to be floats rather than ints, condensed our schema into a single diagram, and removed orderID from the customers entity. In the second round of peer review Jamie Mott brought to our attention several changes that needed to be made to our current logic scheme. She suggested we had inconsistent use of capitalization and that some relationships we had didn't make sense. We added a new entity called Orders, generated a more consistent capitalization scheme (for entities) and deleted the product shipper relationship as well as the vendor customer relationship due to the fact that these relationships didn't make much sense.

In the third round of review some of the biggest changes came from suggestions Zhaowei Si made. Si points out that we failed to meet the following requirements utilization of a SELECT query, Search filter functionality, delete functionality, update functionality. In order to adjust our project in accordance with this feedback we added a search bar, an orders page/admin page in order to meet the requirements for update and delete. We also added a mailingList entity in order to meet the requirement of having a null field. During the 4th round of reviews we received great feedback from Shylton Matta and David Anderson. They both suggested that we didn't have our mailingList in the schema, no name attribute for our product entity, and the registers page did not insert into the customers page. We made the following edits that were suggested as well as we changed INSERT queries in DML so that it doesn't add ID, since it's already auto incrementing.

Based on the feedback we received during parts 5 and 6 we implemented; functional insert, update and delete buttons to the admin and orders pages. In order to allow admin usage of editing key information to our ecommerce website. Shylton Matta brought these issues to our attention. He commented asking why these buttons did not work in tandem with our database. We also had a bunch of JS files in our folder that we ended up getting rid of because they didn't serve much of a purpose.

Project and Database Outlines

Overview

RunTime is a company that operates as a niche computer parts/ computer accessories online webstore. RunTime will provide sales of electronics to a niche market of customers that are interested in high end products. The company does roughly around 5,000 sales per year with annual profits of roughly 4 Million US Dollars. RunTime will need a backend database that can support these specific needs: customer details, suppliers, shipping companies used and the types of products sold. This information will be critical in order for the company to provide an excellent customer experience.

We decided to focus mainly on the Admin side implementation of what the webpage would look like.

Purpose of Entity1: A container for customer data that will fulfill a customer's demands.

Entity1: customers:

- customerID: int(11), auto_increment, unique, not NULL, PK
- email: varchar(255), not NULL
- paymentTypes: varchar(255), not NULL
- address: varchar(255), not NULL
- phoneNumber: varchar(255), not NULL
- password: varchar(255), not NULL
- mailingList: boolean default NULL

Relationships:

customer \longleftrightarrow orders: One to Many: A customer may have many orders but an individual order can only be tied to a single customer.

Purpose of Entity2: Hold data of products we have available for sale to our customers.

Entity2: products:

- productID: int(11), auto_increment, unique, not NULL, PK
- price: float, not NULL
- inStock: boolean, default NULL
- productType: varchar(255), not NULL
- vendorID: int(11), not NULL, FK
- prodName: varchar(255)

Relationships:

products \longleftrightarrow orders: Many to Many: Any number of products can be related to any number of orders.

products \longleftrightarrow vendors: One to Many: There are several different types of a product but each type only has one type of vendor.

Purpose of Entity3: Contains info of our current shipping providers.

Entity3: shippers :

- shipperID: int(11), auto_increment, unique, not NULL, PK
- orderID: int(11), not NULL, FK
- shipCost: float, not NULL

Relationships:

shippers $\leftarrow \rightarrow$ customers: 1 to Many: Each provider can have multiple customers that they will provide service to and each Customer only has one type per order.

Purpose of Entity4: Contains info of our current product suppliers.

Entity4: vendors

- vendorID: int(11), auto_increment, not NULL, FK
- productType: VarChar(255), not NULL
- isCurrentVendor: Bool, not NULL default TRUE

Relationships:

vendors \longleftrightarrow products: One to Many: There are several different types of a product but each type only has one type of vendor.

Purpose of Entity5: Will hold information regarding customers orders.

Entity5: orders:

- orderID: int(11), auto_increment, unique, not NULL, PK
- customerID: int(11), FK
- shipperID: int(11), FK
- productID: int(11), FK
- quantity: int

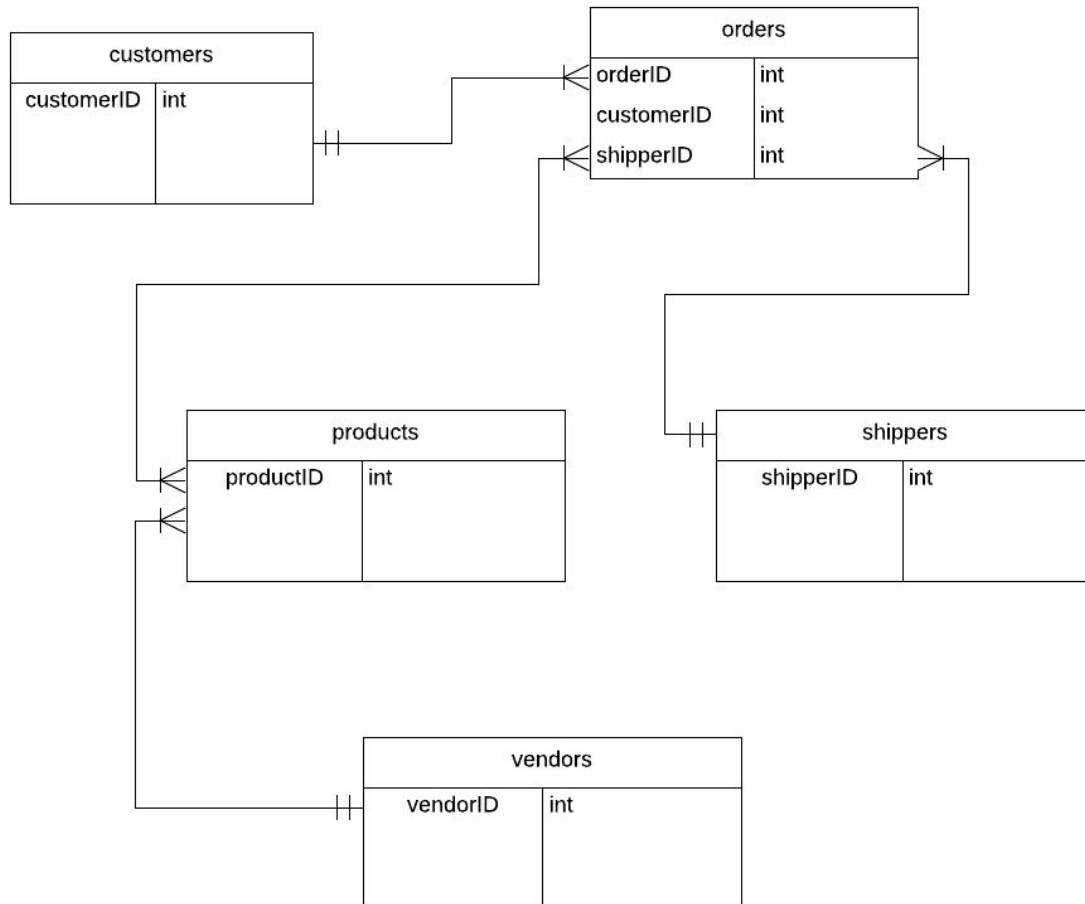
Relationships:

orders \longleftrightarrow products: Many to Many: Many orders can be tied to many different products.

ER Diagram

Blank ERD & Data Flow

Abraham Serrato Meza | February 17, 2020



Schema

List of basic info:

customers(customerID, email, paymentTypes, address, phoneNumber, password, mailingList)

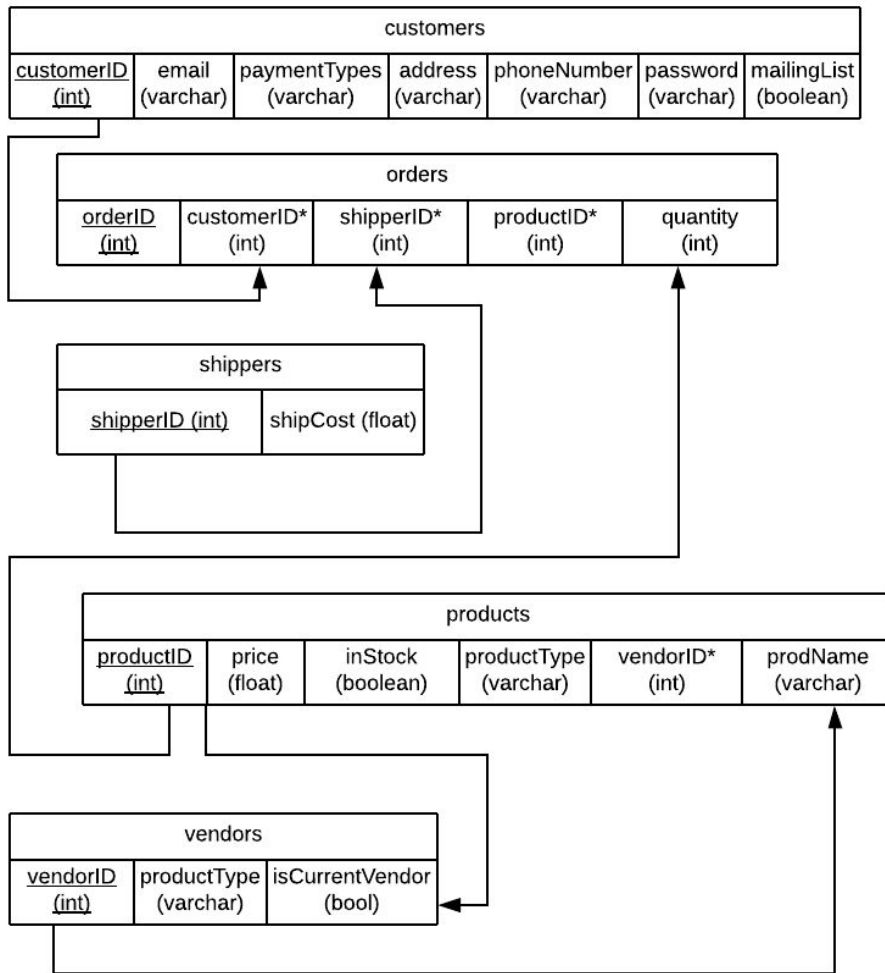
products (productID, price, inStock, productType, vendorID, prodName)

shippers(shipperID, shipCost)

vendors(vendorID, productID, productType, isCurrentVendor)

orders(orderID, customerID, shipperID, productID, quantity)

Notes:
underlined words indicate Primary Keys and are auto incrementing
 * indicates Foreign Keys
 All varchar's are set to 255 characters
 All ints are 11 bits



UI Screenshots with Informative Titles

(With the search bar you can essentially browse any page but we did not implement this)

Home page Just (gives user general information about the website).(browse/display)



Admin page (Allows for Insertion,deletion and update of database Users and Products that are currently within our system).(create,insert,add,delete)

RunTime Errors

Search

Search

HomeProductsAccountAdminOrders

Administrator Space

Update Customer

User ID	E-mail	Password	Payment Type	Address	Phone	Update	Delete
10	<input type="text" value="asad@asda.com"/>	<input type="text" value="a213asf"/>	<input type="text" value="DEBIT"/>	<input type="text" value="323 S St"/>	<input type="text" value="2147483647"/>	<input type="button" value="Update"/>	<input type="button" value="Delete"/>
12	<input type="text" value="asdad@asda.com"/>	<input type="text" value="asda21i31asdi/12"/>	<input type="text" value="CREDIT"/>	<input type="text" value="322 Main St"/>	<input type="text" value="1231231122"/>	<input type="button" value="Update"/>	<input type="button" value="Delete"/>

Update Products

Product ID	Price	In Stock	Product Type	Vendor ID	Product Name	Update	Delete
13	<input type="text" value="300"/>	<input type="text" value="1"/>	<input type="text" value="Parts"/>	<input type="text" value="2"/>	<input type="text" value="Corsair RM 750x PSU"/>	<input type="button" value="Update"/>	<input type="button" value="Delete"/>
15	<input type="text" value="80"/>	<input type="text" value="1"/>	<input type="text" value="Accessories"/>	<input type="text" value="1"/>	<input type="text" value="Keyboard 2"/>	<input type="button" value="Update"/>	<input type="button" value="Delete"/>
16	<input type="text" value="50"/>	<input type="text" value="0"/>	<input type="text" value="Accessories"/>	<input type="text" value="1"/>	<input type="text" value="Mouse"/>	<input type="button" value="Update"/>	<input type="button" value="Delete"/>
17	<input type="text" value="200"/>	<input type="text" value="0"/>	<input type="text" value="Accessories"/>	<input type="text" value="1"/>	<input type="text" value="Monitor"/>	<input type="button" value="Update"/>	<input type="button" value="Delete"/>
18	<input type="text" value="20"/>	<input type="text" value="0"/>	<input type="text" value="Accessories"/>	<input type="text" value="1"/>	<input type="text" value="HDMI cable"/>	<input type="button" value="Update"/>	<input type="button" value="Delete"/>
19	<input type="text" value="200"/>	<input type="text" value="1"/>	<input type="text" value="SoftWare"/>	<input type="text" value="1"/>	<input type="text" value="Windows 10"/>	<input type="button" value="Update"/>	<input type="button" value="Delete"/>
201	<input type="text" value="40"/>	<input type="text" value=""/>	<input type="text" value="Software"/>	<input type="text" value="1"/>	<input type="text" value="Clip Studio"/>	<input type="button" value="Update"/>	<input type="button" value="Delete"/>
	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value=""/>	<input type="button" value="Insert"/>	

Account page(Is non functional at the moment would theoretically allow users to login that already have an account with us).("create")

RunTime Errors

Search

HomeProductsAccountAdminOrders

Email:

Password:

[Register](#)

GET Request Received:

Registration Page(Allows users to create an account with us. The created account is then inserted into the customers table on both the front and back end.)("create")

RunTime Errors

Search

Home

Products

Account

Admin

Orders

Email:

Password:

Address:

Phone Number

Payment Type: CREDIT ☐ DEBIT ☐

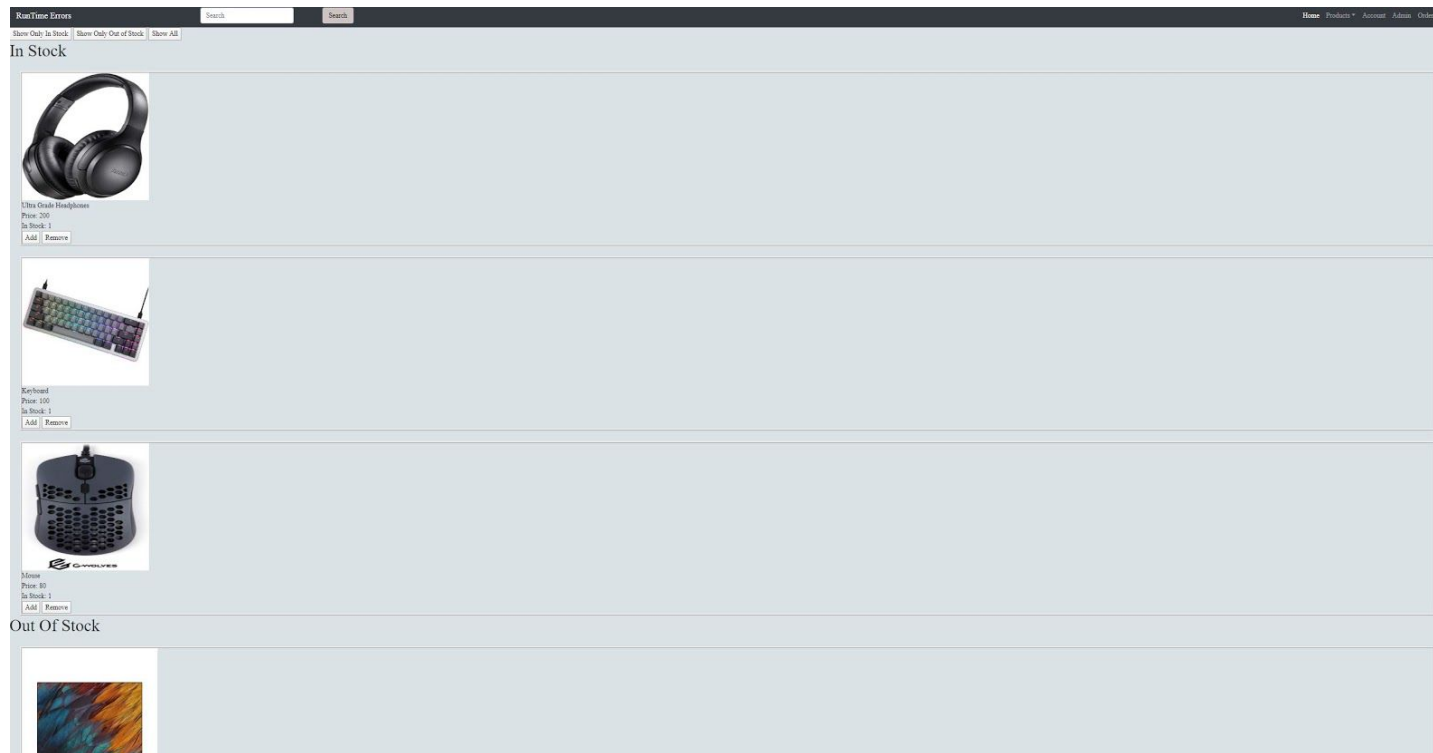
Subscribe to mail list?

☐ Yes

Submit

*Product Pages(Software,Computer Parts, Accessories pages)
(images are updated based on ID (please beware of this)).*

Accessories Page(if we allowed for a user to sign in we would have essentially had a shopping cart that users could have used to add items to there cart from these lists). That being said item images are updated placed as in stock or out of stock when edited in the Admin table or on the backend).(display/filter)(with buttons)



*Software Page(if we allowed for a user to sign in we would have essentially had a shopping cart that users could have used to add items to their cart from these lists).
That being said item images are updated placed as in stock or out of stock when edited in the Admin table or on the backend).(display/filter)*


RunTime Errors

Search


HomeProductsAccountsAdminOrders

Show Only In StockShow Only Out of StockShow All

In Stock



Mathematica
Price: 499.99
In Stock: 1
AddRemove



Windows 10
Price: 150.99
In Stock: 1
AddRemove



TurboTax
Price: 40
In Stock: 2
AddRemove

Out Of Stock

Computer Parts Page(if we allowed for a user to sign in we would have essentially had a shopping cart that users could have used to add items to their cart from these lists). That being said item images are updated placed as in stock or out of stock when edited in the Admin table or on the backend).(display/filter)

RunTime Errors


Search

Search


Home Products Account Admin Orders

Show Only In Stock | Show Only Out of Stock | Show All

In Stock




GPU
Price: 899.98
We currently have this item
[Add](#) | [Remove](#)




Corsair RM750x PSU
Price: 200
We currently have this item
[Add](#) | [Remove](#)


Out Of Stock



Corsair iCUE
Price: 140
We currently dont have this item sorry



Case 17
Price: 500
We currently dont have this item sorry



DDR4 RAM
Price: 50
We currently dont have this item sorry

OrdersPage(displays information based on an order that we have in our system allows for insertion, deletion and update of the order into orders table on the backend of our database).(Create,insert,update,delete)

RunTime Errors

Search

HomeProducts *AccountAdminOrders

OrderId	customerID	shipperID	productID	quantity	Update/Insert	Delete
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<div>Insert</div>	