FlipKart

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Team 3

CS157a Section 1

1. Entity Sets

a. User - This set represents the registered users of Flipkart. This set store user information.
b. Address - This set represents the addresses registered to Flipkart users.
c. Shopping Cart - Each user has a shopping cart assigned to them. The shopping cart will store items selected for purchase by the user. The shopping cart can be edited by the user that owns it.
d. Wishlist - The wishlist will store items of interest selected by the user. The wish list can be edited by the user that owns it.
e. Payment Information - This set will store primary keys for individual payment information.
f. Credit Card - This set will inherit the primary key from the payment information set. It will store credit card information such as credit card number, CVV, name, and expiration date.
g. Paypal - This set will inherit the primary key from the payment information set. It will store the users PayPal ID
h. Product - This set represents all the items that are being sold on FlipKart. It will store information such as a unique product id, product name, description, image, and price.
i. Category - This set represents the categories that a product can belong to. It stores a unique category id and the name of the category.

2. Relationships

a. Has - This relationship is a many to one relationship. It keeps track of the payment information of each user. Each user can have multiple payment methods but each payment method can only be associated with one user.
b. Lists - This relationship is a one to many relationship. It keeps track of the products listed for sale by a user. Each user can list multiple items for sale but each listed item can only have one seller.
c. Edits - This relationship is one to many. It keeps track of the product lists that a user has. Each user can have many shopping lists but each shopping list can only be attributed to one user.
d. Contains - This relationship is a many to one relationship. It keeps track of the products in a shopping cart. Each shopping cart can have many products and each product can only be in one cart.
e. In - This relationship is a many to one relationship. Each product can only have one category and each category can have multiple products.

f. Ships to - This relationship is a many to many relationship. It keeps track of the addresses associated with specific users. Each user can have multiple addresses and the same address can be associated with multiple users.

3. Entity Schemas

a. User(UserID, Name, Email, Phone Number, Password)
b. Address(Address, UserID, State, City, Country, Postal Code)
c. ProductList(ListID)
d. WishList(ListID, Num_Items)
e. ShoppingCart(ListID, Num_Items, totalPrice)
f. PaymentInfo(PaymentID)
g. CreditCard(PaymentID, CardNumber, CardholderName, CVV, ExpDate)
h. Paypal(PaymentID, PaypalID)
i. Product(ProductID, Name, Description, Price, Image)
j. Category(CategroyID, CategroyName)

4. Relationship Schemas

a. Uses(AddressID, UserID)
b. Has(UserID, PaymentID)
c. Edits(UserID, ListID, ProductID, Quantity)
d. Lists(UserID, ProductID)
e. Contains(ListID, ProductID)
f. In(ProductID, CatergoryID)

5. Database Tables

a. Product

productID	price	description	name	image
1	1000	This is a description of a camera	Camera	NULL
2	1500	This is a description of a laptop	Laptop	
3	800	This is a description of a cell phone	Cell Phone	
4	30	This is a descriptiion of a flashlight	Flashlight	NULL
5	10	This is a descriptiion of a charger	Charger	NULL
6	300	This is a descriptiion of a vacuum	Vacuum	
7	50	This is a descriptiion of a fan	Fan	
8	45	This is a descriptiion of a lamp	Lamp	
9	200	This is a descriptiion of a speaker	Speaker	
10	50	This is a descriptiion of a keyboard	Keyboard	
11	30	This is a descriptiion of a mouse	Mouse	
12	1700	This is a descriptiion of a TV	TV	NULL
13	400	This is a descriptiion of a monitor	Monitor	NULL
14	250	This is a descriptiion of headphones	Headphones	
15	150	This is a descriptiion of a drill	Drill	

b. ProductList

ListID
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

c. Contains

ListID	ProductID
5	1
3	2
3	3
3	4
9	5
3	6
9	7
9	8
9	9
9	10
9	11
5	12
5	13
5	14
9	15

d. Category

CategoryID	CatergoryName
0	Toys
2	Books
3	Kids
4	Clothing
5	Movies
6	Games
7	Pet Supplies
8	Home
9	Garden
10	Sports
11	Automotive
12	Baby
13	Outdoors
14	Tools
15	Electronics

e. In

CatergoryID	ProductID
15	1
15	2
15	3
15	4
15	5
15	6
15	7
15	8
15	9
15	10
15	11
15	12
15	13
15	14
14	15

f. User

UserID	Name	Email	PhoneNumber	Password
1	Mike	Mike@gmail.com	(267) 831-0356	hfkjh
2	Frank	Frank@gmail.com	(749) 349-1752	qrewrwq
3	Kevin	Kevin@gmail.com	(817) 365-1698	sdcdsac
4	Bob	Bob@gmail.com	(206) 506-2746	ewqrfds
5	Ting Ting	Ting Ting@gmail.com	(375) 397-4517	fewfvvdsa
6	Jin Han	Jin Han@gmail.com	(465) 511-0072	fdsafewr
7	Emily	Emily@gmail.com	(840) 570-7711	fdsafds
8	Jennifer	Jennifer@gmail.com	(220) 550-9698	tecdsadw
9	Eunice	Eunice@gmail.com	(613) 645-1643	cdsag
10	Amanda	Amanda@gmail.com	(715) 202-5566	nytrnt
11	Eric	Eric@gmail.com	(511) 949-5004	rewvdn
12	Marco	Marco@gmail.com	(230) 216-1515	twewqr
13	Melissa	Melissa@gmail.com	(219) 754-9614	svsac
14	Andrea	Andrea@gmail.com	(789) 997-8103	trfdsv
15	Danny	Danny@gmail.com	(561) 877-8787	fdsasafds

g. Edits

UserID	ListID	ProductID	Quantity
1	8	11	1
2	3	4	1
2	3	7	1
2	3	12	1
3	5	6	1
3	5	8	1
3	5	15	1
4	4	5	1
4	4	14	1
5	9	13	1
6	6	9	1
7	7	10	1
15	1	1	1
15	1	2	1
15	2	3	1

h. PaymentInformation

PaymentID
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

i. CreditCard

PaymentID	CardNumber	CardholderName	CVV	Exp
1	105748375927586	Danny	432	01/21
2	743259805429294	Kevin	653	02/21
3	792984395908543	Frank	534	04/21
10	128494765937459	Eunice	756	06/21
11	294749573947749	Mike	324	08/21
12	458398375983739	Amanda	243	03/21
13	594759375939208	JinHan	977	04/21
14	593858483058584	Bob	654	01/21
15	327584375985874	TingTing	432	07/21

j. Paypal

PaymentID	PaypalID
4	danny@gmail.com
5	kevin@gmail.com
6	emily@gmail.com
7	tingting@gmail.com
8	mike@gmail.com
9	frank@gmail.com

k. Has

UserID	PaymentID
15	1
3	2
2	3
15	4
2	5
7	6
5	7
1	8
3	9
9	10
1	11
10	12
6	13
4	14
5	15

Responsibilities

Danny Song - ER Diagram, Entity Set and Relationship Explanations, Schema Conversion, Tuple Creation
Ting Ting Xu - Database table creation
Jinhan Han - ER Diagram