Technical Specification Report: Model.

Ronan Behan x19141815

1. webUser

This is the status of the person who is using the Website at the time. If they are a visitor they can browse and buy. If they make a purchase the state of this user will be made visitor. This is where a visitor will be assigned a webUser\_ID which is the primary key in this table. If they register as a customer or an admin they are assigned a webUser\_ID and then they need to give a password. The state of their account then becomes admin or customer. Finally there will be the datatype assigned for when this account has been opened, closed and if there are any updates to it. If the Web User is registered it will also tell us. They will not be registered if they are a visitor. The table will also have the email address as we need some sort of contact details if you are to buy as a visitor or register. It is connected to the customer and admin tables by its primary key webUser\_ID. This is for better referencing.

1. Customer

They is the customer table. They will have the primary key of customer\_ID, automatically assigned. It will have all their necessary details like their name, phone number and date of birth for better identity purposes. Customer also references the address table by the foreign key address\_ID, this is the address table’s primary key. This is to link the table to make sure it has access to the address for better security of transit of goods and payment. Customer table also references the webUser table by the foreign key webUser\_ID, this is the webUser table’s primary key. This is to link the tables and allows us to store the email in the webUser as this is required if you want to get registered in the first place.

1. admin

They is the admin table. They will have the primary key of admin\_ID, automatically assigned. It will have all their necessary details like their name, phone number and date of birth for better identity purposes. Admin table also references the address table by the foreign key address\_ID, this is the address table’s primary key. This is to link the table to make sure it has access to the address for better security of transit of goods and payment. Admin table also references the webUser table by the foreign key webUser\_ID, this is the webUser table’s primary key. This is to link the tables and allows us to store the email in the webUser as this is required if you want to get registered in the first place.

1. category

This table identifies the categories of the product. There are 6 categories split up by sport. The sports are running, soccer, golf, climbing, hiking or basketball. The categories have IDs, this is its primary key, category\_ID, and are named and there is a column for description too. This table also has a foreign key which links it to the product table. This is the primary key of the product table product\_ID.

1. Brand

The next table is brand. This is pretty self-explanatory. Each brand has an ID, this is its primary key, brand\_ID, and a name. This table is also linked to the product table. It uses the product table’s Primary key as a foreign key. This links all the tables for better referencing. This table also has a foreign key which links it to the product table. This is the primary key of the product table product\_ID.

1. Offer

This table is for the offers that apply to certain products. It has an ID, which is its primary key, under offer\_ID. It uses this ID as its offer code, this is applicable by the customer to get a discount. The offer also has a description of the offer under “description”. We include the price reduction as an applicable decimal datatype. This table also has a foreign key which links it to the product table. This is the primary key of the product table product\_ID.

1. product

This is the biggest table. Each product has an ID. This is its primary key which is also the foreign key for the tables: category, brand, offer and shoppingCart. Each product has a name, a description, stockQuantity to know what’s left, gender for specification, price in the datatype decimal, size in the datatype int, colour, the picture of the product and the offer code for the offers. Product also has the foreign keys offer\_ID, category\_ID and brand\_ID, all of which are primary keys of the tables; offer, category and brand respectively. This links these tables for better referencing.

1. shoppingCart

This is where we will put the products that the customer chooses for purchase. Each cart will automatically be assigned an ID, shoppingCart\_ID, this will be its primary key. This cart will have the products in it. The products will have their product\_ID, their name, the quantity of these products that the customer wants to buy, the price per item and the total price for the shopping cart at the end. The shoppingCart also has 2 foreign keys; the customer\_ID and the Shipping\_ID, both of which are the primary keys of the customer and the shipping tables respectively. This links all the tables for better referencing.

1. Order

This table is for when the customer commits to buying what’s in the shopping cart. Each order is given an order\_ID automatically, this is the primary key for this table. We also have some columns to indicate when the order was created and status of the order, which will indicate in what stage of transit the order is for example “shipped” or ”ready for shipping”. This table also references the table customers so that we have access to all the details to secure a successful shipping process. This is done through the foreign key customer\_ID which is the primary key of customer. We also have the foreign key shipping\_ID which links this table to the shipping table so that we the process of shipping is underway we can have all the details required for a successful shipping.

1. payment

Next we have the payment table. Here we have an ID, the payment ID. This is assigned automatically and will be its primary key. Next we have a lot of the info required for payments such as the payment ID, payment\_method for example revolut, paypal etc, number of the card, card expiration date and the card code. It also linked to the customer, shipping and orders table by foreign keys which are theses table’s primary keys. This is for better links between the tables. Payment table also references the address table by the foreign key address\_ID, this is the address table’s primary key. This is to link the table to make sure it has access to the address for better security of transit of goods and payment.

1. Shipping

Finally we have the shipping table. This is for when the good are send out in transit to the customer. Each order when shipped has a shipping ID, shipping\_ID, this is the primary key of this table and is automatically assigned. This table also has the date shipped to keep track of the transit. This table also references the customer table and the orders table through their primary keys customer\_ID and order\_ID. These foreign keys give access the necessary info to the shipping table to get everything required to get the order shipped successfully. Shipping table also references the address table by the foreign key address\_ID, this is the address table’s primary key. This is to link the table to make sure it has access to the address for better security of transit of goods and payment.