Order of Operations

Table	Insert	Update	Delete
USERS	-	-	Delete all REVIEWS of that USER. Delete all ORDERS of that USER. ShippingAddresses are automatically deleted. CartItems are automatically deleted.
ShippingAddresses	A ShippingAddress is inserted into USER.	A ShippingAddress is updated in USER.	A ShippingAddress is deleted from USER.
CartItems	Check respective PRODUCT and ProductItem before inserting a CartItem [**product_id, sku**] A CartItem is inserted into USER.	Check respective PRODUCT and ProductItem before inserting a CartItem [**product_id, sku**]. A CartItem is updated in USER.	A CartItem is deleted from USER.
ORDERS	Check the respective USER before inserting an ORDER. [**user_id**]. The inserted ORDER must have at least 1 OrderItem.	Check the respective USER before updating the **user_id** of an ORDER [**user_id**].	When deleting an ORDER, delete all of its OrderItems.

OrderItems	Check the respective PRODUCT and ProductItem before inserting an OrderItem. [**product_id, sku**, **product_price**, **current_stock**]. Insert OrderItem in ORDER.	Check the respective ProductItem before updating the **product_id, sku, order_item_price** or **order_item_quantity** of an OrderItem. [**product_id, sku, product_price, current_stock**]. Update OrderItem in ORDER.	Delete OrderItem from ORDER.
PRODUCTS	When inserting a PRODUCT, insert at least 1 ProductItem and 1 ProductImage.	When updating a PRODUCT [**product_id, product_price**], update the corresponding CartItems [**product_id, cart_item_price**]	When deleting a PRODUCT: Delete all ProductImages of that PRODUCT. Delete all REVIEWS of that PRODUCT. Delete all CartItems of that PRODUCT. Delete all ProductItems of that PRODUCT.
ProductImages	Insert ProductImage in PRODUCT.	Update ProductImage in PRODUCT.	Delete ProductImage from PRODUCT.

ProductItems	Insert ProductItem in PRODUCT.	Update ProductItem in PRODUCT *Update corresponding OrderItem in ORDER (Optional).* Update corresponding CartItem in USER.	Delete CartItem in USER. *Delete OrderItem in ORDER.* Delete ProductItem in PRODUCT.
REVIEWS	When inserting a REVIEW, check whether the corresponding PRODUCT and ProductItem exist. [**product_id, sku**] REVIEW is inserted in USER.	When updating the **product_id** or **sku** of a REVIEW, check whether the corresponding PRODUCT and ProductItem exist. [**product_id, sku**]. REVIEW is updated in USER.	REVIEW is deleted from USER.

NOTE: ProductImage isn't linked to **OrderItem** as it may continue to exist even after the corresponding ProductItem is deleted.

NOTE: ProductImage isn't linked to **CartItem** since in the future, CartItem will be in Redis.

NOTE: This chart doesn't show what would happen if we tried to update primary keys.