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Service Layer Design

My application will be broken down into three architecture layers: the presentation layer, the business layer (also known as the service layer), and the data layer.

**PRESENTATION LAYER**

The user will be able to click on items depending on the category they selected from the home page that will then take them to a page that will show them only the information that a customer needs to know about the product. Like product name, product description, how many are left, etc. Then the user will be able to add items to the cart and from the cart be able to go through a checkout process.

Some errors may include: http errors, errors viewing the webpage, errors for needed fields, etc.

**BUSINESS LAYER**

My service layer will consist of processing data from the user and preps it to be sent the data layer for final processing. The business layer also known as the service layer will keep track of user profiles and accounts. It will keep up with what payment methods they have previously used, what billing addresses they have used. It will keep up with orders from the user and once an order is made, the service layer will pass the information to the data layer so that the databases can be updated and take the payment.

Some errors may include: bad payment method, order canceled due to unexpected error,

**DATA LAYER**

The data layer and final layer of my application will handle all of the final data request and processing. A lot of the layer can be controlled through the Django Admin login screen of the website and through code. This is where the databases are connected and can send data to the data service to handle request as needed. Any time an order is made, any manipulations of my databases will be handled here.

Some errors may include: database errors, order update errors, cancelation messages and recovery messages/routines.

Shop/Add items to cart take/process payment order

payment Processed

Order placed

Payment validated

Order processed

Order processed

Error

Error

Data Layer

Business (Service) layer

Presentation Layer