

List of Constraints to be considered on deciding an architecture

- Constraints and Performance Criteria
- Network connection for online store
- Review service depends on the customer feedback
- Price history may require lots of data storage
- Secure Transactions
- Aesthetic Design Of Website
- Proper Payment Calculations
- Increased Loading Times
- Exchange/Return Policy
- Scam/Fraud Prevention

A lot of the constraints are error or security related so we believe that a layered architecture would be ideal for our product but taking into consideration the scale of our project and its feasibility a client-server architecture with layered approach and some redundancies is better suited.

The planned components would be:

1. Presentation: presents the UI to the end-user taking UX into consideration and sending any response/requests to an application layer;
2. Application layer: contains the logic and functionalities of the web application, like searching or reviewing products. Acts as middleware.
3. Data: would store information such as the user's saved data like account details
4. API: retrieves information and passes it to the Application layer
5. External Layer: Includes the supplier, bank and any other entities that are not part of our project scope