Requirement Gathering and Analysis Phase Solution Architecture

| Date | 04-07-2024 |
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| Team ID | SWTID1720199985 |
| Project Name | Grocery Web App |

Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

1. structure, characteristics, behavior, and other aspects of the software to project stakeholders.

Characteristics:

- User-Friendly Interface
- Product Management
- Shopping Cart and Checkout
- User Authentication and Account Management
- Payment Processing

Structure

> Frontend : User Interface (UI) Components

> Backend : Database

2.Technologies

MongoDB, Express, ReactJs, NodeJs

3. Features, Development phases

> Features

Customer Side:

- o Browsing categories
- Viewing product details
- o Adding items to the cart
- o Checkout and payment processing

Seller/Admin Side:

o Product listing and management

> Development Phases

- Phase 1: Requirement Analysis and Planning
- Phase 2: UI/UX Design
- o **Phase 3**: Frontend Development
- o **Phase 4**: Backend Development
- Phase 5: Integration and Testing

4. Specifications

- ➤ **Database Schema**: Clearly defined structure for database collections.
- ➤ **User Stories**: Specific scenarios for how users will interact with the app.

Solution Architecture Diagram:

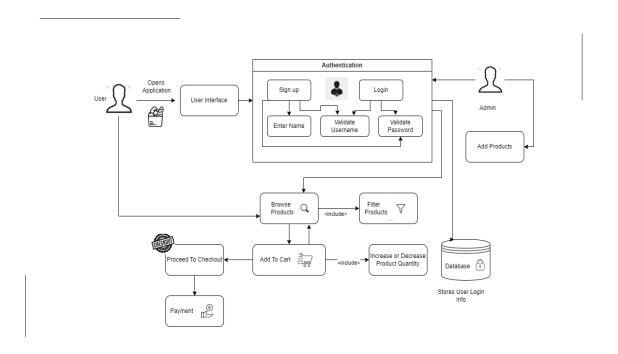


Figure 1: Architecture and data flow of the Grocery Web App