**ECOMMERECE APPLICATION – QUICK DROP**

**Project Name: Quick Drop**

**Logo:** <https://drive.google.com/file/d/1yI555I-V26k1j4oqODfy5-GMStcSIXtG/view?usp=sharing>

**Application Flow Chart:** <https://www.mermaidchart.com/raw/8077512b-e897-4848-ac92-b213f6c2931f?theme=light&version=v0.1&format=svg>

**Main Components of the Application**

1. **Frontend (React)** 
   * User interface for customers
   * Admin dashboard
   * Delivery partner interface
2. **Backend (Node.js & Express)** 
   * API endpoints for all functionality
   * Authentication and authorization
   * Business logic implementation
3. **Database (MongoDB)** 
   * Store product information
   * User data
   * Order details
   * Delivery partner information
4. **Application Flow User Side:** 
   * Registration/Login
   * Product browsing and search
   * Cart management
   * Checkout process
   * Order tracking
   * Reviews and ratings

**Admin Side:**

* + Product management
  + Order management
  + User management
  + Analytics dashboard

**Delivery Partner Side:**

* + Order assignment
  + Order acceptance
  + Delivery tracking
  + Status updates

**Technical Implementation Details**

1. **Authentication** 
   * JWT-based authentication
   * Role-based access control (Customer, Admin, Delivery Partner)
2. **Product Management** 
   * CRUD operations for products
   * Category and subcategory management
   * Inventory tracking
   * Image upload and storage
3. **Order Management** 
   * Cart functionality
   * Address management
   * Payment gateway integration
   * Order status tracking
4. **Delivery System** 
   * Geolocation for delivery partners
   * Estimated delivery time calculation
   * Real-time tracking
5. **Additional Features** 
   * Push notifications
   * Search functionality with filters
   * Reviews and ratings system
   * Analytics for business insights