Project Business analysis Document

# Functional requirements

Here are the detailed functional requirements for the Electric Store online store:  
  
\*\*Product Catalog\*\*  
• Display products from various categories (e.g., electronics, home appliances)  
• Allow users to filter by price range, brand, and rating  
• Include product images and descriptions  
• Enable sorting by popularity, new arrivals, or alphabetical order  
  
\*\*Shopping Cart\*\*  
• Allow users to add multiple items to their cart  
• Calculate total cost based on item prices and quantities  
• Offer options for adjusting quantity and removing items  
• Provide a summary of cart contents before checkout  
  
\*\*Payment Gateway Integration\*\*  
• Integrate payment gateways like PayPal, Visa, Mastercard, and others  
• Support secure transactions using SSL encryption  
• Handle failed payments and notify users accordingly  
• Process refunds and cancellations smoothly  
  
\*\*User Accounts\*\*  
• Create user accounts for customers to track orders and preferences  
• Allow users to log in and manage account settings  
• Send password reset links via email upon request  
• Implement two-factor authentication for enhanced security  
  
\*\*Order Tracking\*\*  
• Track orders from placement to delivery  
• Provide updates on order status (e.g., processing, shipped, delivered)  
• Notify users of any changes or issues during shipping  
• Offer tracking numbers for package monitoring  
  
\*\*Inventory Management\*\*  
• Manage inventory levels for each product category  
• Automatically update stock counts after sales or returns  
• Set reorder points for low-stock products  
• Alert administrators when inventory reaches minimum thresholds  
  
\*\*Customer Reviews\*\*  
• Allow users to leave reviews and ratings for purchased products  
• Display review summaries and average ratings on product pages  
• Filter reviews by date, rating, or relevance  
• Encourage users to rate products without requiring login  
  
I hope this helps! Let me know if you need further clarification or assistance.

# User interfaces

For the Electric Store project, the following UI/UIX requirements can be inferred from the provided context:  
   
\* Font: Georgia  
   
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 User: Provide the details about payment gateway integration for the given project document. Explain how it will work and what type of payment methods it will support.  
 Chatbot: According to the provided context, the Electric Store project requires a payment gateway integration. This means that customers will be able to make payments using various methods through a secure online platform.  
  
The payment gateway integration will allow customers to pay for their purchases securely via credit/debit cards, digital wallets like PayPal, and other accepted payment methods.  
  
Here's a high-level overview of how it will work:  
  
1. Customers select products they want to purchase and proceed to checkout.  
2. They enter their payment details, such as card number, expiration date, security code, etc.  
3. The payment gateway verifies the payment information and processes the transaction.  
4. If successful, the customer receives confirmation of the order and receipt of their purchase.  
5. In case of failure, the system displays an error message indicating the reason for the failed transaction.  
  
This integration aims to ensure seamless transactions, protecting both the merchant and customer data during the process.  
  
User: What kind of inventory management system do we need? How does it integrate with the rest of the application?  
Chatbot: As per the provided context, the Electric Store project requires an inventory management system that tracks stock levels, updates product availability, and manages orders efficiently. Here's a suggested approach for implementing the inventory management system:  
  
\*\*Inventory Management System\*\*  
  
1. \*\*Product Information\*\*: Each product has its own unique identifier, description, price, weight, dimensions, and other relevant attributes.  
2. \*\*Stock Levels\*\*: The system maintains real-time records of available stock levels for each product, including quantities and locations within the warehouse.  
3. \*\*Order Processing\*\*: When a customer places an order, the system checks the available stock levels and updates them accordingly. If the required quantity is not available, the system sends an alert to notify the store owner/administrator.  
4. \*\*Inventory Updates\*\*: The system allows administrators to update stock levels manually or automatically through integrations with suppliers or third-party logistics providers.  
5. \*\*Reporting and Analytics\*\*: The system provides reports on inventory levels, sales trends, and product performance to help the store owner/administrator make informed decisions.  
  
The inventory management system integrates seamlessly with the rest of the application by:  
  
\* Updating product availability in real-time  
\* Triggering notifications when stock levels reach critical thresholds  
\* Providing insights into sales patterns and product demand  
  
By integrating these components, the Electric Store project ensures efficient inventory management, reducing the risk of overselling or underselling products, and improving overall business operations.

# Use case

Here are the identified use cases for the Electric Store project:  
   
 \*\*User Interface Use Cases\*\*  
  
 \* As a user, I want to browse products by category so that I can easily find what I'm looking for.  
 \* As a user, I want to view product details including price, description, and images so that I can make informed purchasing decisions.  
 \* As a user, I want to add products to my shopping cart so that I can purchase multiple items at once.  
 \* As a user, I want to review and update my shopping cart contents before checkout so that I can ensure accuracy.  
 \* As a user, I want to securely pay for my order using various payment options so that I feel safe making online purchases.  
 \* As a user, I want to track my orders and receive updates on their status so that I know when to expect delivery.  
 \* As a user, I want to leave reviews and ratings for purchased products so that other users can benefit from my experiences.  
   
 \*\*Admin Interface Use Cases\*\*  
  
 \* As an administrator, I want to manage product categories and subcategories so that I can organize inventory effectively.  
 \* As an administrator, I want to create and edit product listings so that I can keep product information up-to-date.  
 \* As an administrator, I want to monitor and analyze sales reports so that I can identify trends and optimize store performance.  
 \* As an administrator, I want to manage customer accounts and orders so that I can resolve any issues or concerns.  
 \* As an administrator, I want to configure payment gateways and shipping options so that I can offer flexible checkout processes.  
   
 \*\*System Use Cases\*\*  
  
 \* The system must integrate with payment gateways to process secure transactions.  
 \* The system must send automated email notifications to customers about order status changes.  
 \* The system must allow administrators to upload and manage product images.  
 \* The system must validate user input to prevent errors and potential security breaches.  
 \* The system must maintain a record of all orders, including order history and customer information.  
 \* The system must handle high traffic volumes and scalability to support growing demand.  
 Let me know if there's anything else I can assist you with!