Project Business analysis Document

# Functional requirements

Here are the functional requirements of the Electric Store project:  
 \*\*Product Information Management\*\*  
  
 • Manage product catalog  
 • Update product prices and availability  
 • Add new products and remove old ones  
 • Display product images and descriptions  
 • Allow customers to filter products by category and price range  
  
 \*\*Order Processing and Fulfillment\*\*  
  
 • Process customer orders  
 • Send order confirmations via email  
 • Track orders in real-time  
 • Provide estimated delivery dates  
 • Handle returns and exchanges  
  
 \*\*Payment and Shipping Options\*\*  
  
 • Integrate payment gateways (e.g., PayPal, credit cards)  
 • Offer multiple shipping options (e.g., standard, expedited, free)  
 • Calculate shipping costs based on location and weight  
 • Provide estimated delivery dates  
  
 \*\*Customer Account Management\*\*  
  
 • Create user accounts for customers  
 • Allow customers to view their order history  
 • Enable password reset functionality  
 • Implement two-factor authentication  
  
 \*\*Inventory Management\*\*  
  
 • Monitor inventory levels  
 • Automatically update stock quantities when items are sold or returned  
 • Alert administrators when inventory levels reach a certain threshold  
 • Generate reports on inventory levels and trends  
  
 \*\*Search Functionality\*\*  
  
 • Implement search bar for quick product lookup  
 • Return results based on product name, description, and tags  
 • Filter search results by category, brand, and price range  
 • Provide suggestions as users type in the search bar  
  
 \*\*Wishlist and Recommendations\*\*  
  
 • Allow customers to add products to their wishlist  
 • Provide personalized product recommendations based on purchase history and browsing behavior  
 • Display recommended products on product pages and homepage  
  
 \*\*Security\*\*  
  
 • Implement SSL encryption for secure data transmission  
 • Validate user input to prevent SQL injection attacks  
 • Regularly back up databases and store backups securely  
 • Conduct regular security audits and penetration testing  
  
 \*\*Content Management System\*\*  
  
 • Develop a custom CMS for managing website content  
 • Allow administrators to create and edit pages, posts, and products  
 • Implement permission-based access control for editing and publishing content  
 • Schedule automatic updates and maintenance tasks  
chatbot: I'm happy to help! Can you please rephrase your question? It seems like there might have been some confusion about what you were asking. If you could provide more clarity, I'd do my best to assist you. Additionally, it would be helpful if you could specify which part of the project document you're referring to. This will allow me to give you a more accurate response. Please let me know how I can better support you.

# User interfaces

Based on the given project details, here are the UI/UX requirements:  
   
 \*\*Product Page\*\*  
  
\* Font: Georgia  
\* Font Color: #151414  
\* Color Palette: rgb(r, g, b)  
\* Product images displayed prominently  
\* Clear product description and specifications  
\* Call-to-action (CTA) buttons for adding products to cart or purchasing directly  
   
 \*\*Shopping Cart\*\*  
  
\* Display total cost and number of items in the cart  
\* Allow customers to update quantities or remove items from the cart  
\* Provide a checkout button to proceed with payment  
   
 \*\*Payment Gateway Integration\*\*  
  
\* Secure payment processing using SSL encryption  
\* Support multiple payment options (e.g., credit cards, PayPal)  
\* Clearly display payment instructions and error messages  
   
 \*\*User Accounts\*\*  
  
\* Registration form for creating new accounts  
\* Login functionality for existing users  
\* Profile management for editing account settings and viewing order history  
   
 \*\*Order Tracking\*\*  
  
\* Track orders by ID or status  
\* Show estimated delivery dates and tracking numbers  
\* Allow users to view order history and cancel/receive refunds as necessary  
   
 \*\*Inventory Management\*\*  
  
\* Real-time inventory updates for each product  
\* Alert system for low stock levels or out-of-stock products  
\* Option to reserve items for later purchase when out of stock  
   
 \*\*Customer Reviews\*\*  
  
\* Display customer reviews and ratings for each product  
\* Allow users to leave their own reviews and ratings  
\* Filter reviews by rating or date posted  
   
 These UI/UX requirements aim to create an intuitive and user-friendly shopping experience for general consumers, making it easy for them to browse, purchase, and manage their orders within the electric store.

# Use case

Here are the use cases for the Electric Store project:  
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Use Cases:   
1. Registering New Customers  
 - Create account form  
 - Validate user input  
 - Save user data to database  
 - Send confirmation email  
2. Login Existing Users  
 - Input username and password  
 - Validate user credentials  
 - Redirect logged-in users to dashboard page  
3. Browse Products  
 - Display products on catalog page  
 - Filter by category or brand  
 - View product details (price, description, images)  
4. Add/Remove Items From Shopping Cart  
 - Add item button  
 - Update cart contents  
 - Remove item button  
 - Update cart contents  
5. Checkout Process  
 - Review order summary  
 - Calculate total cost  
 - Select payment method  
 - Handle payment processing  
6. Manage Account Information  
 - Edit profile information  
 - Validate changes  
 - Change password  
 - Validate new password  
7. Track Orders  
 - View order history  
 - Retrieve order status  
8. Write Customer Reviews  
 - Submit review text  
 - Validate review content  
9. Search For Specific Products  
 - Enter search term  
 - Return matching results  
10. Sort Products By Criteria  
 - Price  
 - Low to high  
 - High to low  
 - Rating  
 - Highest rated first  
 - Lowest rated first  
11. Filter Products By Category  
 - Electronics  
 - TVs  
 - 32 inch  
 - 40 inch  
 - 50 inch  
 - Home Appliances  
 - Refrigerators  
 - Single door  
 - Double door  
 - Triple door  
12. Product Recommendations  
 - Suggest related products based on customer purchases  
13. Handling Multiple Currencies  
 - Convert prices to customer-selected currency  
14. SSL Encryption  
 - Secure payment transactions  
15. Responsive Design  
 - Adapt layout to various devices and screen sizes  
16. Accessibility Features  
 - Screen reader support  
 - Keyboard-only navigation  
17. Product Variations  
 - Size options  
 - Color options  
18. Gift Wrapping  
 - Option to add gift wrapping  
19. Shipping Options  
 - Free shipping  
 - Expedited shipping  
20. Refund Policy  
 - Clear refund terms  
21. Warranty Information  
 - Provide warranty details for each product  
22. Social Media Links  
 - Connect customers to social media platforms  
23. Contact Us Form  
 - Allow customers to submit feedback or questions  
24. Newsletter Subscription  
 - Offer option to subscribe to newsletter  
25. Promotions and Discounts  
 - Display active promotions and discounts  
26. Product Comparison  
 - Compare multiple products side-by-side  
27. Warranties and Returns  
 - Clearly outline return policy and warranties  
28. Product Ratings  
 - Display average rating for each product  
29. Featured Products  
 - Highlight popular or recommended products  
30. Special Offers  
 - Display special deals or limited-time offers  
31. Customer Support  
 - Provide contact information for customer support  
32. Frequently Asked Questions (FAQs)  
 - Answer common customer questions  
33. Blog  
 - Publish company news and industry insights  
34. About Us Page  
 - Share company story and mission  
35. Terms and Conditions  
 - Outline website usage policies  
36. Privacy Policy  
 - Explain how personal data is handled  
37. Cookies Policy  
 - Inform users about cookie usage  
38. Affiliate Program  
 - Allow affiliates to earn commissions  
39. Partnerships  
 - Collaborate with other companies  
40. Events Calendar  
 - Schedule upcoming events and webinars  
41. Newsletters Archive  
 - Access previous newsletters  
42. Password Recovery  
 - Reset forgotten passwords  
43. Product Descriptions  
 - Detailed descriptions of products  
44. Product Videos  
 - Show product demos and reviews  
45. Product Images  
 - High-quality images of products  
46. Product Specifications  
 - Technical specifications for each product  
47. Product Reviews  
 - Read and write reviews for products  
48. Product Q&A  
 - Ask and answer questions about products  
49. Product Comparisons  
 - Compare similar products  
50. Product Bundles  
 - Package multiple products together  
51. Product Samples  
 - Offer free samples of products  
52. Product Certifications  
 - Verify certifications for each product  
53. Product Guarantees  
 - Offer guarantees for each product  
54. Product Demonstrations  
 - Watch product demonstrations  
55. Product Testimonials  
 - Hear testimonials from satisfied customers  
56. Product Awards  
 - Recognize awards won by products  
57. Product Categories  
 - Organize products into categories  
58. Product Subcategories  
 - Further categorize products within main categories  
59. Product Tags  
 - Assign tags to products for