Functional Requirements

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| Functional Requirement ID | Requirement Description | Acceptance Criteria | Source of Data |
| FR-001 | The system shall allow hotels to register by providing their name, email, password, and hotel verification details. | Users can successfully create an account with valid information, pending verification. | User-provided data, hotel verification service |
| FR-002 | The system shall allow users to log in and log out using their email and password. | Users can log in and log out successfully using valid credentials. | User-provided data |
| FR-003 | The system shall allow users to view and update their profile information. | Users can view and update their profile, with changes reflected immediately. | User-provided data |
| FR-004 | The system shall display a list of available products for purchase. | A list of products is displayed within 3 seconds of loading the main activity. | Backend Database |
| FR-005 | The system shall display detailed information about a product when selected. | Detailed product information is displayed within 2 seconds of selection. | Backend Database |
| FR-006 | The system shall allow users to search for products by name or category. | Search results are displayed within 2 seconds of entering the search query. | Backend database |
| FR-007 | The system shall allow users to add products to their shopping cart. | Products are added to the cart, and the cart is updated immediately. | User-provided data, backend database |
| FR-008 | The system shall allow users to view the contents of their shopping cart. | The cart's contents are displayed accurately and updated in real-time. | User-provided data, backend database |
| FR-009 | The system shall allow users to update the quantity of products in their cart. | Changes in quantity are reflected immediately in the cart. | User-provided data, backend database |
| FR-010 | The system shall allow users to remove products from their cart. | Products are removed from the cart, and the cart is updated immediately. | User-provided data, backend database |
| FR-011 | The system shall allow users to proceed to checkout from their cart. | Users can successfully proceed to checkout with the current cart contents. | User-provided data, backend database |
| FR-012 | The system shall display an order summary before users confirm their purchase. | The order summary accurately reflects the cart contents and total price. | User-provided data, backend database |
| FR-013 | The system shall allow users to enter payment information and process the payment. Payment information shall be transmitted securely using SSL/TLS encryption. | Payments are processed successfully, and users receive a confirmation message. | User-provided data, payment gateway |
| FR-014 | The system shall send an order confirmation to users upon successful payment. | Users receive an order confirmation via email within 5 minutes of payment. | Backend database, email service |
| FR-015 | The system shall allow admin users to view sales data in graphical format. | Sales data is displayed in charts/graphs that update in real-time. | Backend database |

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| FR-016 | The system shall allow admin users to visualize user activity data, such as the number of active users and orders. | User activity data is displayed in charts/graphs that update in real-time. | Backend database |
| FR-017 | The system shall fetch product data, user information, and order details from a back-end server via JSON web service. | Data is fetched and displayed within 3 seconds of the request. | Backend server |
| FR-018 | The system shall display a user-friendly error message if registration fails due to invalid or missing information. | Appropriate error messages are displayed when registration fails. | User-provided data |
| FR-019 | The system shall validate the email and password format during login. | Users are notified if the email format is invalid, or the password does not meet the required criteria. | User-provided data |
| FR-020 | The system shall display an error message if login credentials are incorrect. | Users receive a clear error message indicating incorrect login credentials. | User-provided data |
| FR-021 | The system shall notify the user in case of payment failure. | Users receive immediate payment failure during checkout. | Payment gateway, backend server |
| FR-022 | |  | | --- | |  |  |  | | --- | | Product prices shall be displayed in the specified currency format with two decimal places. | | Product prices are consistently displayed with two decimal places across the application. | Backend database |