Software Requirements Specification

for

AI-powered Chatbot for E-Commerce Website

Version 1.0

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Date: -

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1. Introduction
   1. Purpose

This Software Requirements Specification (SRS) describes the functional and nonfunctional requirements for the AI-Powered Chatbot to be integrated into the E-Commerce Website domain named “Quick Shop”. The SRS covers the chatbot's capabilities for customer support, product discovery and recommendation, order status queries, cart and checkout assistance, returns and refunds support, escalation to human agents, analytics, and administrative/configuration interfaces. This document targets stakeholders, developers, testers, UX designers, and support teams and will be used as the authoritative reference during design, implementation, and testing.

* 1. Document Conventions
     1. **Requirement IDs:**
        1. Functional requirements use REQ-Fnn (e.g., REQ-F01).
        2. Nonfunctional requirements use REQ-NFnn.
     2. **Priority:** High / Medium / Low.
        1. **Status:** Draft / Approved / InProcess.
        2. **Font/Markup:** Use Markdown/IEEE style headings. Use italic for examples and monospace for API endpoints.
        3. **In progress placeholders:** Use TBD where information is pending.
  2. Intended Audience and Reading Suggestions

Primary audience: Product Owner, Project Manager, Backend & Frontend Developers, Data Scientists (NLP/ML engineers), QA/Testers, UX Designers, DevOps, Security & Compliance, Customer Support Leads.

* 1. Product Scope
     1. Provide 24/7 conversational support via text (and optionally voice) on web and mobile web.
     2. Handle common user intents: product search, recommendations, order tracking, returns, sizing/help, promotions, and checkout assistance.
     3. Integrate with the website backend (product catalog API, user/order service, cart service, authentication) and third-party services (payment provider, CRM, human chat queue).
     4. Support multi-language interaction (e.g., English + regional languages) and personalization based on user data.
     5. Provide administrative UI to manage canned responses, training data, and monitor performance metrics.
  2. References
     1. IEEE SRS template (Karl E. Wiegers).

1. Overall Description
2. External Interface Requirement
3. System Feature
4. Other Non-Functional Requirement
5. Other Requirement