**Functional Requirements:**

**1-Greeting and Introduction:**

-The chatbot must be capable of initiating a friendly greeting and introducing itself to users upon activation.

-The greeting should be adaptable, considering the time of day or any personalized user preferences.

-The introduction should include a brief overview of the chatbot's capabilities and the types of assistance it can provide.

-The chatbot should explicitly communicate what it cannot do, managing user expectations effectively.

**2-Question Answering:**

-The chatbot must promptly and accurately respond to straightforward queries related to course information.

-The chatbot should employ natural language understanding to comprehend user queries effectively.

Responses should be concise, informative, and tailored to the specific context of the question.

-The chatbot should transparently communicate its limitations and specify when it cannot provide certain information.

**3-Customer Support:**

-The chatbot should offer effective customer support by:

-Addressing user queries related to problems or issues.

-The chatbot should employ troubleshooting capabilities to identify and address common issues.

-It should transparently communicate when an issue exceeds its capabilities and escalate to human support when necessary.

-Providing clear instructions on utilizing various website services.

-Instructions should be step-by-step and include multimedia elements for enhanced clarity.

-The chatbot should clarify when user queries fall outside its scope and redirect appropriately.

-The chatbot should adapt its communication style based on user feedback to ensure understanding.

**4-Task Completion:**

-The chatbot needs to efficiently execute basic tasks, including:

-Taking orders.

-The chatbot should guide users through the order process, ensuring a smooth transaction.

-It should confirm and provide details about the completed order.

-Clearly communicate any tasks it cannot perform during the order process.

-Offering information about courses.

-The chatbot should retrieve and present detailed information about courses, including schedules, prerequisites, and instructor details.

-It should assist in selecting the most suitable courses based on user preferences.

-Explicitly state when it cannot provide specific details.

**Non-Functional Requirements:**

**1-Usability:**

-The chatbot interface must be intuitively designed, ensuring a user-friendly experience for both developers and end-users.

-The user interface should feature clear navigation and well-organized information to enhance ease of use.

-Accessibility standards should be followed to ensure inclusivity for users with diverse needs.

-The chatbot should transparently communicate its limitations in understanding certain user inputs or meeting specific accessibility requirements.

**2-Performance:**

-The chatbot should respond promptly to user queries, minimizing latency, and ensuring a seamless user experience.

-Response times should be optimized to provide near-instantaneous answers to user inquiries.

-The chatbot should handle concurrent user interactions efficiently, maintaining performance even during peak usage.

-Clearly communicate situations where delayed responses may occur, such as during high traffic, to manage user expectations.

**3-Reliability:**

-The chatbot should exhibit high reliability, with minimal downtime, guaranteeing users access to assistance whenever required.

-Regular maintenance schedules should be established to address potential issues proactively.

-A robust error-handling mechanism should be implemented to gracefully manage unexpected situations and maintain service availability.

-Clearly communicate any planned maintenance or potential downtime to users well in advance.

**4-Security:**

-Robust security measures must be implemented to safeguard user data and maintain the integrity of the chatbot's functionality.

-All user data must be encrypted during transmission and storage to prevent unauthorized access.

-Access controls and authentication mechanisms should be in place to ensure that only authorized users can interact with sensitive functionalities.

-Transparently communicate the limitations in data access for security reasons and inform users about the measures in place.