**Health Chat Bot**

**1. Introduction**

**1.1 Purpose**

The purpose of this document is to define the requirements and specifications for the development of a health chat bot.

**1.2 Scope**

The health chat bot aims to provide users with information, guidance, and support related to health and wellness. The bot will engage in natural language conversations with users, offering assistance on various health topics.

**2. Functional Requirements**

**2.1 User Registration and Authentication**

* The chat bot should support user registration and authentication.
* Users should be able to create accounts and log in securely.

**2.2 Natural Language Processing**

* The chat bot should be equipped with natural language processing capabilities to understand and respond to user queries in a conversational manner.
* It should be able to handle a variety of health-related topics and provide accurate information.

**2.3 Health Information Retrieval**

* The chat bot should be integrated with a reliable health information database.
* It should retrieve and present relevant health information based on user queries.

**2.4 Symptom Analysis**

* The chat bot should be capable of analyzing user-provided symptoms and offering preliminary insights or recommendations.
* It should emphasize the importance of consulting with a healthcare professional for accurate diagnoses.

**2.5 Emergency Response**

* The chat bot should be programmed to recognize and respond appropriately to emergency situations.
* It should provide emergency contact information and encourage users to seek immediate medical help when necessary.

**3. Non-functional Requirements**

**3.1 Performance**

* The chat bot should respond to user queries promptly, aiming for a response time of under 3 seconds.

**3.2 Security**

* User data, especially health-related information, should be stored securely and comply with relevant data protection regulations.

**3.3 Scalability**

* The system should be scalable to handle an increasing number of users without compromising performance.

**3.4 Availability**

* The chat bot should be available 24/7, ensuring accessibility for users at any time.

**4. User Interface**

**4.1 Conversational Interface**

* The chat bot should have an intuitive and user-friendly conversational interface.

**4.2 Multilingual Support**

* The user interface should support multiple languages to cater to a diverse user base.

**5. Constraints**

* The system should comply with all relevant health and privacy regulations.
* The chat bot's responses should be based on general health information and should not replace professional medical advice.

**6. Assumptions**

* Users will have access to a stable internet connection.
* Users will use the chat bot responsibly and not rely solely on its advice for medical decisions.