**SRS DOCUMENT**

**BACKGROUND:**

As a part of Industry Academia community (IAC) activities many students and freshers participate in online internship program (IP) every year to get a job ready in time. The students come up with queries which need to be answered almost instantly.

**PROJECT OVERVIEW:**

Smart chatbot application that leverages AI technologies to provide seamless and intelligent interactions, enhancing user engagement and automating customer support processes with various platform integrations

**HARDWARE REQUIREMENTS:**

personal computer / mobile phone to test application.

**SOFTWARE REQUIREMENTS:**

RASA, Twilio, Ngrok ,python and python libraries for NLP and ML tasks, Git, MySQL.

**CONSTRAINTS:**

Cannot use paid services to develop bot.

**ASSUMPTIONS:**

user should know that answers is generated by bot and not assume it as final answer, technical people should check efficiency of bot before deploying it into production.

**RISKS:**

If number of API calls gets above certain number it will not be able to send messages in trial version of API, if generative AI used it can sometimes hallucinate and lead to miscommunicate.

**FUNCTIONAL REQUIREMENTS:**

The unified chatbot application built using RASA should support natural language processing, multi-platform compatibility, accurate response generation, and integration with external APIs for enhanced user interactions with speech functionality.

**NON-FUNCTIONAL REQUIREMENTS:**

The unified chatbot application should exhibit high availability, low response latency, and secure data handling.

**EXTERNAL INTERFACE REQUIREMENTS:**

The unified chatbot application should integrate with various messaging platforms such as Facebook LinkedIn, SMS, and WhatsApp,

**TECHNOLOGY USED:**

RASA’s natural language processing capabilities with custom pipelines and policies, Twilio API, meta developer account, python and python libraries for Machine learning /deep learning.