Project Definition:

The problem we aim for is to design and develop an AI chatbot capable of assisting individuals in predicting their risk of developing diabetics by leveraging a combination of personal health data, lifestyle, and medical history. This system uses Machine learning algorithms to analyze medical data and predict the likelihood of an individual developing diabetes. our primary objectives are to provide a personalized assessment to the individual to manage their health.

Functionality:

- Medication Reminders
- Blood Sugar Tracking and Emergency Information
- Dietary Assistance
- Support and Motivation
- Privacy and Data security

User Interface:

- User onboarding and Simple and clean design
- User-friendly navigation
- Conversational interface
- Voice and text input
- Data visualization

Natural Language Processing:

- User personalization
- Multimodal input handling
- Preprocessing and cleaning
- Sentiment Analysis
- Intent resolution
- Fallback and error handling

Response:

- Empathetic and supportive tone
- Personalization and Actionable advice
- Resource sharing
- Clarification and further question
- Continuous learning and improvements

Integration:

- Smart devices and wearables
- Health insurance portal
- Social media platforms

- Pharmacy websites

<u>Testing phases:</u>

- Functional testing
- Usability testing
- Integration testing
- Performance testing
- Language and multilingual testing
- Security and privacy testing

<u>Improvement strategies:</u>

- User feedback analysis
- Data collection and analysis
- A/B testing
- Feature and accessibility improvement