

## **Phase 1: Problem Definition and Design Thinking**

In this part you will need to understand the problem statement and create a document on what have you understood and how will you proceed ahead with solving the problem.

Please think on a design and present in form of a document.

### **Problem Definition:**

The problem is to build an AI-powered diabetes prediction system that uses machine learning algorithms to analyze medical data and predict the likelihood of an individual developing diabetes. The system aims to provide early risk assessment and personalized preventive measures, allowing individuals to take proactive actions to manage their health.

### **Design Thinking:**

1. Functionality: Define the scope of the chatbot's abilities, including answering common questions, providing guidance, and directing users to appropriate resources.
2. User Interface: Determine where the chatbot will be integrated (website, app) and design a user-friendly interface for interactions.
3. Natural Language Processing (NLP): Implement NLP techniques to understand and process user input in a conversational manner.
4. Responses: Plan responses that the chatbot will offer, such as accurate answers, suggestions, and assistance.
5. Integration: Decide how the chatbot will be integrated with the website or app.
6. Testing and Improvement: Continuously test and refine the chatbot's performance based on user interactions.

### **NOTE:**

File Naming Convention: **AI\_Phase1**

After completion upload your file to your private GitHub account. Please give access to your faculty evaluators of your college and industry evaluator [ [IndustryEvaluator@skillup.online](mailto:IndustryEvaluator@skillup.online) ] to your private GitHub repository for evaluation process

Go to the Project Submission Part 1 section and add your college code, the link of your GitHub in the space provided, upload your documents, and click on submit.