

# AI BASED DIABETES PREDICTION SYSTEM

## 1. Problem Definition:

- Clearly define the need for an AI-based diabetes prediction system.
- Highlight the significance of early detection and intervention in managing diabetes.

## 2. Design Thinking Process:

### Empathize:

- Explain how you empathized with potential users and stakeholders to understand their challenges and requirements.

### Define:

- Present the refined problem statement and the specific objectives of the diabetes prediction system.

### Ideate:

- Discuss the brainstorming process that led to the selection of AI models and relevant data points for prediction.

### - Prototype:

- Describe the creation of a preliminary version of the AI model and the iterative testing process for refining it.

### Test:

- Present the evaluation process, including the datasets used and the measures taken to ensure the accuracy and reliability of the predictions.

### Implement:

- Explain the development of the user-friendly interface and the seamless integration of the system with existing healthcare infrastructure.

### Iterate:

- Outline the feedback gathering mechanism and the planned updates to keep the system aligned with the latest research and technological advancements in the field of diabetes management.

## 3. Conclusion:

- Summarize the significance of the AI-based diabetes prediction system in improving healthcare outcomes.
- Emphasize the potential impact on early intervention, patient care, and the overall management of diabetes.

#### 4. Future Scope:

- Suggest potential avenues for further research and development, highlighting how the system can be enhanced and expanded in the future.
- Discuss the possibility of integrating additional features or collaborating with healthcare institutions for real-world implementation.