# AI Based Diabetes Prediction System

Innovation

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Abstract

An AI-based diabetes prediction system is designed to assess an individual's risk of developing diabetes using machine learning techniques and relevant health data. The system involves data collection, preprocessing, model selection, training, and deployment to provide early diagnosis and preventive care. Collaboration with healthcare experts and continuous monitoring ensure its accuracy and usability in clinical settings.

Case Diagram

Use Case Diagram of the Diabetes Monitoring System
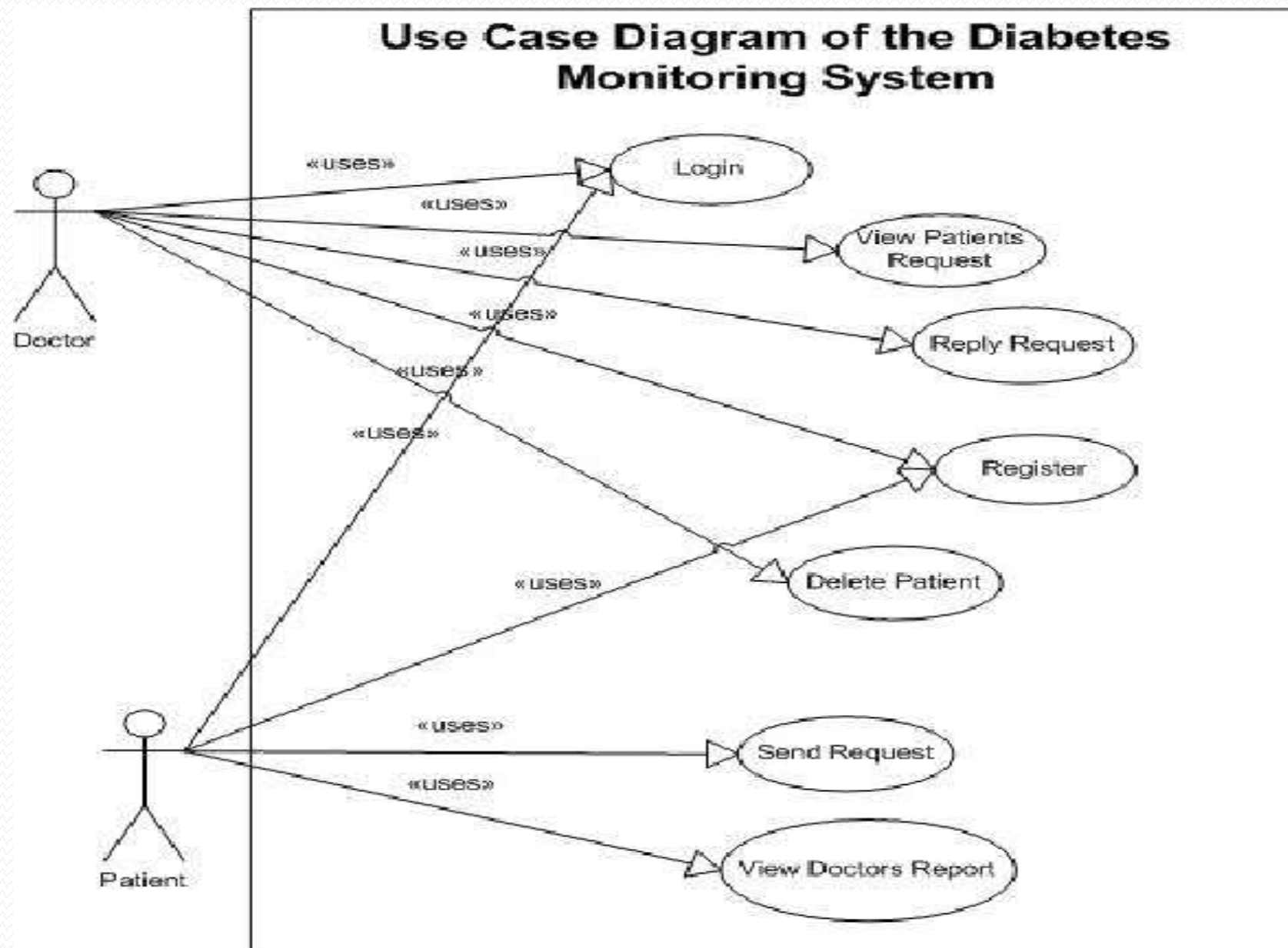
Flow chart
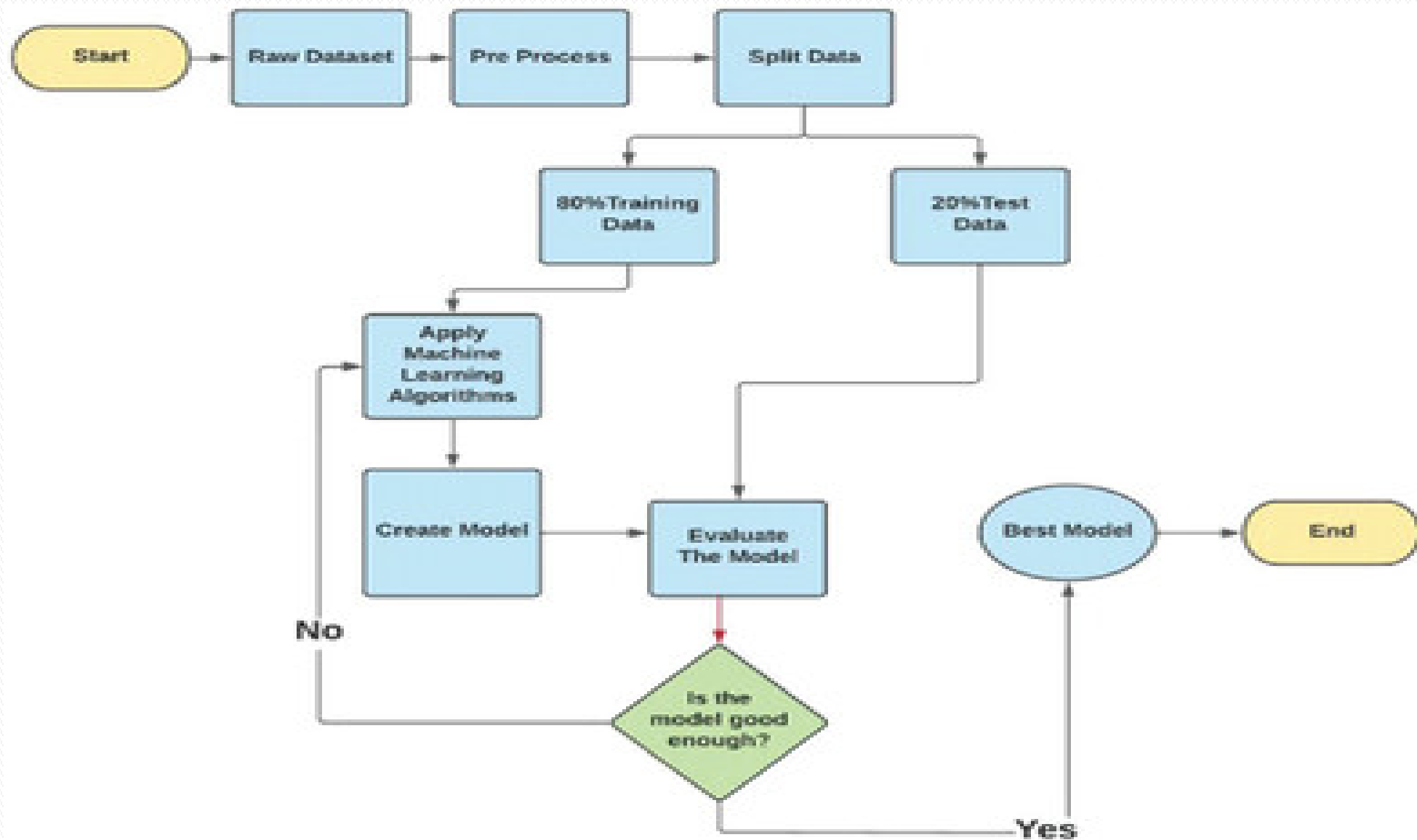
Requirement Analysis

Requirement analysis is the process of identifying, documenting, and understanding the needs and constraints of a project or system to define what it must accomplish. It involves gathering, prioritizing, and documenting functional and non-functional requirements to guide the project's development or solution's design. This phase is crucial for successful project planning and implementation.
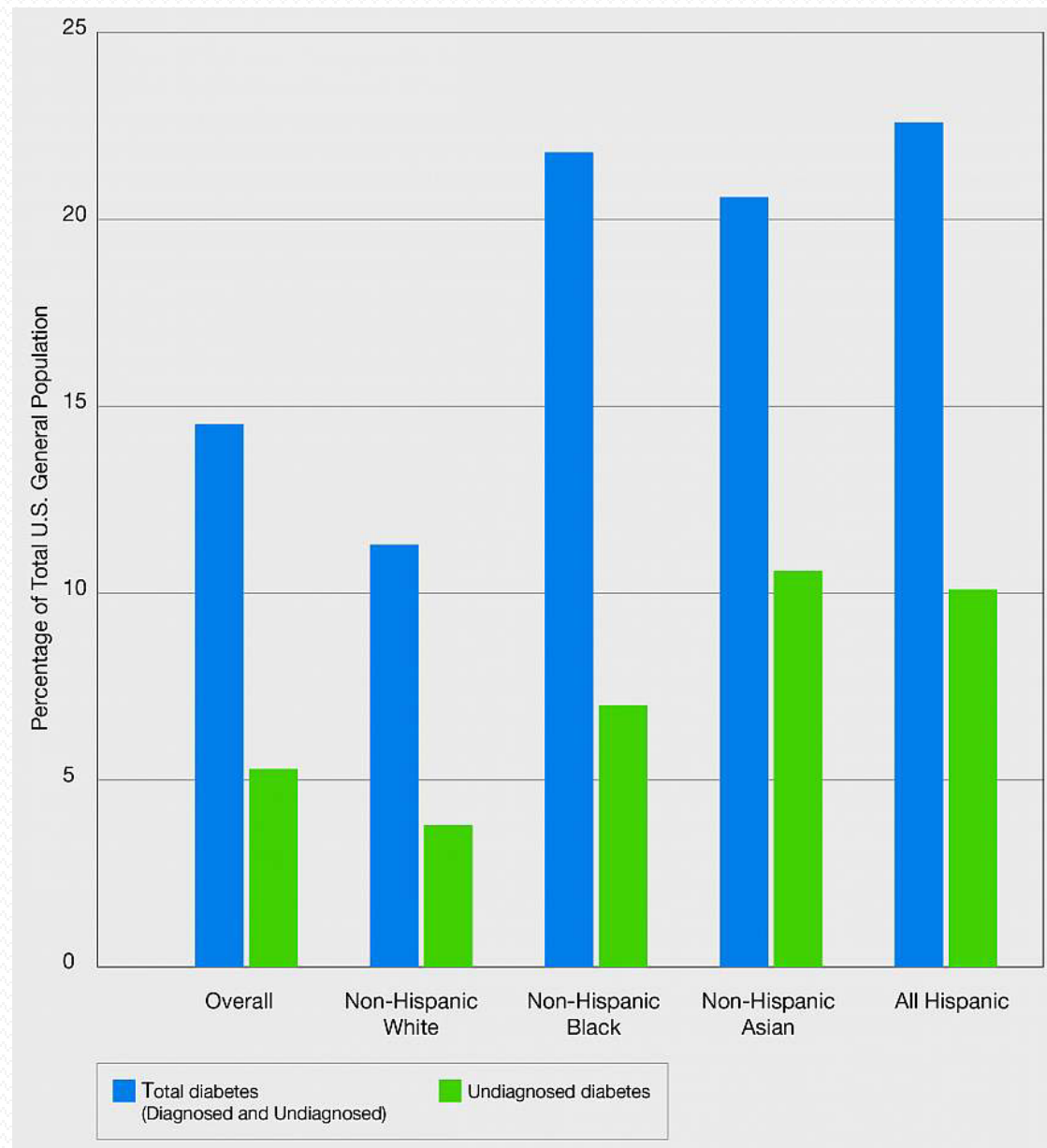
Tools
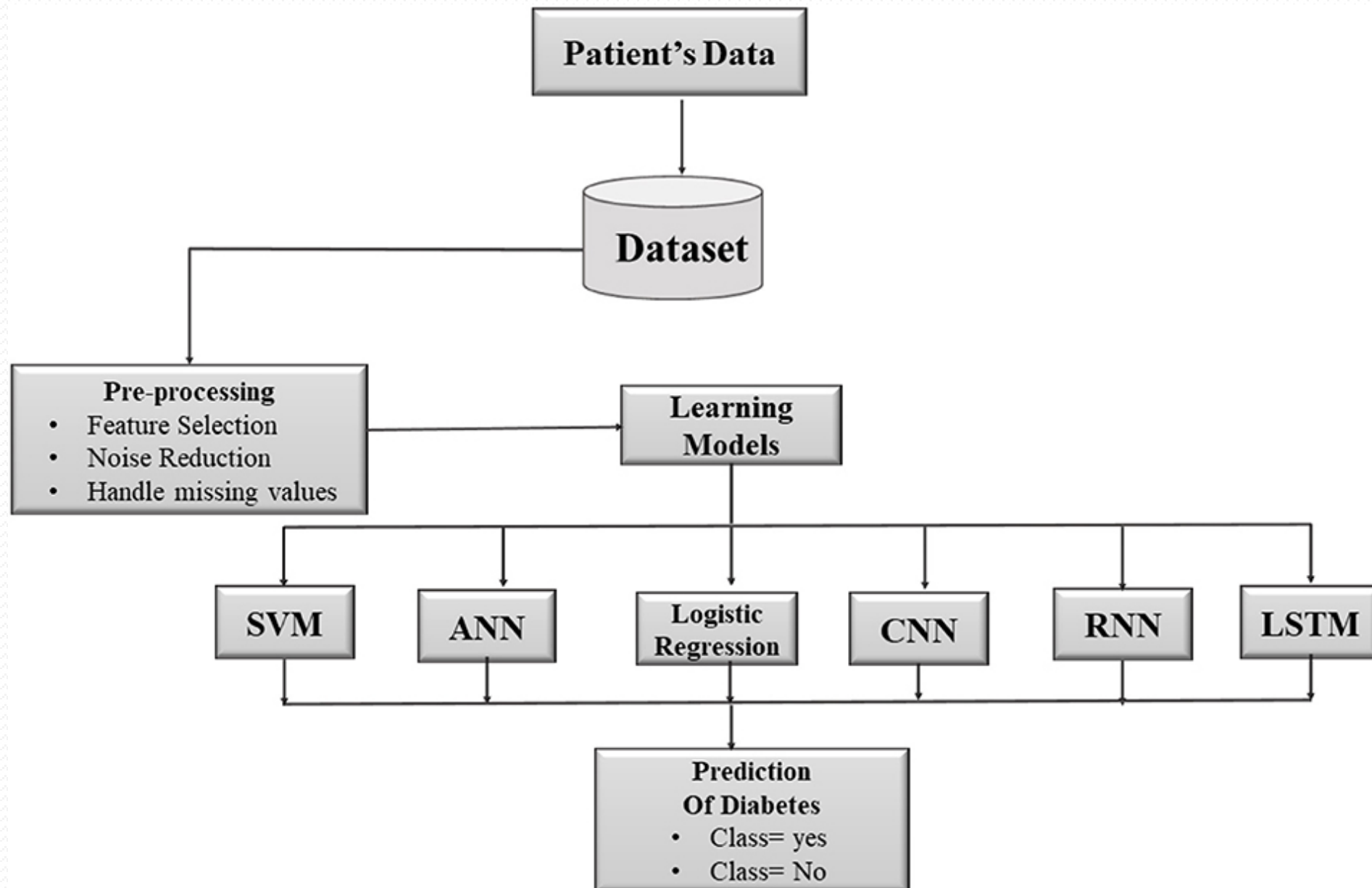
Goal
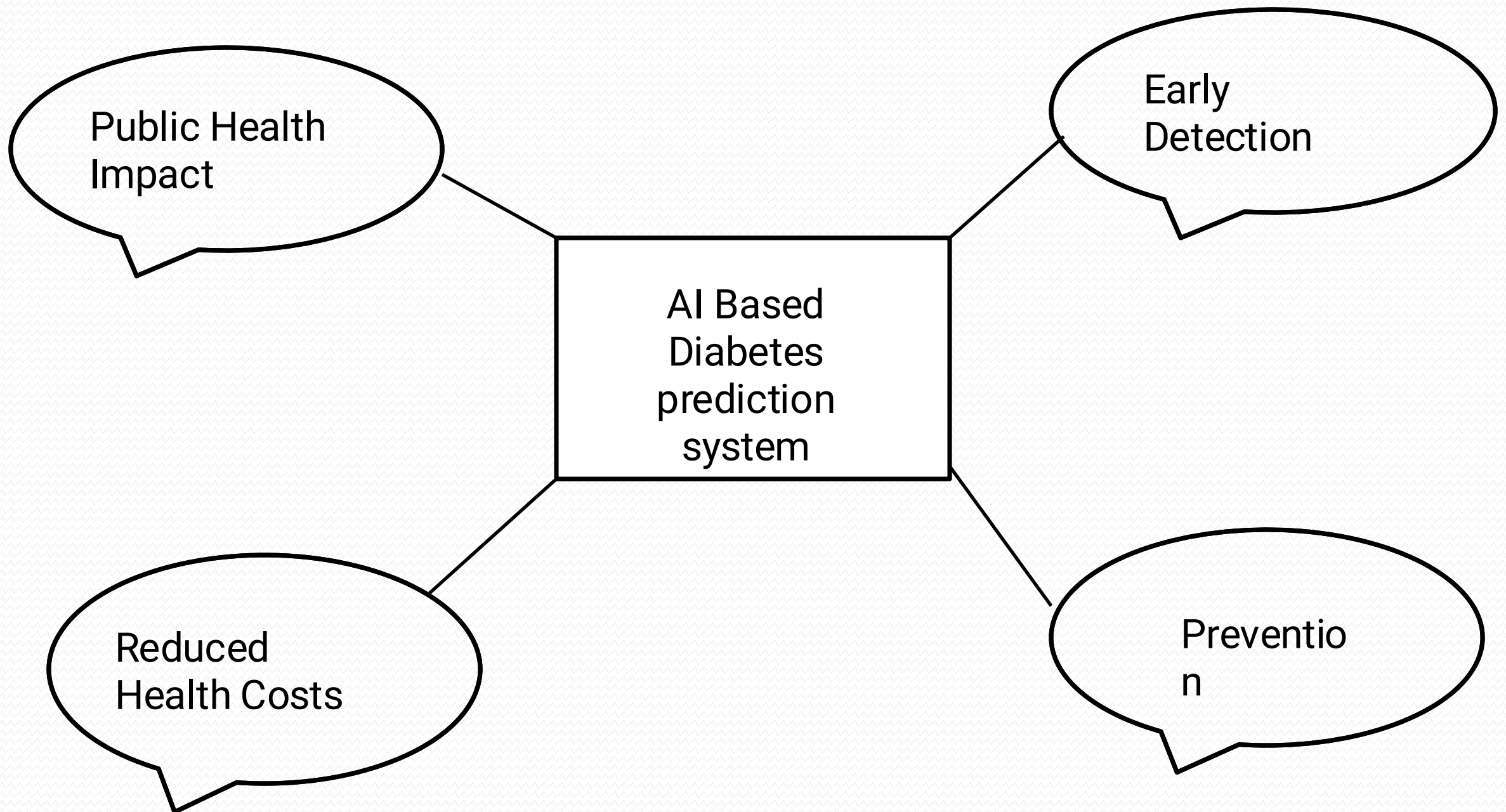
Basic code of Tensor flow

```
import tensor flow as tf
node1 = tf.constant(3, dtype=tf.int32)
node2 = tf.constant(5, dtype=tf.int32)
node3 = tf.add(node1, node2)
sess = tf.compat.v1.Session()
print("sum of node1 and node2 is :",sess.run(node3))
sess.close()
```

Predictive Analysis

References

Machine Learning Based Diabetes Classification and Prediction for Healthcare Applications (hindawi.com)

(PDF) DIABETES PREDICTION USING MACHINE LEARNING ALGORITHMS (researchgate.net)

Diabetes prediction using machine learning and explainable AI techniques - PMC (nih.gov)

Conclusion

In conclusion, an AI-based diabetes prediction system aims to proactively identify individuals at risk of diabetes, provide personalized recommendations, and contribute to early intervention and prevention efforts, ultimately improving healthcare outcomes and reducing associated costs.

Thank You