**Automated Disease Prediction Using Machine Learning**

**ABSTRACT:-**

This project presents a machine learning-based disease prediction system implemented as an interactive web application using Streamlit. The system leverages classification models, specifically Support Vector Machines (SVMs), to predict the likelihood of three diseases: Diabetes, Heart Disease, and Parkinson's Disease. Each disease-specific model was trained on its respective dataset, optimized for high accuracy in binary classification tasks. The SVM classifier, known for its robustness in handling high-dimensional data, forms the backbone of this predictive system.

The application provides an intuitive interface for users to input relevant medical parameters, such as blood pressure, glucose levels, or vocal features, depending on the disease being assessed. Upon submission, the app preprocesses user input and feeds it into the corresponding trained model, delivering predictions in real time. The use of Streamlit ensures scalability and accessibility, as the application can be deployed seamlessly on various platforms. By combining the accuracy of SVM classification with an easy-to-use interface, the project aims to provide a reliable tool for early disease detection. This system demonstrates the potential of machine learning in healthcare applications, enhancing decision-making and preventive care.

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**SIGNATURE OF THE GUIDE**

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