Statement of Work

Machine Learning-Based Heart Stroke Risk Assessment System

Date: 20/2/2025
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Project Overview:

FOR: Patients who are at risk of strokes and cardiovascular diseases.

WHO: To the individuals who remain undiagnosed until they suffer a critical stroke, leading to high healthcare costs and fatal outcomes.

The Machine Learning-Based Heart Stroke Risk Assessment System is a:
A predictive analytics system that assesses stroke risk based on medical history, lifestyle factors, and genetic predisposition.

THAT: Provides an early risk assessment, allowing individuals to take preventive measures and reduce healthcare costs.

UNLIKE: Traditional risk assessment models that rely only on periodic medical checkups, which may not detect risks early enough.

OUR PRODUCT: Utilizes advanced machine learning models to provide real-time risk evaluation and personalized health recommendations.

Deliverables:

1. Machine learning model for stroke risk assessment.
2. Web-based or mobile application for end-user interaction.
3. Comprehensive dataset with preprocessing scripts.
4. Documentation (technical reports, user manuals, and regulatory compliance reports).
5. Deployment plan for real-world testing and feedback collection.

Conclusion:

This project aims to enhance early detection of stroke risk using machine learning. By analyzing patient data and predicting stroke likelihood, we can help individuals adopt preventive measures and reduce critical health emergencies. The success of this project will significantly contribute to proactive healthcare management and improved patient outcomes.