Scope of Work document

Project Title : Predictive Health Insurance Model

Project Overview

develop a predictive model to estimate health insurance premiums based on factors like age, smoking habits, BMI, and medical history.

Build and deploy a predictive model with a Streamlit application.

Objective:

• Develop a high-accuracy (>97%) predictive model. The percentage difference between the predicted and actual value on a minimum of 95% of the errors should be less than 10%.

• Deploy the model in the cloud so that an insurance underwriter can run it from anywhere.
• Create an interactive Streamlit application that an underwriter can use for predictions.

Scope of Work: 1. Data Collection and Preprocessing

• Collect and clean labeled datasets.

• Perform exploratory data analysis (EDA).

2. Model Development

• Train and evaluate multiple models.

Optimize the best model for accuracy.

3. Model Deployment

• Deploy the model on a cloud platform.

• Ensure security and scalability.

4. Streamlit Application Development

• Build an interactive app for inputting factors and displaying predictions.

5. Testing and Validation

• Rigorous testing and validation with real-world data.

6. Documentation and Training

• Provide documentation and training for underwriters.

Deliverables:

Trained model, deployed model, Streamlit app, documentation, and training materials.