Scope of Work (SOW) Document

Project Title:

Predictive Health Insurance Model for LIC Insurance

Client:

LIC Insurance

Service Provider:

Infosys

Project Overview

Infosys will develop a predictive model for LIC Insurance to estimate health insurance premiums based on factors like age, smoking habits, BMI, and medical history. The project has two phases:

1. **Phase 1 (Minimum Viable Product : MVP):** Build and deploy a predictive model with a Streamlit application. In this phase, Infosys will focus on quickly delivering a Minimum Viable Product (MVP) that provides immediate business value by enabling LIC Insurance underwriters to estimate insurance premiums through a user-friendly interface.

2. **Phase 2:** Develop infrastructure for **straight-through processing (STP)** of insurance quotes (detailed planning and estimation for this phase will be done later). The second phase will focus on building a **fully automated, scalable, and integrated system for Straight-Through Processing (STP)** of health insurance quotes.

Phase 1: MVP Development

Objective:

- Develop a high-accuracy (>97%) predictive model. For at least 95% of the predictions, the percentage difference between the predicted premium and the actual premium 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.

Project Timeline

Phase 1:
- Data Collection and Preprocessing: 2 weeks
- Model Development and Evaluation: 4 weeks
- Deployment and Application Development: 3 weeks
- Testing, Validation, Documentation, and Training: 2 weeks

Project Management

Product Owner: Prikshit
Technical Lead: Ishi
Data Scientist: Puneet
Client Representative: Mitali

Communication Plan:

- Weekly progress meetings.
- Bi-weekly updates to LIC Insurance stakeholders.

Budget and Payment Terms

Phase
- Total Cost: $30,000
- Payment Schedule: 50% upfront, 50% upon completion.

Acceptance Criteria

Phase 1:
- Successful deployment of the model and application.
- Model meets accuracy requirements (97% minimum).
- Application usable by underwriters.

Signatures

LIC Insurance Representative: _____ Date: _____
Infosys Representative: _____ Date: _____