**CONTRACT FOR FINAL YEAR PROJECT**

**To:**

OIC Department of IT

Email: info@oic.edu.np

**Developers:**

Nilesh Nath, Rajan Shrestha, Nischal Karki

Computer Science and Information Technology

7th Semester

**1. Project Overview**

This contract outlines the terms and conditions for developing the Final Year Project titled "Stock Price Prediction Using LSTM." The project aims to create a system that predicts stock prices using Long Short-Term Memory (LSTM), focusing on real-time stock data fetching, visualization, and prediction accuracy.

**2. Scope of Work**

* Development of a stock price prediction system using LSTM.
* Design and implementation of the frontend using Streamlit for data visualization.
* Backend development using Django for real-time data scraping and processing.
* Integration of an LSTM model for stock price prediction.
* Daily data update mechanism synchronized with the Nepal Stock Exchange market closure.

**3. Cost Structure**

**3.1. Development Costs**

* Frontend Development: Streamlit interface design and integration – NRs.20,000
* Backend Development: Django API for data scraping and data processing – NRs.30,000
* LSTM Model Development: Implementation and training of the LSTM model – NRs.30,000
* Testing and Debugging: Quality checks and performance validation – NRs.15,000
* Documentation: Preparation of the project report, logbook, and user guide – NRs.5000

Total Estimated Cost: NRs. 1, 00,000

**3.2. Payment Schedule**

Milestone 1: 20% upon signing the contract.

Milestone 2: 40% upon completion of frontend and backend integration.

Milestone 3: 30% upon successful implementation of the LSTM model.

Milestone 4: 10% upon final delivery and acceptance.

**4. Schedule**

**4.1. Project Timeline**

Project Start Date: 2024/07/24

Milestone 1: Completion of frontend design

Milestone 2: Completion of backend development

Milestone 3: LSTM model training and testing

Milestone 4: Final integration and presentation

Project End Date: 2024/11/12

**4.2. Delays and Extensions**

Delays due to unforeseen circumstances will be reviewed and may result in schedule adjustments.

**5. Quality Constraints**

**5.1. Standards**

The system must adhere to industry standards for software development and machine learning model implementation.

Performance metrics, data accuracy, and model validation should meet the specified targets.

**5.2. Testing**

The testing process will involve unit tests, integration tests, and validation using historical stock data.

**5.3. Acceptance Criteria**

The project will be deemed complete once all specified functionalities are implemented, and the system meets performance benchmarks.

**6. Signatures**

**For OIC, Department of IT**

Name: Dhiraj Kumar Jha

**For Student Developer**

Nilesh Nath, Rajan Shrestha, Nischal Karki

Title: Stock Price Prediction using LSTM

Date: 2024/09/09