**Proposal for RNN Text Classification Project**

**Objective**

Develop a Recurrent Neural Network (RNN)-based solution for text classification using Keras. The project will include data preprocessing, model implementation, training, evaluation, and clear documentation for reproducibility.

**Scope of Work**

1. **Data Preprocessing**
   * Text cleaning and tokenization.
   * Converting text data to numerical representations (e.g., word embeddings).
   * Handling data splits (training, validation, and testing).
2. **Model Development**
   * Designing and implementing the RNN-based text classification model using Keras.
   * Experimenting with RNN architectures such as LSTM/GRU, embedding layers, and dropout layers.
3. **Model Training and Tuning**
   * Training the model with appropriate hyperparameter optimization (learning rates, batch sizes, etc.).
   * Incorporating early stopping or other techniques to prevent overfitting.
4. **Model Evaluation**
   * Assessing the model’s performance using metrics such as accuracy, precision, recall, F1-score, etc.
   * Visualizing results for better insights (e.g., confusion matrix, loss/accuracy plots).
5. **Documentation and Delivery**
   * Commenting on code for clarity and ease of understanding.
   * Providing a well-documented Jupyter Notebook, including explanations for each step.
   * Offering guidance on how to run the notebook in your environment.

**Deliverables**

* A fully functional and optimized RNN-based text classification model.
* A complete Jupyter Notebook with step-by-step documentation.
* Visualizations of results and evaluation metrics.
* Recommendations for improvements or next steps (if applicable).

**Timeline**

Estimated completion time: **7 - 10 working days** (depending on additional requirements and feedback cycles).

**Pricing**

Based on the complexity of the project and the deliverables, I propose a fee of **Ksh 35,000**, broken down as follows:

* **Data Preprocessing:** Ksh 8,000
* **Model Development:** Ksh 12,000
* **Training and Tuning:** Ksh 7,000
* **Evaluation and Visualizations:** Ksh 5,000
* **Documentation and Support:** Ksh 3,000

**Total:** **Ksh 35,000**

**Payment Terms**

* 50% upfront to commence work.
* 50% upon project delivery and approval.

**Additional Notes**

* Any additional features or significant changes to the requirements will be billed separately.
* I am available for post-project support at an agreed-upon hourly or fixed rate.

Please review this proposal, and feel free to share any specific requirements or questions. Once approved, I will begin working immediately.

Let me know if you'd like to tweak anything in this proposal!