KADA SMS Booking System (MVP)

Overview

The KADA SMS Booking System is a simple desktop application designed to classify SMS messages and generate appropriate responses for a ride-booking and package delivery service. This project uses a basic NLP model (built with NLTK) to detect user intent from SMS messages and respond accordingly.

How to Use

1. **Extract Files**:
    - Place the following files in the same folder:
        - `sms_booking_gui.exe` (the executable application)
        - `nltk_sms_model.pkl` (the serialized NLP model)
    - Ensure both files remain in the same directory for the application to work correctly.
2. **Run the Application**:
    - Double-click on `sms_booking_gui.exe` to open the application.
    - A GUI window will appear.
3. **Interact with the Application**:
    - Type an SMS message in the input box.
    - Click the **"Process SMS"** button to classify the intent and generate a response.
    - The application will display the detected **intent** and an appropriate **response**.

Sample SMS Messages

You can try the following sample messages to test the system:

- `"I need a ride to Makola"` → Intent: `ride_request`, Response: `"Your ride has been booked. Please wait for your driver."`
- `"Send the package to Tema"` → Intent: `delivery_request`, Response: `"Your delivery order has been booked. Please await the dispatch rider."`
- `"How do I use this system?"` → Intent: `help_request`, Response: `"To request a ride, type 'Ride to [destination]'. To send a package, type 'Send to [destination]'."`

Features

- **SMS Intent Detection**:
    - Detects three primary intents:
        - `ride_request`
        - `delivery_request`
        - `help_request`
    - Handles unknown messages gracefully.

- **Interactive GUI**:
    - Simple and user-friendly interface for entering and processing SMS messages.

Requirements

- The application runs as a standalone executable. No installation or additional setup is required.
- Ensure the `nltk_sms_model.pkl` file is in the same directory as the executable.

Technical Details

- **Programming Language**: Python
- **GUI Framework**: Tkinter
- **NLP Framework**: NLTK
- **Model**: Basic keyword-based intent detection using pre-defined intents.

Known Limitations

- The system currently uses a simple keyword-matching model and may not handle complex or ambiguous messages.
- It is not yet integrated with live SMS services like Africa's Talking.

Contact

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