

AI Recipe Generator

Project Overview

This AI-powered recipe generator is built using **Rasa** and provides recipes for three dishes:

1. **Paneer Butter Masala**
2. **Chicken Biryani**
3. **Chole Bhature**

Users can interact with the chatbot to receive **ingredient lists and cooking instructions**.

Technical Stack

- **Language:** Python
- **Framework:** Rasa
- **Dataset:** Custom CSV dataset (Preprocessed with SpaCy)
- **Deployment:** Docker (Local)

Challenges Faced

1. **Large Dataset Issue:** Initially, the dataset contained **13K+ rows**, but Rasa's server could not handle the load.
2. **Static Approach Issues:** Using a static approach caused **actions.py** to stop working.
3. **Final Solution:** Limited the dataset to **3 sample dishes** for smooth performance.

Installation & Usage

1. Install **Docker Desktop**.
2. Pull the latest Rasa image:
3. `docker pull rasa/rasa:latest`
4. Initialize the Rasa project:
5. `docker run -it --rm -v [your_project_path] rasa/rasa:latest init --no-prompt`
6. Train the model:
7. `docker run -it --rm -v [your_project_path] rasa/rasa:latest train`
8. Run the chatbot:
9. `docker run -it --rm -v [your_project_path] rasa/rasa:latest shell`

Future Improvements

- Expand dataset with **optimized storage**.
- Improve **response accuracy** with NLP techniques.
- Deploy on a **cloud server** (AWS/GCP).