



Swift Visa:

AI-Based Visa Eligibility and Screening Agent

Traditional Approach as an Issue:

- **What is the problem?**

Traditional rule-based systems depends on translation APIs, OCR, or scraped content to evaluate the Visa status which makes it rigid and imperfect for recent changes in rules.

- **Why does this problem exist?**

Lack of structured information, outdated rules, and lack of Advance and recent visa policy access to rule based system.

- **Who faces the problem?**

Students, travellers, workers, immigration consultants.

- **What will a solution achieve?**

Automation, accuracy, fast decision-making which is making it easy to evaluate the visa's condition.

What I Will Do

In this project, I will try to :

- Build an **AI-powered agent** that evaluates a user's visa eligibility on the basis of the Vector Database.
- Use **RAG (Retrieval-Augmented Generation)** to ground answers in real immigration policy and lash it with recent and real time data.
- Collect official **visa rules from various countries** .
- Convert these rules into **vector embeddings** and store them in **FAISS/Chroma**.
- Build a **Streamlit-based user interface** where users enter their details.
- Integrate the UI with the backend **LLM pipeline**(with a good prompt).
- Deploy the agentic model for use.

Objective of the Project

The objective of this project is to:

- Create a complete and full-fledged system that functions like a virtual **visa eligibility officer**.
- Evaluate visa eligibility using **LLMs and Agents**, not rule-based logic.
- Ensure responses are always **grounded in official policy documents**.
- Provide transparent results with **explanations, citations, and confidence scores**.
- Build an interactive, easy-to-use **web application** for users with Streamlit.

Use Cases

- Students checking eligibility for student visas.
- Workers checking eligibility for skilled migration visas.
- Tourists evaluating short-term visa requirements.
- Immigration advisors for quick screening of the current visa.
- Companies evaluating workers for work permits.

AI TECH AGENCY INFOGRAPHICS

1

Vector Store

Official rules are collected here virtually and embedded and stored in virtual Chroma/FAISS

3

LLM Engine

Helps in finding the result and giving proper explanation as well

2

RAG Pipeline

Retrieve recent and relevant Immigration rules

4

Front-end Application

A proper UI and UX frontend is made to showcase the model

Tech Stack

- **Frontend**

Streamlit

- **Backend**

Python

Lang Chain / Fast API

- **LLM Models**

GPT-4.o

Mistral 7B (via LM Studio)

- **Vector Store**

FAISS / Chroma

- **Embeddings**

Sentence Transformers

- **Deployment**

Streamlit Cloud