STREAMLIT INTERFACE – HireSense App

Overall Flow:

- The entire system is built using Streamlit
- Uses spaCy to preprocess text: lowercasing, stopword removal, and lemmatization
- Uses SentenceTransformer to convert text into semantic embeddings
- Uses cosine similarity to find the best matches between resume and job description embeddings
- Role switching and user flow is managed using st.session_state.role

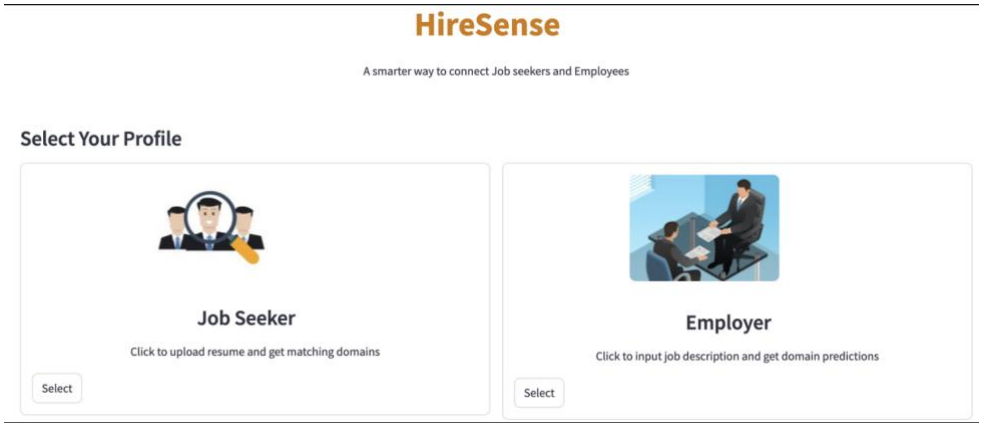
Initial Screen – Role Selection:

This is the landing page of the HireSense application
The user is prompted to choose their role:

- Job Seeker – upload resume to get matched job domains
- Employer – paste job description to find relevant resumes

Two visually distinct cards are displayed with illustrations and instructions
When the user clicks the "Select" button:

- Their choice is stored using st.session_state.role
- This controls what screen appears next



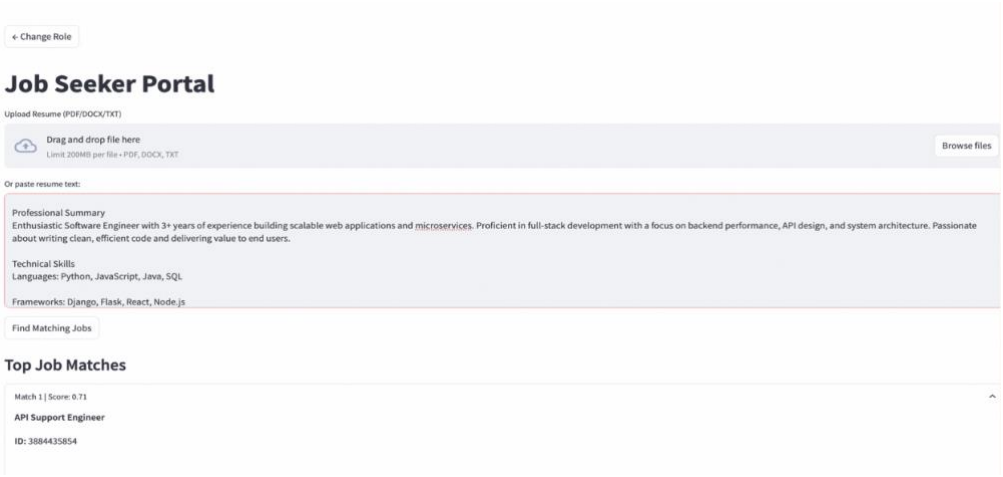
Job Seeker Portal:

- This screen appears if the user selected the Job Seeker role.
- The user can:
  - Upload a resume in .pdf, .docx, or .txt format, or
  - Paste resume text manually in a text area.

When the user clicks 'Find Matching Jobs':

1. The resume text is cleaned and lemmatized using spaCy
2. It is embedded into vector form using SentenceTransformer
3. The app loads job data from jobs.csv and jobs_embeddings.npy
4. Cosine similarity is calculated between the resume and job descriptions
5. The top 5 job matches are shown with:

   - Job title
   - Job ID
   - Similarity score



<u>Employer Portal:</u>

This screen appears if the user selected the Employer role.
The employer can paste a job description into a text box.
On clicking ‘Find Matching Resumes’:

1. The job description is cleaned and embedded (similar to the Job Seeker flow).
2. The app loads candidate resumes (resumes.csv) and their embeddings (resumes_embeddings.npy).
3. Computes cosine similarity between the job description and all resumes.
4. Displays the Top 5 matching resumes, showing:
    - Resume ID
    - Resume snippet
    - Similarity Score