SHL Assessment Recommendation Engine - 1-Page Summary

Overview

This project delivers an intelligent SHL Assessment Recommendation Engine that suggests relevant assessments from SHL's catalog based on a user's query (e.g., job description or role name). The system is powered by semantic search using precomputed embeddings.

Tech Stack

- Backend API: FastAPI (deployed on Render)

- Frontend: Streamlit app (to be deployed)

- Embeddings: all-MiniLM-L6-v2 from SentenceTransformers (locally generated)

- Data Source: Curated assessments.json dataset with over 120 SHL products

How It Works

1. All SHL product descriptions are embedded using SentenceTransformer.

2. When a user submits a query, it is embedded and compared against the assessment embeddings using cosine similarity.

3. The top-k most relevant assessments are returned with their details.

API Endpoint

- Base URL: https://shl-assessment-recommender-lq61.onrender.com

- Endpoint: POST /recommend

- Request Body:

```
{
   "query": "Looking for a retail sales representative",
   "top_k": 5
}
```

Response

A list of recommended SHL assessments including:

- Name and catalog link

- Remote testing support

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- Adaptive test support

- Duration

- Test type

Deliverables

- Live Demo: Streamlit frontend - coming soon

- API: FastAPI backend (https://shl-assessment-recommender-lq61.onrender.com)

- Code: GitHub Repository - link to be provided

- PDF Summary: Attached