TalentScout — Hiring Assistant

Overview

TalentScout is a Streamlit-based hiring assistant that collects candidate details and generates tailored technical screening questions using Mistral AI (or a safe fallback). It helps recruiters save time, standardize screening, and improve candidate evaluation.

Problem Statement

Recruiters often spend significant time manually creating technical screening questions. This leads to inconsistencies, inefficiency, and potential bias during candidate evaluations.

Solution

TalentScout automates this process by providing an easy-to-use interface where recruiters input candidate details and technology stack. The system then generates relevant, difficulty-adjusted technical questions via Mistral AI, or uses a fallback generator when no API key is available.

Key Features

- Candidate intake form (name, email, phone, experience, role, tech stack)
- AI-powered question generation (Mistral API) with fallback option
- Regenerate questions per technology
- Recent submissions stored in SQLite/Postgres
- Download results as JSON/TXT
- Streamlit UI with collapsible sections and copy-to-clipboard

Tech Stack

Python	3.10+
Frontend	Streamlit
LLM	Mistral API
Database	SQLite (default), Postgres (optional)
ORM	SQLAlchemy

Architecture

The system follows a modular architecture: - Streamlit frontend for candidate intake & question display - Backend modules (generator, utils, prompts) for logic - Database layer (storage, models) with SQLite/Postgres support

Deployment

TalentScout can be deployed locally using Streamlit or on Streamlit Cloud for public demos. Environment variables (MISTRAL_API_KEY, DATABASE_URL, etc.) are configured securely via

.env or Streamlit Secrets.

Screenshots

Screenshots included in the repository under docs/screenshots: - Candidate Form - Generated Questions - Recent Submissions

Limitations & Future Work

- SQLite is ephemeral on Streamlit Cloud, Postgres recommended for persistence - Parsing robustness can be improved for malformed LLM outputs - Future extensions: Admin dashboard, multilingual support, PDF export

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