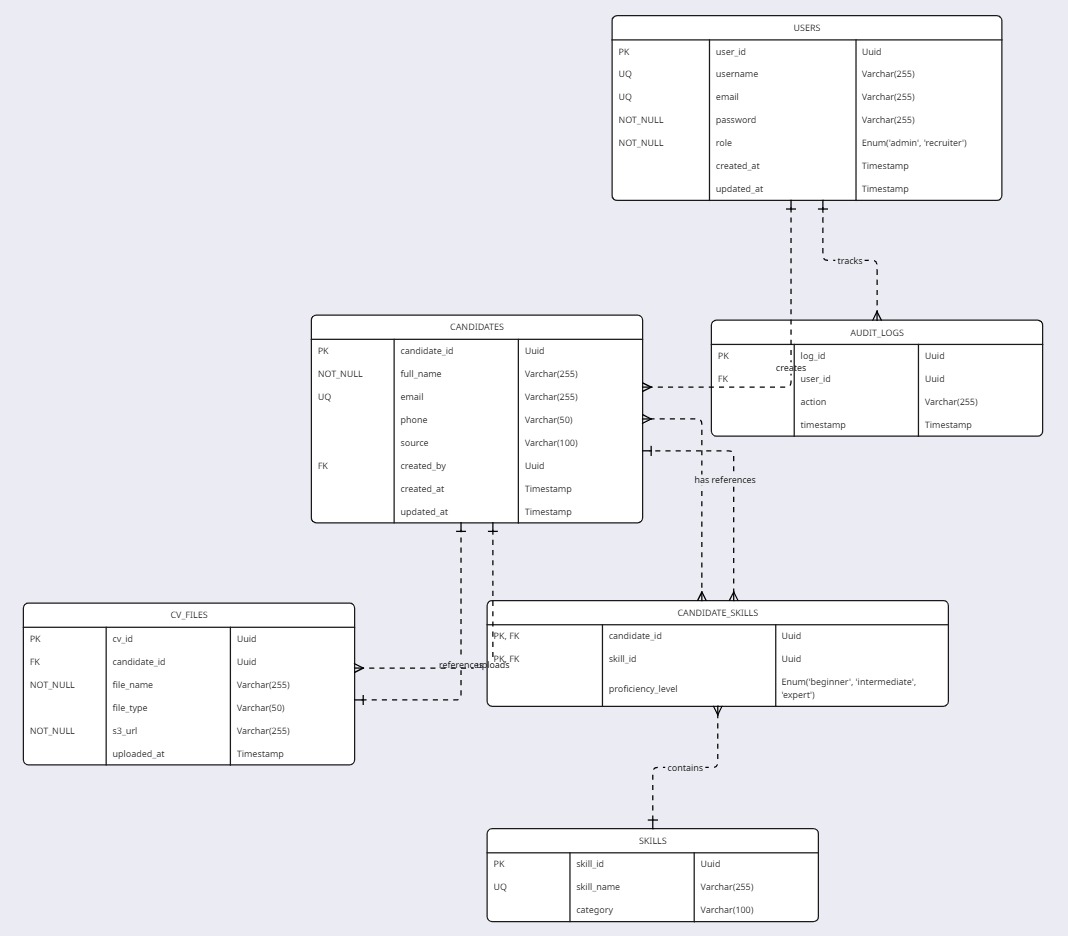
# Database Schema - CV Processing Portal

This section describes the complete SQL Data Definition Language (DDL) schema for the CV Processing Portal project. The schema ensures data integrity, normalization, and supports the functional requirements of the system. The tables cover users, candidate details, resume file storage, skills, job postings, match scoring, and audit logs.  


## SQL DDL Scripts

**-- USERS TABLE: Stores recruiters and admin details**CREATE TABLE users (  
 user\_id SERIAL PRIMARY KEY,  
 username VARCHAR(50) NOT NULL UNIQUE,  
 email VARCHAR(100) NOT NULL UNIQUE,  
 password\_hash VARCHAR(255) NOT NULL,  
 role VARCHAR(20) CHECK (role IN ('RECRUITER', 'ADMIN')),  
 created\_at TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,  
 is\_active BOOLEAN DEFAULT TRUE  
);  
  
-**- CANDIDATES TABLE: Extracted from uploaded CVs**  
CREATE TABLE candidates (  
 candidate\_id SERIAL PRIMARY KEY,  
 full\_name VARCHAR(100) NOT NULL,  
 email VARCHAR(100),  
 phone VARCHAR(20),  
 address TEXT,  
 created\_at TIMESTAMP DEFAULT CURRENT\_TIMESTAMP  
);  
  
**-- CV FILES TABLE: Stores uploaded CV file metadata and S3 path**CREATE TABLE cv\_files (  
 cv\_id SERIAL PRIMARY KEY,  
 candidate\_id INT NOT NULL REFERENCES candidates(candidate\_id) ON DELETE CASCADE,  
 file\_name VARCHAR(255) NOT NULL,  
 s3\_url TEXT NOT NULL,  
 upload\_date TIMESTAMP DEFAULT CURRENT\_TIMESTAMP,  
 uploaded\_by INT REFERENCES users(user\_id),  
 content\_type VARCHAR(50),  
 file\_size INT  
);  
  
**-- SKILLS TABLE: Skill dictionary and extracted mapping**CREATE TABLE skills (  
 skill\_id SERIAL PRIMARY KEY,  
 candidate\_id INT REFERENCES candidates(candidate\_id) ON DELETE CASCADE,  
 skill\_name VARCHAR(100) NOT NULL,  
 proficiency\_level VARCHAR(50),  
 source VARCHAR(50),  
 UNIQUE(candidate\_id, skill\_name)  
);

**-**  
-- INDEXING FOR PERFORMANCE  
CREATE INDEX idx\_candidates\_email ON candidates(email);  
CREATE INDEX idx\_cvfiles\_candidate ON cv\_files(candidate\_id);  
CREATE INDEX idx\_skills\_name ON skills(skill\_name);  
CREATE INDEX idx\_auditlogs\_user ON audit\_logs(user\_id);