Job Application Tracking System

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# 1. Project Overview

The Job Application Tracking System is a web-based application developed as part of the school internship program (11B, 2024/2025).   
Its main goal is to assist job seekers and HR administrators in managing job postings and applications efficiently.  
Users can browse job listings and submit applications, while administrators can manage job ads and review applications.

# 2. Technologies Used

The project utilizes the following technologies and tools:  
- JetBrains Rider (C#/.NET development)  
- Visual Studio Code (frontend or auxiliary editing)  
- SQL Server Management Studio (database management)  
- Figma (UI/UX design)

# 3. Entity Relationship Diagram (ERD)

The diagram below illustrates the relationships between users, job ads, and job applications:

# 4. Database Schema Description

## Users Table

- Id: Primary key.  
- FirstName, MiddleName, LastName: Personal details.  
- Username: Unique username.  
- Password: User password (plain or hashed).  
- Role: Defines whether the user is USER or ADMIN.  
- IsActive: Indicates if the user account is active.  
- CreatedOn, CreatedBy, UpdatedOn, UpdatedBy: Audit fields.

## JobAds Table

- Id: Primary key.  
- Title: Job title.  
- CompanyName: Employer's name.  
- Description: Details about the job.  
- PublishedOn: Posting date.  
- IsOpen: Indicates if the job is open for application.  
- IsActive: Indicates if the ad is currently valid.  
- CreatedOn, CreatedBy, UpdatedOn, UpdatedBy: Audit fields.

## JobApplications Table

- Id: Primary key.  
- UserId: Foreign key to Users.  
- JobAdId: Foreign key to JobAds.  
- Status: Current status (Submitted, Interview, Rejected).  
- IsActive: Indicates if the application is active.  
- CreatedOn, CreatedBy, UpdatedOn, UpdatedBy: Audit fields.

# 5. Roles and Access Control

- Users (Role: USER): Can register, log in, view job ads, and apply to them.  
- Admins (Role: ADMIN): Can manage job postings and review applications. Admin accounts are created manually by a system admin or teacher.

# 6. Functional Requirements

- Users can view all open job listings.  
- Users can apply to a job only once.  
- Users can only view their own applications.  
- Admins can create, edit, and delete job listings.  
- Admins can view and update the status of all applications.  
- Input validation (required fields, text limits, etc.) is enforced throughout the system.

# 7. User Flow & Example Scenario

Example:  
1. An admin logs in and creates a job posting.  
2. A user logs in, views the job ad, and submits an application.  
3. The admin later reviews the application and updates its status to "Interview" or "Rejected".  
4. The user logs in and views the updated status of their application.