Project Title: Skill Matching Platform with Dynamic Role and Permission Management

Description:

Objective: Create a robust backend system using Node.js, Express.js, and MongoDB to build a Skill Matching Platform that allows users to manage their skills, explore posted job vacancies, and determine the percentage match between their skills and the requirements of each vacancy. The project will incorporate dynamic role and permission management to ensure secure and controlled access to various APIs.

Key Features:

1. User Management:
   * Implement user authentication and authorization using JWT tokens.
   * Allow users to sign up, log in, and manage their profile information.
2. Skill Management:
   * Users can add, update, and delete their skills.
   * Skills will be stored in MongoDB and associated with user profiles.
3. Vacancy Management:
   * Create APIs for posting, updating, and deleting job vacancies.
   * Include details such as job title, description, required skills, vacancy image and posting date.
4. Skill Matching:
   * Implement an algorithm to calculate the percentage match between a user's skills and the skills required for a job vacancy.
   * Display the matching percentage for each job vacancy based on the user's skills.
5. APIs for Data Export/Import:
   * Create an API to import data from the database and generate a JSON file.
   * Implement an API to export data (e.g., job vacancies, user skills) to a CSV file.
6. Dynamic Role and Permission Management:
   * Design a system for dynamic role creation and assignment.
   * Define permissions for each role to restrict access to specific APIs.
   * Allow administrators to manage roles and permissions dynamically.
7. Role-Based API Access:
   * Apply dynamic role-based access control to APIs.
   * Restrict access to certain functionalities based on the user's role and permissions.
8. Logging and Error Handling:
   * Implement logging mechanisms to track user activities and system events.
   * Handle errors gracefully and provide meaningful error messages.

Tech Stack:

* Node.js
* Express.js
* MongoDB (Mongoose for object modeling)
* JWT for authentication
* CSV and JSON libraries for data export/import

Outcome: The Skill Matching Platform will provide a seamless and secure environment for users to manage their skills, explore job vacancies, and find suitable matches. The dynamic role and permission management will ensure that the system is scalable and adaptable to changing organizational needs.