Backend Intern

Backend Task: ♟ Chess Tournament Management system

Duration: 3 days

Stacks accepted: NodeJS, Python/Django

Task Description:

You are required to build a backend system to manage a chess tournament. The system should allow users to register, manage players, create and manage tournaments, and keep track of the scores.

Requirements:

- **User Authentication and Authorization:**

  - Implement user registration and login functionality.

  - Use JWT for authentication.

  - Differentiate between regular users and admin users.

- **Player Management:**

  - Allow admins to add, update, delete, and view player information.

  - Player information should include name, age, rating, and country.

- **Tournament Management:**

  - Allow admins to create tournaments with specific start and end dates.

  - Each tournament should have a unique name and a list of participants.

  - Allow admins to assign players to tournaments.

- **Match Management:**

- - Automatically generate pairings for each round based on the Swiss-system tournament rules.

    - Allow admins to update the match results.

  - **Leaderboard:**

    - Generate and display a leaderboard for each tournament showing the players' ranks, points, and other relevant statistics.

  - **API Documentation:**

    - Document all the API endpoints using Swagger or similar tools

🚚 Deliverables:

🔑 Source code repository GitHub/GitLab

📋 Deatailed README.md file explaining how to set up and run the project

⛓️ API documentation link or file

🪄 Evaluation Criteria

Code Quality: Clean, well-documented code with proper use of design patterns.

Functionality: Completion of all specified features and requirements.

User Experience: Intuitive and user-friendly interface.

Performance: Efficient and optimized code.

Testing: Adequate coverage of unit tests and proper handling of edge cases.