

# Tech Challenge #3: Backend (Leaderboard)

**Name:** Leaderboard (2 to 3 hr(s))

**Details:** You are tasked with creating a RESTful API for a mobile game that allows players to submit their high scores and view the leaderboard.

The API should have the following endpoints:

1. POST /scores: Submit a new high score for a player. The request body should contain the player's name and the score.
2. GET /leaderboard: Retrieve the top 10 scores, ranked by score. The response body should contain an array of objects with the player's name and their score.

In addition, the API should meet the following requirements:

1. Authentication: Only authenticated users should be able to submit scores. Authentication should be performed using JSON Web Tokens (JWTs).
2. Authorization: Users should only be able to submit scores for themselves. Admins should be able to submit scores for any user.
3. Rate limiting: Requests to the /scores endpoint should be rate limited to prevent abuse.
4. Logging: All requests should be logged to a file, including the client's IP address, the HTTP method, the endpoint, and the response status code.

## Technical Specs:

1. Typescript with Nest Backend Server
2. SQL based Database (Locally run)
3. Docker set to run on "ubuntu:latest" or "node:14-alpine" (use node image only if you are not adding DB set up to Docker)
4. (Optional) Run setup of DB before Server setup on Docker Compose

**Submission**

Email or WhatsApp HR with the link to your GitHub repo used to host the technical challenge and we look forward to discussing your task with you soon.