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# Backend Developer Assignment

This document contains description and requirements about the assignment for the role of backend developer at IQnext.

## Goal

- Verify applicant's ability to work with spring framework.
- Verify applicant's ability to deal with REST API.
- Check for the best practice inside the chosen backend framework.
- Verify the applicant's ability to write clean and testable code.

## Requirements

1. For implementation use Java 1.8 or later.
2. Use maven for the dependencies.
3. Use logs in your code for better understanding

## Assignment Details

You will be given access to the FIFA world cup database with player statistics data, player defense data and player playing time data. You need to create two API routes to bring meaningful insights-

1. Route-1 [fifa/api/v1/statistics]
  - a. Create an api route to return all players' statistics data. (/get-all-details)
  - b. Create an api route to return results of all statistical data of the player based upon the player id. (/get-by-id)
  - c. Create an api route to return players statistics with filter (based on no of games played, no of minute played, no of goal score, year of birth etc)]. (/apply-filter)
2. Route-1 [fifa/api/v1/defense]
  - a. Create an api route to return all players' defense data. (/get-all-details)
  - b. Create an api route to return results of all defense data of the player based upon the player id. (/get-by-id)
  - c. Create an api route to return players' defense with filters (based on position, team, tackles, tackle won etc)]. (/apply-filter)

Database Dump- [Download](#) database dump.

## Specification

- Try to write clean code, you can use any IDE and Code editor of your choice.
- Front end is not required.
- Use Postman or any API testing platform to test your API.
- Try to cover your code with unit tests if possible. (good to have, not mandatory).
- The code needs to work after we pull it and try it (should be bug free).
- Use comments for better understanding

## Quality Requirements

Similarly as during any other code review in our team, we'll be checking the following:

- Code quality
- Usage of the configuration files
- Usage of the unit tests
- Naming convention

## Bonus Question

1. Apart from the specified technology, which technology can be used to achieve the same and can be much easier to implement.

## Post Completion - Submission

After completing the given assignment please make sure that your code is bug free. And fillup the assignment submission form [here](#). Try to document your API response and upload it with the post completion form.