

Back-end Developer Case Study

You are working as a software developer for a news company heavily focused on sports news.

The product manager asked your team to show historical football fixtures from the leagues below:

- Premier League (England)
- Bundesliga (Germany)

Data Source:

- Premier League
 - 2018-2019: <https://www.football-data.co.uk/mmz4281/1819/E0.csv>
 - 2017-2018: <https://www.football-data.co.uk/mmz4281/1718/E0.csv>
- Bundesliga
 - 2018-2019: <https://www.football-data.co.uk/mmz4281/1819/D1.csv>
 - 2017-2018: <https://www.football-data.co.uk/mmz4281/1718/D1.csv>

Tasks:

1. Create a CLI command to fetch and parse .csv files of the last 2 seasons of the leagues above, then save them to a database.
2. Build a REST API to serve fixtures of a certain league and season.

Acceptance Criteria:

The CLI command should warn the user in case a different file scheme was used.

The API should warn users about wrong parameters.

The API has to return data to the following scenarios successfully:

- 15 fixtures from Bundesliga in 2018-2019
- 8 fixtures from Premier League in 2017-2018

Notes:

1. The following attributes are sufficient:
Date, HomeTeam, AwayTeam, FTHG, FTAG, Referee
2. Fixture listing endpoint has to support following query parameters:
 - a. Limit: How many fixtures have to be returned from the API?
Example: ?limit=15 returns 15 fixtures
 - b. Page: Which page of fixtures has to be returned?
Example: ?limit=5&page=2 returns fixtures from 6 to 10.

Expectations:

- Express or Koa should be used as a framework
- Query parameters & csv file schemas should be validated.
- You may use any database as you want (MongoDB, MySQL, PostgreSQL)
- Upload your code to a private repository in Github/Bitbucket/GitLab etc.
- Repository should contain an exported Postman collection file, or Swagger documentation.

- Please upload your code to a private repository in GitHub and share repo with "onedio-tech" user.

Bonus:

- Writing unit tests
- Use Redis for caching response data
- Usage of docker & docker-compose
- Usage of Github Actions