Day 26 Workshop <u>Duration: 180 mins</u> Full Stack Foundation

## **Objective**

The objective of this workshop is to learn how to query a document database

## Setup

- a. Import the given JSON document into a new MongoDB database. Call the database boardgames and the collection from game.json and comment.json. Call the collection games and comments respectively
- b. Create a SpringBoot application with the following dependencies
  - Spring Boot Dev Tools
  - ii. Spring Web
  - iii. Thymeleaf
  - iv. Spring Data MongoDB
  - v. JSON-P

## Workshop

You are to create the following REST resources

a. Browsing the games by name

```
GET /games
Accept: application/json
```

The request accepts the following optional query parameters

limit - limits the number of games returned. The default value 25

offset - specify offset of the first row to be returned. The default is 0

The endpoint returns the result in the following JSON object

```
games: [ <array of games> ],
  offset: <offset or default value>,
  limit: <limit or default value>,
  total: <total number of games>,
  timestamp: <result timestamp>
}
```

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```
Each element of the games array has the following structure
```

```
{
  game_id: <ID field>,
  name: <Name field>
}
```

b. Browsing the games by rank

```
GET /games/rank
Accept: application/json
```

Games are returned based on their rank (ranking field) in ascending order. The endpoint has the same query parameters as a. above. The return result is also the same as a.

c. Get game details

```
GET /game/<game_id>
Accept: application/json
```

Returns the details of a game base on its \_id (<game\_id> is equals to id field). The following JSON object is returned for a game

```
game_id: <ID field>,
  name: <Name field>,
  year: <Year field>,
  ranking: <Rank field>,
  average: <Average field>,
  users_rated: <Users rated field>,
  url: <URL field>,
  thumbnail: <Thumbnail field>,
  timestamp: <result timestamp>
}
```

The REST endpoint should handle non-existence game ids.