

Name:

Project Name:

Supervised By:

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Introduction

This is a simple ticket reservation system for football world cup, from this system you can reserve a chair in the stadium.

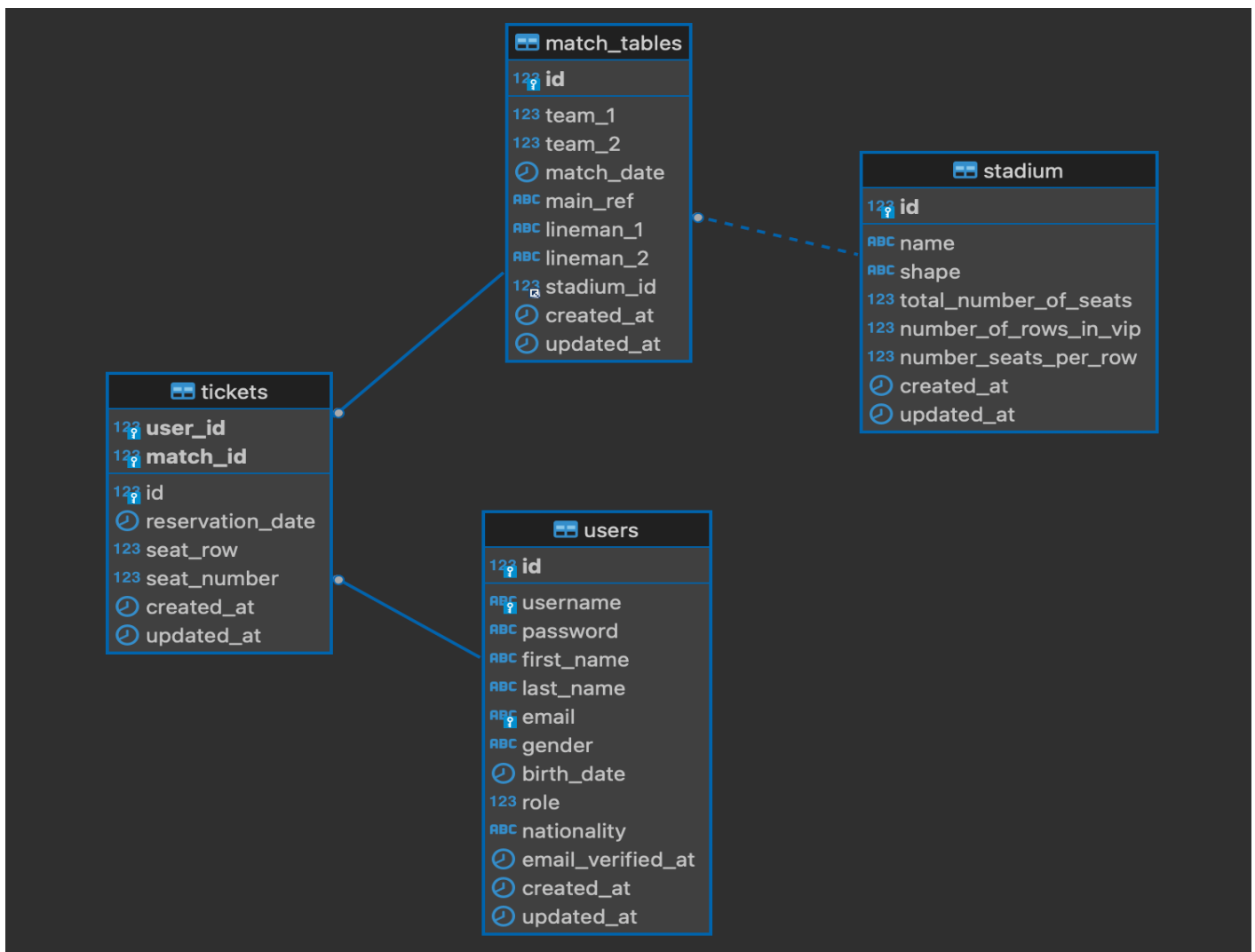
We have 3 roles

Admin: verify users – delete users – see some statistics of system


Manager: create matches


Fan: see coming matches – reserve ticket – edit profile


Entities




Repositories

 UserRepository
findByEmail
findAll
findByUsername
save
update

 TicketRepository
findByIdEquals
findByTicketId_Match_IdEquals
findAll
update
save (reserve ticket)

 MatchRepository
findById
save
findAll
update

 StadiumRepository
findById
save
update
findAll

Controllers

user-controller

PUT /api/users/secure/verify/user/{userId}

PUT /api/users/profile/edit

POST /api/users/sign-up

POST /api/users/logout

POST /api/users/login

GET /api/users/secure/users

GET /api/users/secure/refreshAccessToken

GET /api/users/profile/{username}

DELETE /api/users/secure/delete/{userId}

stadium-controller

PUT /api/stadium/edit

POST /api/stadium/create

GET /api/stadium/{stadiumId}

GET /api/stadium/all

match-table-controller

PUT

`/api/match/{matchId}/edit`

POST

`/api/match/create`

GET

`/api/match/{matchId}`

GET

`/api/match/{matchId}/isFull`

GET

`/api/match/all`

ticket-controller

POST

`/api/tickets/secure/reserve/{matchId}`

GET

`/api/tickets/{matchId}`

DELETE

`/api/tickets/secure/delete/{ticketId}`

Surpassing the expectations

- Additional generated queries
- Additional native queries (@Query)
- Complex queries (Join,)

```
@Query("select t from Ticket t where t.ticketId.match.id = ?1")
List<Ticket> findById_Match_IdEquals(Long matchId);
```

```
@Query("select t from Ticket t where t.id = ?1")
Ticket findByIdEquals(Long id);
```

- Additional endpoints
- Use of different Methods (GET, POST, PUT, DELETE, ...)

I used more than expected end points in controllers

- Use of additional libraries
 1. Lombok (default getter and setter)
 2. Auth (for authentications)
 3. Spring doc (for swagger controllers)
- Security (Authentication, Access Control, ...)

I used JWT

```
public String creatAccessToken(String userId, String username, int role, boolean isVerified,
                               HttpServletRequest request) {

    return JWT.create()
        .withSubject(userId)
        .withExpiresAt(new Date(System.currentTimeMillis() + 30 * 60 * 1000)) //expire after 30 minutes
        .withIssuer(request.getRequestURL().toString())
        .withClaim(name: "id", Long.valueOf(userId))
        .withClaim(name: "role", role)
        .withClaim(name: "isVerified", isVerified)
        .withClaim(name: "username", username)
        .sign(_algorithm); // put information in the token
}
```