

# **C4 Architecture**

<b>Date</b>	<b>:</b>	<b>28/03/2022</b>
<b>Version</b>	<b>:</b>	<b>0.2</b>
<b>State</b>	<b>:</b>	
<b>Author</b>	<b>:</b>	<b>Group 2</b>

#### Version history

<b>Version</b>	<b>Date</b>	<b>Author(s)</b>	<b>Changes</b>	<b>State</b>
0.1	10/3/2022	All members	Initial version	Finish
0.2	28/03/2022	All members		Unfinished

#### Distribution

<b>Version</b>	<b>Date</b>	<b>Receivers</b>

## Table of contents

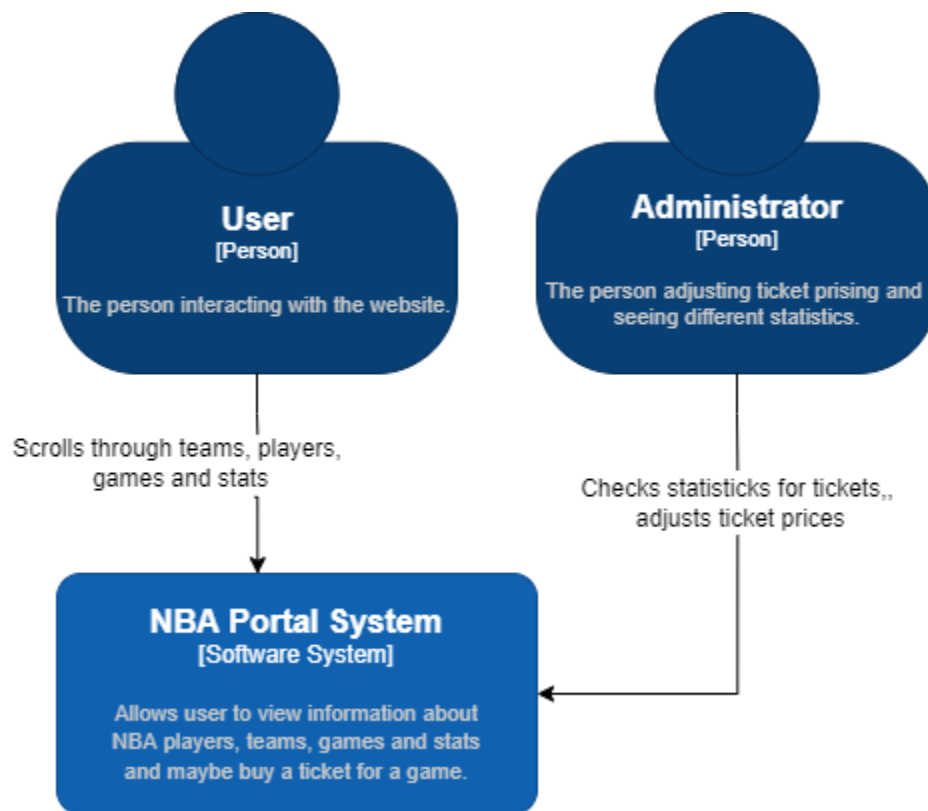
C4 Software Architecture .....	Грешка! Показалецът не е дефиниран.
1. Introduction .....	4
2. Architecture .....	4
2.1. System Context Diagram.....	4
2.2. Containers Diagram .....	5
2.3. Components Diagram .....	6
2.4. C4 Diagram.....	7
3. Sequence diagram.....	8
3.1. Buying a ticket.....	8

## 1. Introduction

The project which architecture is depicted in this document is going to be a NBA portal where users can view information about NBA games, teams and players and purchase tickets for future games.

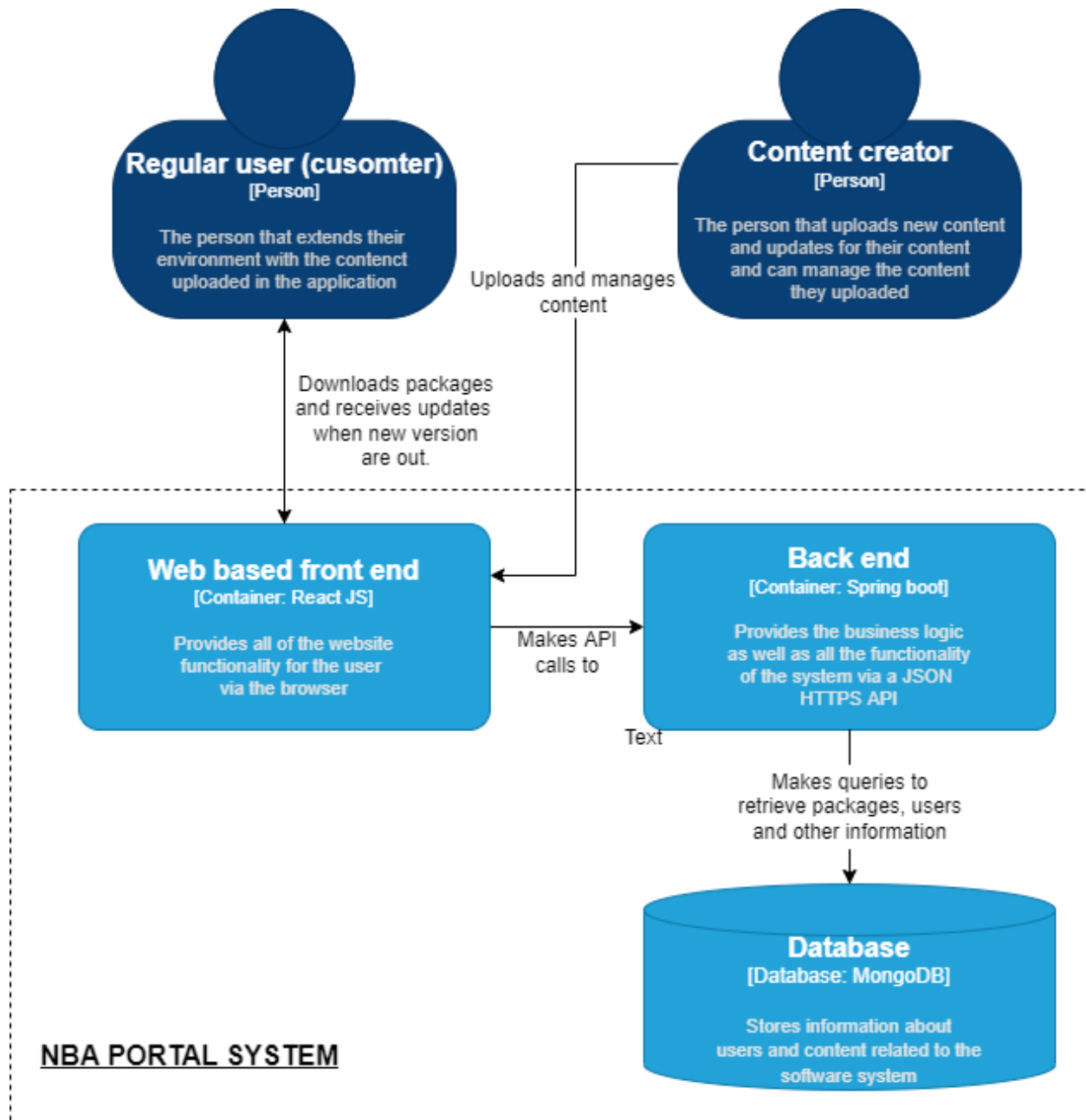
## 2. Architecture

### 2.1. System Context Diagram



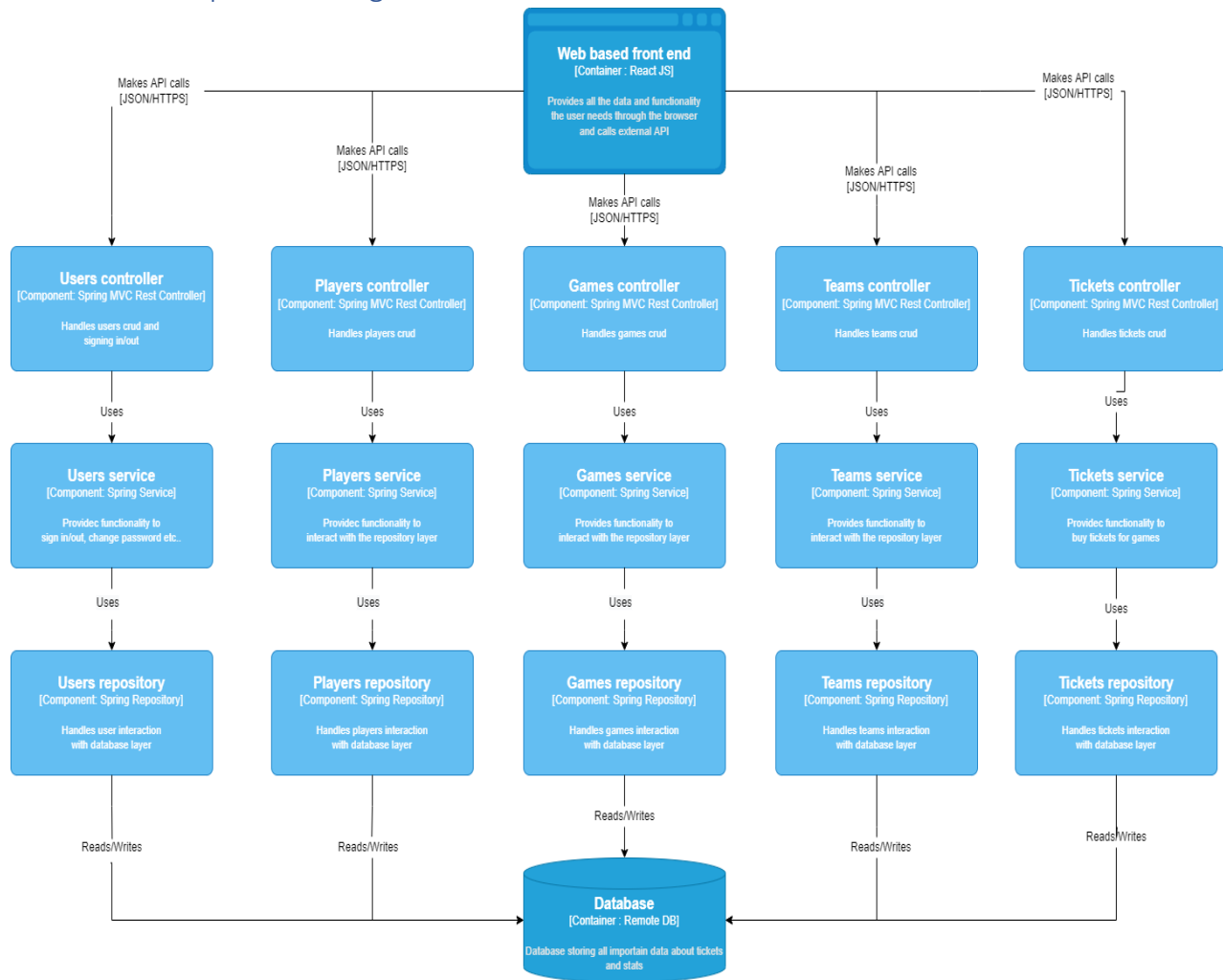
The system will be used by two types of users: a normal user and an administrator. They will interact with the system which will allow them to see information about teams, games, players and tickets, as well as make a purchase for a ticket for a specific game.

## 2.2. Containers Diagram

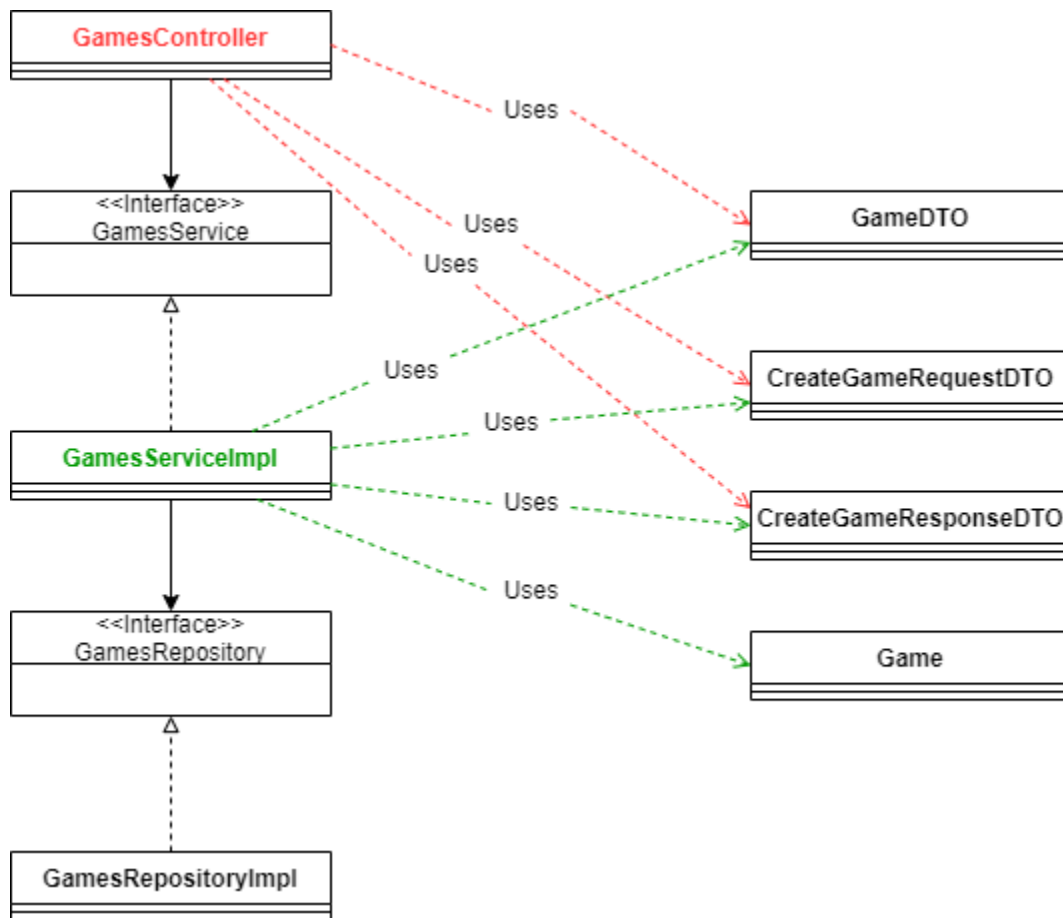


The system consists of a Web based front end which is build on ReactJS, a backend which holds all the logic and API endpoints which is build on Spring boot. The backend interacts with an internal database which allows the persistence of data for indefinite period of time.

## 2.3. Components Diagram



## 2.4. C4 Diagram



This is how every component in the application is set up. There is a three-layered design in place (Controller, Service and Repository) for every endpoint as well as dependency inversion with interfaces between the layers. There are models which are used by the Repository layer mainly while the other two layers make use of DTOs.

### 3. Sequence diagram

#### 3.1. Buying a ticket

