TALLINN UNIVERSITY OF TECHNOLOGY

School of Information Technologies

Kristjan Kattus 185146IADB

Football league system

Home project in subject Building Distributed System

Supervisor: Andres Käver

Author's declaration of originality

I hereby certify that I am the sole author of this thesis. All the used materials, references

to the literature and the work of others have been referred to. This thesis has not been

presented for examination anywhere else.

Author: Kristjan Kattus

25.02.2021

2

Table of contents

| 1 Introduction | 4 |
|-------------------|---|
| 2 System overview | 5 |
| 2.1 Initial stage | 5 |

1 Introduction

Football league system is designed to offer football associations and other league type competition organizer a platform where they will be able to showcase, manage and schedule their league games.

Organizers will be able to create either new league or multiple leagues. Add teams to every league. Add players or give managers power to add players to their team. Showcase league tables, fixtures, results and protocols.

Regulars users will be able to see all league tables, statistics, search club or players by name and view upcoming fixtures and also past fixtures protocols.

Referees or other match officials will be able to fill out the match protocol in its details, yellow/red cards, goals, substitution

I chose this topic because I do see a need for a universal league creating and managing tool where associations and other league type competition organizers will be able to create and manage their own league system. With very little systems available at the moment, with most of them being developed by each competitions own associations, I see the need for such system in current football world. Also being inside the football all the time shows me some weak points with current systems.

2 System overview

The overall system will evolve in the upcoming stages. The general idea will be to implement features step by step, while keeping the system usable. All features during the development have the possibility to be changed, removed or otherwise altered with. Features will be implemented by looking at features priority in system. Initial stage feature is per say "must be", hence they will be implemented first. Extra features will be shown and implemented in later stages of development. Initial webpage design will include main screen mockup, login mockup. Webpage design will also be changed. Entity relationship diagram (ERD), which database will be based of from can also be altered with during systems development.

2.1 Initial stage

- 1. Design and define database and its attributes
- 2. Design main client proposed screens
- 3. Create domain models and Model-View-Controller controllers.
- 4. Design admin screen
- 5. Implement creating leagues
- 6. Implement creating and adding teams
- 7. Implement players to the system
- 8. Implement user authentication and authorization
- 9. Create user roles
- 10. Implement adding match fixtures, league table and protocols

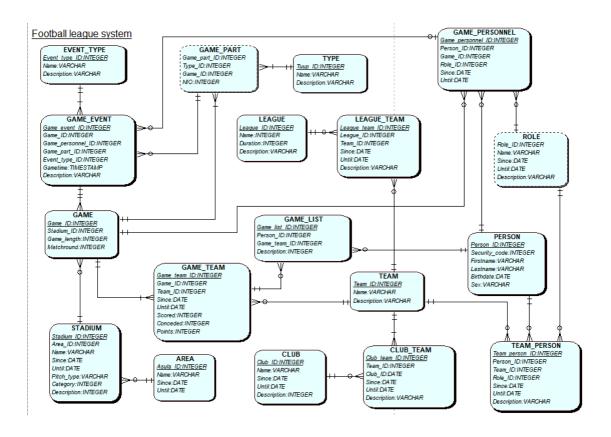


Diagram 1: Entity relationship diagram

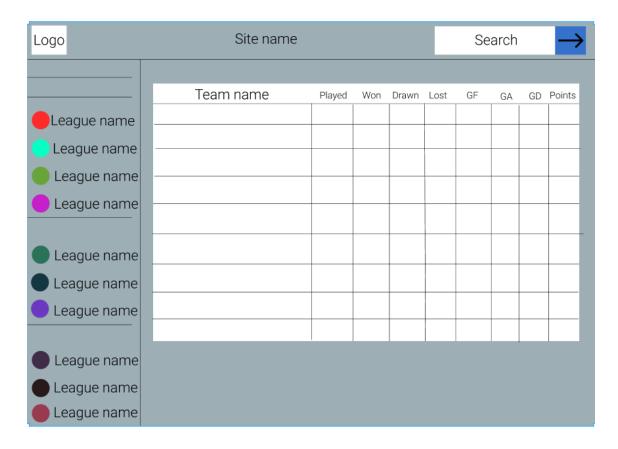


Diagram 2: Main client screen



Diagram 2: Login screen for admins and managers