

Low-Level Design Document European League Football Gaming App

PREPARED FOR

Calmin Scarlett (Executive Sponsor)

VTI Lecturer & Associates

PREPARED BY

VTI Software Engineering Group 2023

INTRODUCTION

Purpose

The purpose of this document is to provide details of the Euro League Football Application, Integration Framework, API operations, system structure and processing logic.

Overview

The following figure depicts the overall hosting infrastructure for the application

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Section/ Forms	Field Name	Data Type	Length	Description	Optional/ Required
Authentica tion / User Sign On	userId	string	20	Autogenerated unique identifier - Primary Key.	Required
	userName	string	25	User's display name. Can be changed.	Required
	firstName	string	25	User's first name entered when registering. Can be changed.	Required
	lastName	string	25	User's last name entered when registering. Can be changed.	Required
	email	string	35	User's email account when they have registered.	Required
	password	string	25	User's password entered when registering. Can be changed.	Required
	isAdmin	boolean	-	Indication of a admin role of the user.	Required
	contact	string	15	Telephone.	Optional
Football Team Class	teamId	string		Autogenerated unique identifier - Primary Key	Required
	userId	string	20	Owner of the team.	Required
	footballerName	string	40	Name of the team.	Required
	homeStadium	string	50	Location of the home stadium.	Required
Footballer Class	footballerId	string	10	Autogenerated unique identifier - Primary Key	Required
	firstName	string	25	First name of the footballer	Required
	lastName	string	25	Given last name of the footballer	Required
	dateOfBirth	date	-	Footballer's given date of birth -.stored in following format - YYYYMMDD	Required

Section/ Forms	Field Name	Data Type	Length	Description	Optional/ Required
	isInjured	boolean	-	Injured players will sit out the game	
	isSuspended	boolean	-	Suspended player will not start next match	required
	position	string	30	Goalkeeper, defender, midfielder, forward etc	required
	playerRating	int	-	Future consideration	Optional
League Class	leagueId	string	10	Autogenerated unique identifier - Primary Key	Required
	teamId	string	10	Primary Key	Required
	leagueName	string	30	Name of the league, eg English Premier League, Serie A	Required
Player Statistics Class	leagueId	string	10	Unique identifier of the league	Required
	footballerId	string	10	Unique identifier of the footballer	Required
	goals	int	-	Goals scored in the current season	Required
	assists	int	-	Assist made in the current season	Required
	tackles	int	-	Tackles made in the current season	Required
	interceptions	int	-	Interceptions made in the current season	Required
	cleanSheets	int	-	Team not conceding a goal in a given match	Required
	homeRating	int	-	Rating of the footballer at home matches	Required
Squad List Class	footballerId	string	10	Unique identifier of the footballer	Required
	teamId	string	10	Unique identifier of the	Required

Section/ Forms	Field Name	Data Type	Length	Description	Optional/ Required
				team	
Team Statistics Class	leagueId	string	10	Unique identifier of the league	Required
	teamId	string	10	Unique identifier of the team	Required
	goalScored	int	-	Goals that have been scored in a season	Required
	goalConceded	int	-	Goals that have been conceded in a season	Required
	win	int	-	Games won in a season	Required
	loss	int	-	Games lost in a season	Required
	draw	int	-	Games drawn in a season	Required
Match	matchId	string	10	Autogenerated unique identifier - Primary Key	Required
	leagueId	string	10	Unique identifier of the league	Required
	homeTeam	string	10	Unique identifier of the team playing at their homeStadium	Required
	awayTeam	string	10	Unique identifier of the team not playing at their home stadium	Required
	matchTime	date	-	Timestamp of the match - timestamp on the display. This will conform to is ISO 8601, and includes time zone offset	Required
	homeTeamScore	int	-	Goals scored by the home team	Required
	awayTeamScore	int	-	Goals scored by the away team	Required

Section/ Forms	Field Name	Data Type	Length	Description	Optional/ Required

API Operations

Interface Rules

Get Interface Rules

The operation fetches all the EFL rules configured in the system. These are the rules that determine whether certain operations are enabled or not. The rules may also define certain values e.g. number of days an injured or suspended player will be out.

[ADD Example or Technical Details here](#)

User Account

Validate Each User

This API is used to validate a user in EFLA during online registration from an external portal/customer mobile system. The operation validates if the user ID (email account) already exists in EFL. If it exists a “Duplicate Key on Insert” error is passed.

Technical Detail (Example):

- E\$_XXXXXX_DB.Validate_Customer
- Table: EFL_USER

Get User

For an active account, this operation fetches user data, email, phone and other contact details

Sample_getUser

Technical Detail:

- E\$_PL_EFLUM_DB.Get_User_Data
- Tables: EFL_USER

Algorithms/Strategies

The strategies that will determine the outcome of a game will be listed below

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