

FINAL PRESENTATION

YUSUFBEK KARAMATOV . HUSNU ARKCA . MUSTAFA AKSELI . YUNUS EMRE ASLAN



MAIN OBJECTIVE:

THE PRIMARY OBJECTIVE OF THE STATS IN GRASS PROJECT IS TO DEVELOP A DESKTOP APPLICATION DESIGNED TO MANAGE AND DISPLAY FOOTBALL MATCH STATISTICS. THIS APPLICATION AIMS TO FACILITATE THE REAL-TIME RECORDING AND VIEWING OF MATCH DATA, ENSURING ACCURACY AND EFFICIENCY FOR USERS.

KEY FEATURES:

**USER
FRIENDLY
INTERFACES**

**REAL-TIME
DATA
HANDLING**

**DATABASE
INTEGRATION**

**ERROR
HANDLING
AND DATA
CORRECTION**

WHAT WE USED?



WHO WORKED ON WHAT?

BACKEND



HUSNU
ARKCA



YUSUFBEK
KARAMATOV

FRONTEND

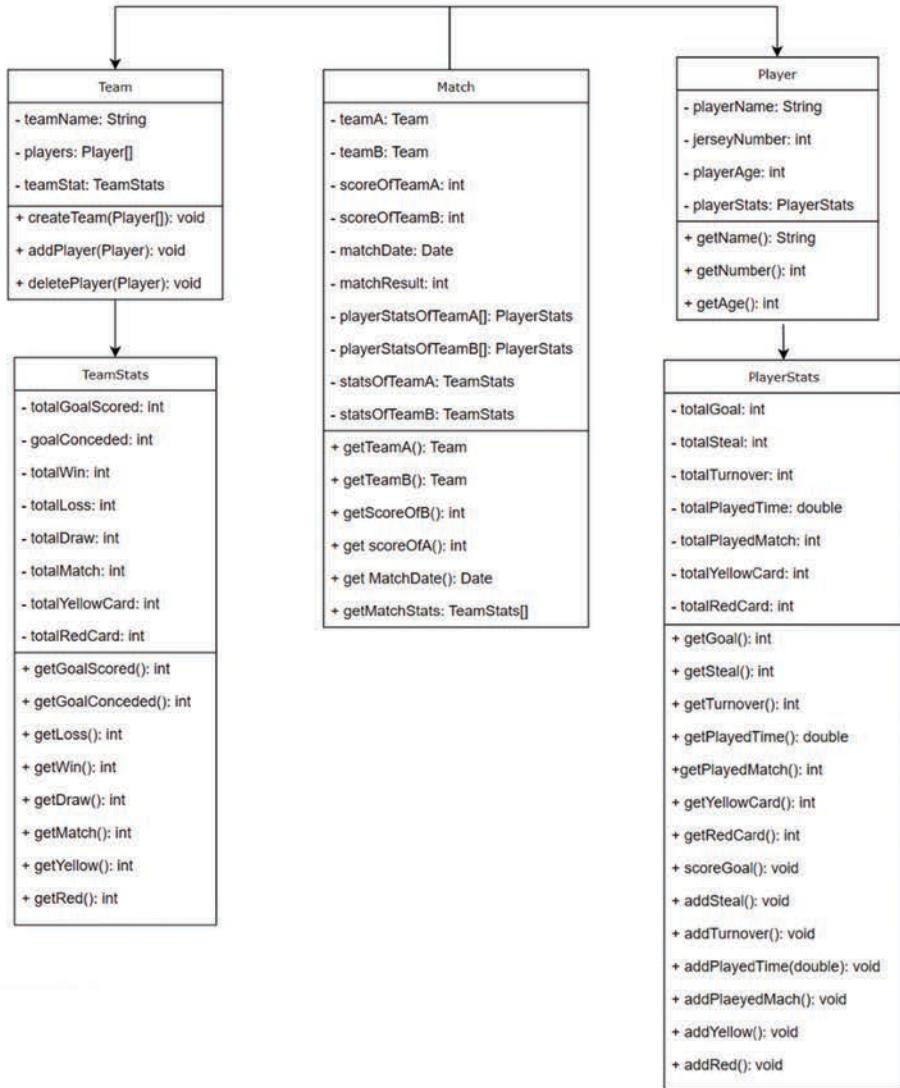


MUSTAFA
AKSELI

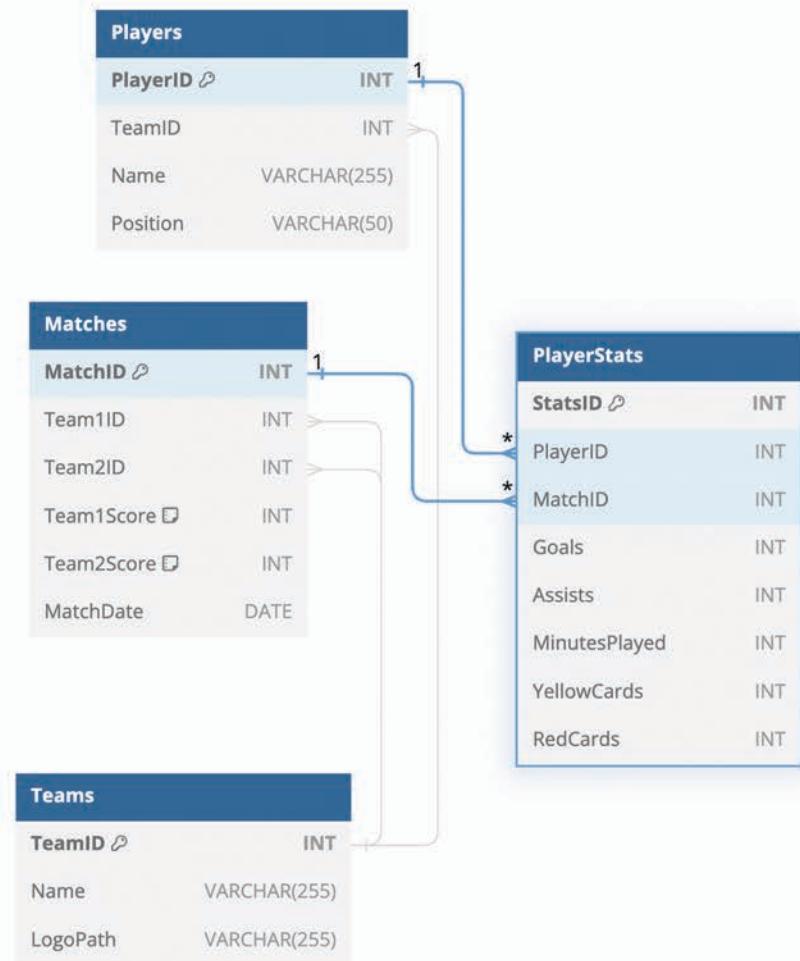


YUNUS
EMRE

UML DIAGRAM

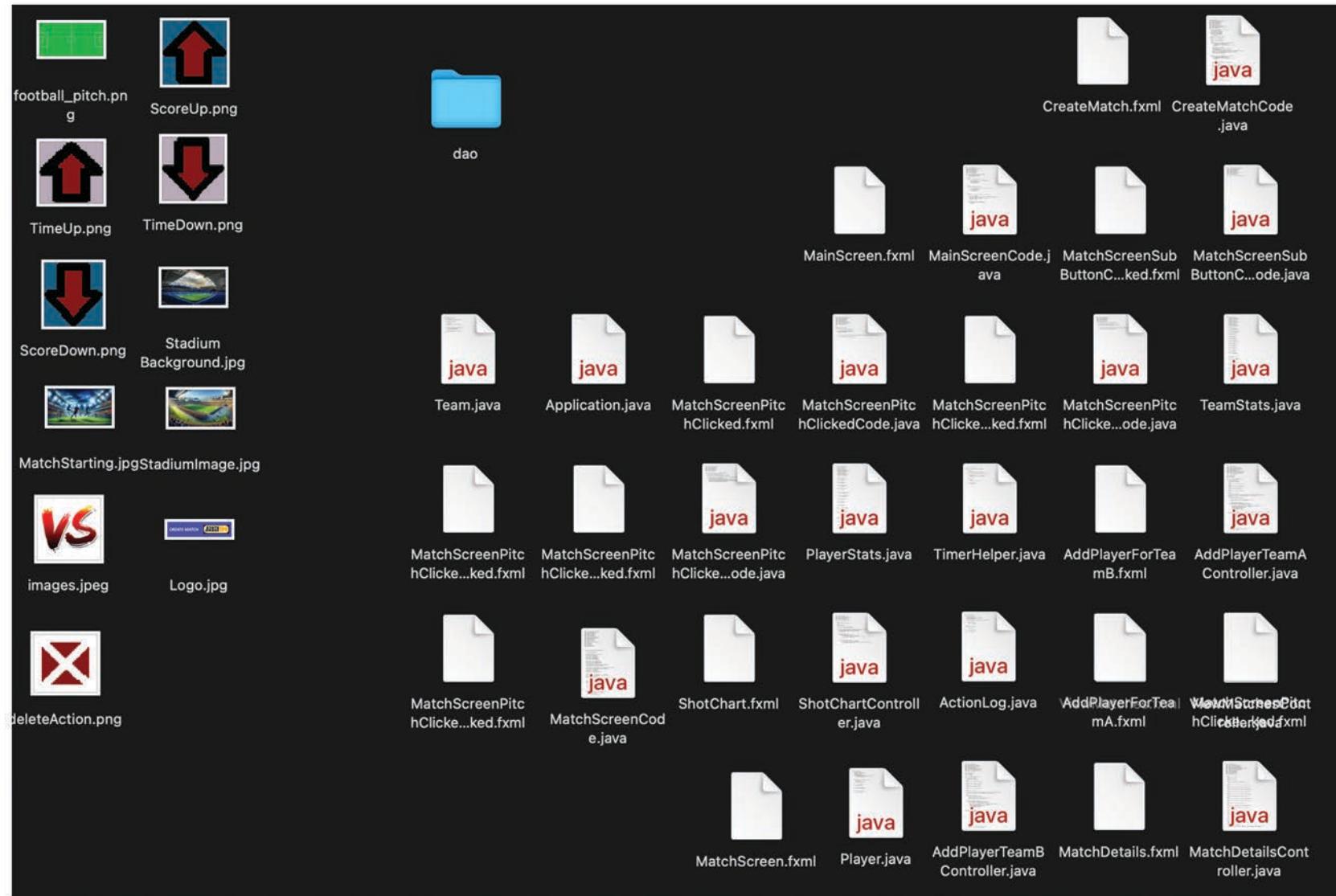


DB DIAGRAM



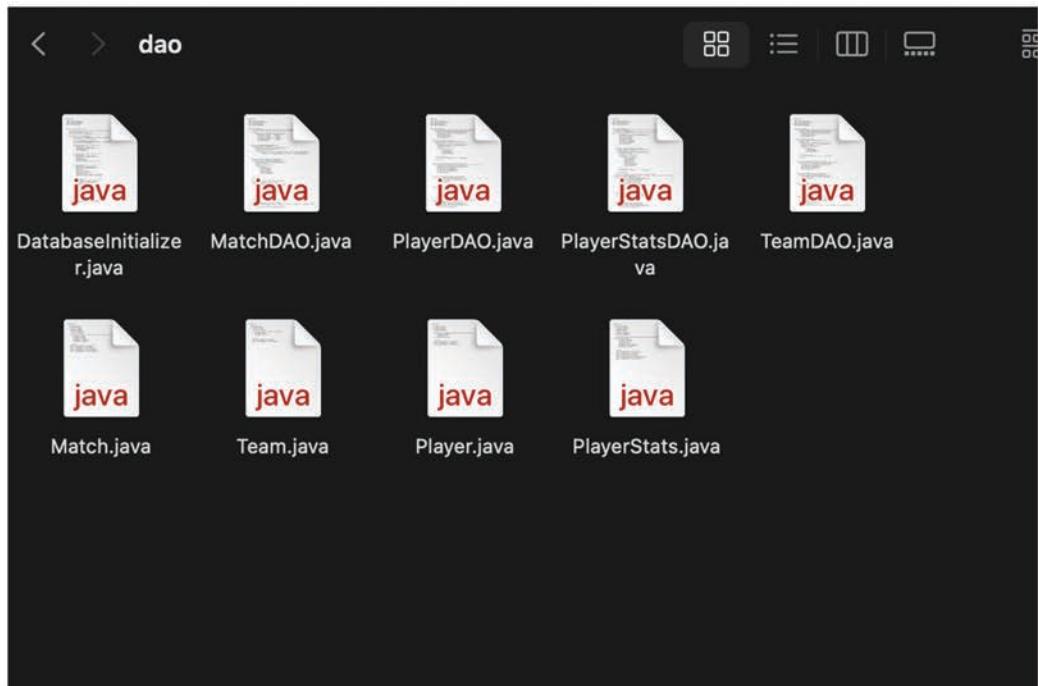
WHAT IS SPECIAL ABOUT STATS_IN_GRASS DB

DAO - DATA ACCESS OBJECT. IT IS A DESIGN PATTERN USED IN SOFTWARE ENGINEERING TO ABSTRACT AND ENCAPSULATE ALL ACCESS TO A DATA SOURCE



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```
package dao;

import java.sql.Connection;
import java.sql.PreparedStatement;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.util.ArrayList;

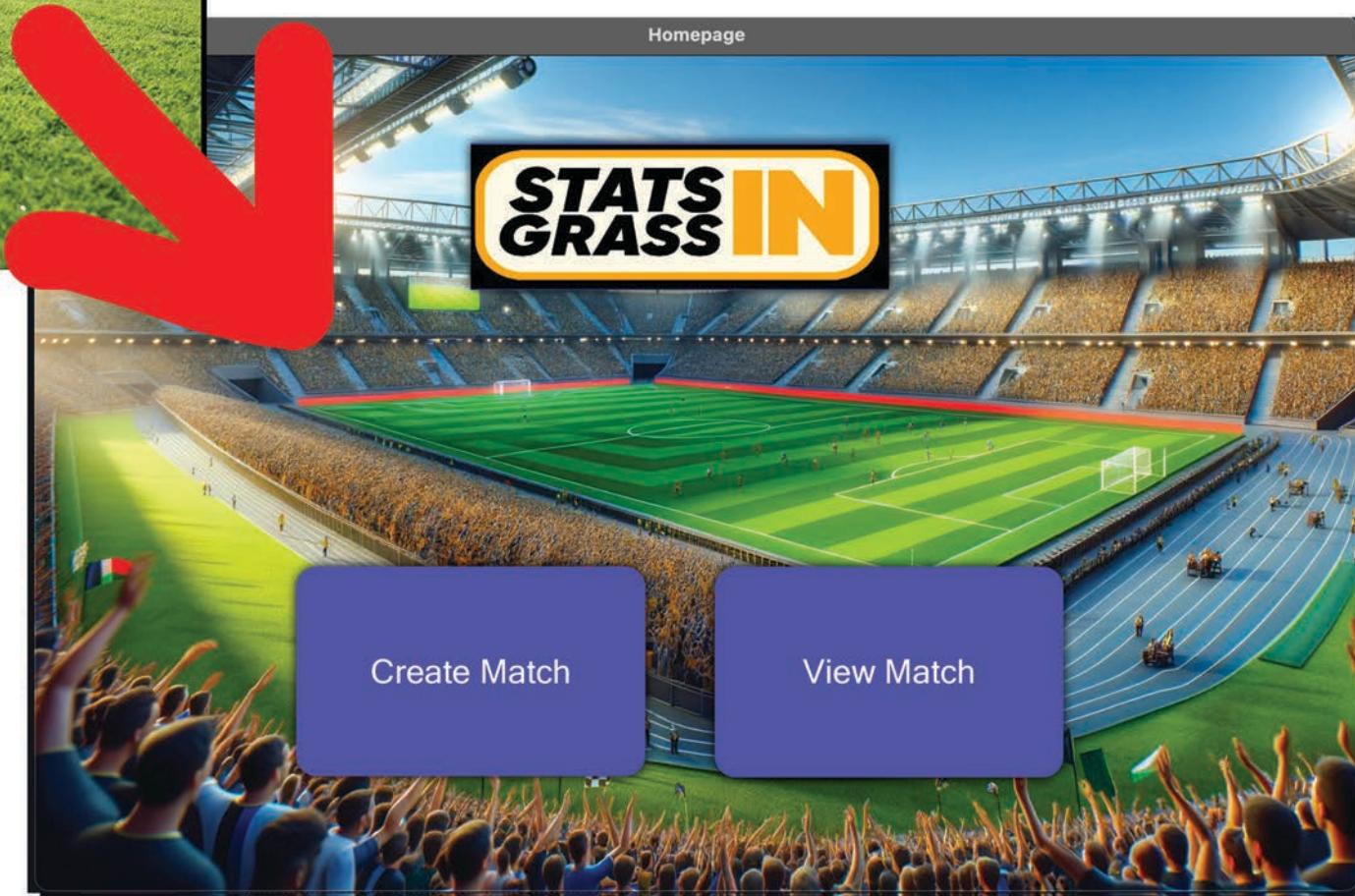
public class TeamDAO {
    public void addTeam(String name, String logoPath) throws SQLException {
        String sql = "INSERT INTO Teams (Name, LogoPath) VALUES (?, ?)";
        try (Connection conn = DatabaseInitializer.getConnection();
             PreparedStatement stmt = conn.prepareStatement(sql)) {
            stmt.setString(parameterIndex:1, name);
            stmt.setString(parameterIndex:2, logoPath);
            stmt.executeUpdate();
        }
    }

    public Team getTeam(int teamId) {
        String sql = "SELECT * FROM Teams WHERE TeamID = ?";
        Team team = null;
        try (Connection conn = DatabaseInitializer.getConnection();
             PreparedStatement stmt = conn.prepareStatement(sql)) {
            stmt.setInt(parameterIndex:1, teamId);
            ResultSet rs = stmt.executeQuery();
            if (rs.next()) {
                team = new Team(
                    rs.getInt(columnLabel:"TeamID"),
                    rs.getString(columnLabel:"Name"),
                    rs.getString(columnLabel:"LogoPath")
                );
            }
        } catch (SQLException e) {
            System.out.println("Database error: " + e.getMessage());
        }
        return team;
    }
}
```

WHAT WE ACHIEVED GOOD?



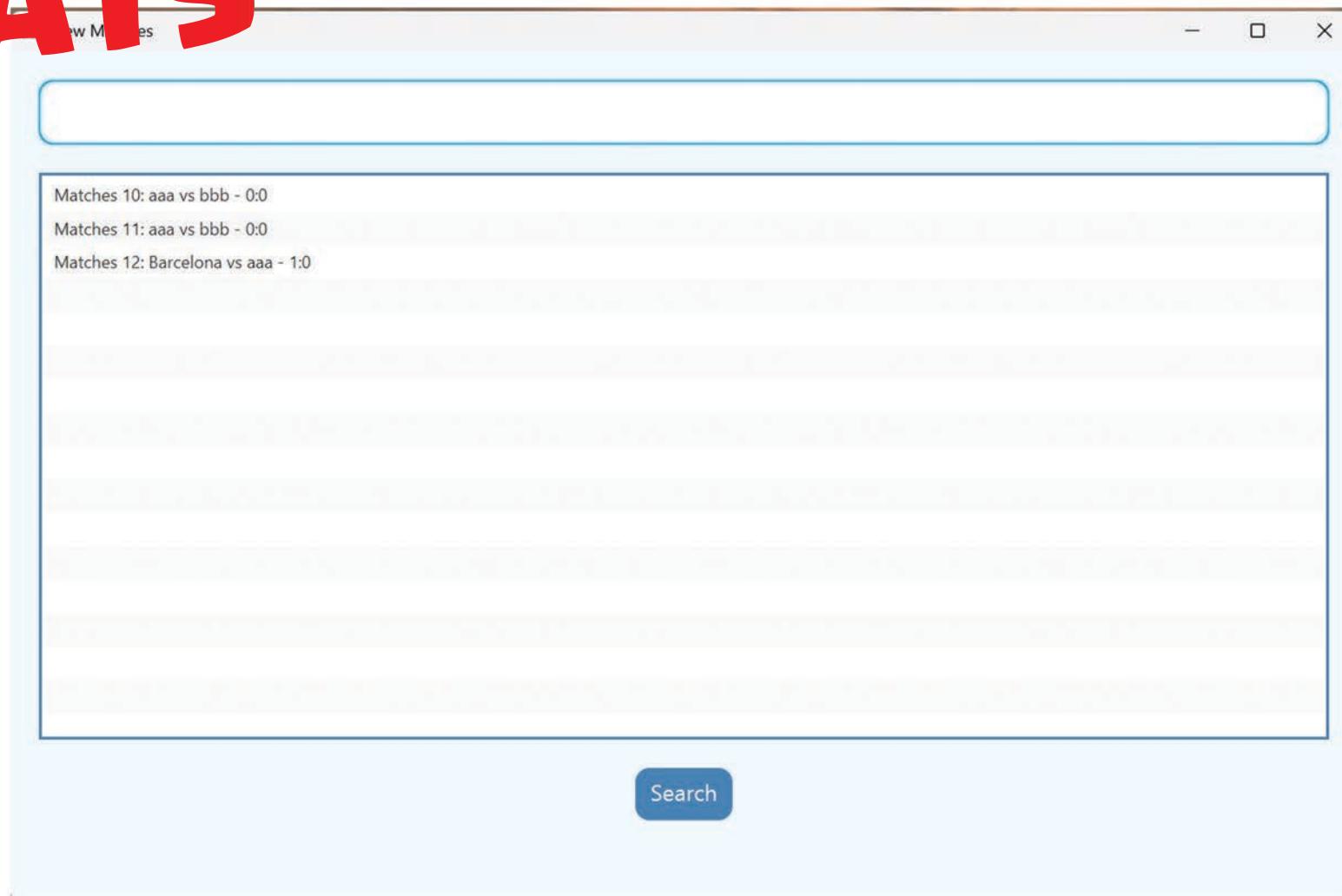
DESIGN
IS NEARLY
THE SAME



UML & DB
IS BETTER

WHAT WE COULD NOT ACHIEVE SO GOOD?

PAST STATS



**STATS
GRASS IN**