# BILKENT UNIVERSITY
## ENGINEERING FACULTY
## DEPARTMENT OF COMPUTER ENGINEERING

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**CS353 DATABASE SYSTEMS**
**PROJECT PROPOSAL**

SOCIAL BETTING PLATFORM
GROUP 5

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# Contents

# 1 Description of the Project

This project aims to create a social betting platform on sports. Users may bet on various types of sports, both team-based or non team-based. Users may create bet slips on matches of these sports, which other users can like, share, follow or make comments on. Admins set the bet rates which determine a base value for bet slips users create, and they may change or remove said rates. Editors serve to guide users on betting on respective matches with their comments. In addition to bet slips, users can also buy lottery tickets.

# 2 Requirements

## 2.1 Nonfunctional Requirements

### 2.1.1 Authentication and Security

Users should go through the verification processes so that the system will be more secure. This verification process involves the filling of personal information such as citizen number and family members' information. This is important for the reliability of the website. The implication for the authentication requirements gives users that there is a secure system in this website. Also there are three types of clients for this website. The user, the admin and the editor are these types which are defined for logging in. The user log in requires more security than others since they will use the website for betting the matches. The main functionalities of the platform which consists of the matches and the bets will be interfered with by the admin. Authentication process for the admin will take less time compared to user authentication since there is only one admin for our website. Also, there are editors similar to the newspaper columnists. The number of editors is way less than the user count. Hence, less information is sufficient for them to enter the website.

### 2.1.2 User Friendly Interface

The user interface should be appealing and easy accessible. In order to prevent the difficulties that may derive from the complexity of the functionalities, we will try to prepare a simple UI with higher functionalities represented. Also, the names of the segments should be

meaningful so that the users and the editors can easily understand the purpose of the functionalities.

### 2.1.3  Data Integrity and Access of Data

The bet slips and the information shared by the users and the editors should be easy to access but should also be stored in a secure way. Users cannot access the bet slips of the other users. This way, they will not be influenced by other users' bet slips and change it according to theirs. Any users' personal information and the shared information will be read-only to apply the security idea for the data. Also, an user or an editor should not be able to change the bets, matches etc. which is only under the control of the admin.

### 2.1.4  Accessibility

Since the application is a web application any user with a browser and internet connection can use it.

### 2.1.5  Faster Response Time

Since our website will not require much of a graphic resolution for the interface, we will be only concerned about the live match show as it is specified in E/R diagram. However, users will be directed to another website for the live matches. Therefore, the website's running performance may not be affected.

### 2.1.6  Design Maintenance

Our database system design includes all types of sports fields as the website will include them also. For future application of the implementation of other types of sports, we aim to keep the design general and more expandable in the future. The generality of the design is provided with the aggregation of the relationship between the user and the general match-bet relationships sets.

## 2.2  Functional Requirements

Functional Requirements of the betting platform clarify the needs for the proper implementation and the usability of the design provided in the E/R diagram given in section 4.0.

### 2.2.1 Activities of the User

Users having the ability to do activities involving Bet Slips - creating them, liking them, sharing them, commenting on them and following them. Users are able to add other users as Friends to see, share, like, follow or comment on their activities and Bet Slips. They make a bet with the specific odd and the bet type from the chosen match given in the website. These bet slips can also be given on the website so users can take that bet slip with one-two steps.

### 2.2.2 Admin's Authority

Admins that can set the rates for Bets or remove them altogether, and create Surveys for Users to join.

### 2.2.3 Live Match

The matches are shown on the website or it is directed to another source which gives the live version at that moment. Users can watch the match they choose to watch from the provided source.

### 2.2.4 Lottery Tickets

In addition to the bet slips creation by the user, they can also buy a lottery ticket from the website. The tickets have the levels which determines the amount of prize will be given to the winners. Different types of tickets have different amounts of fees to buy them.

### 2.2.5 Team Communities

The team communities are for the fanatic followers of the team. They may want to gather together and follow the news about the team. It includes the news and the matches which the team win/lose or including any other activities.

### 2.2.6 Recommendations Side with Editor

The editors can provide an essay on the match, the bet or any other related topic about the betting for a specific sport type. They can also suggest a bet slip for a specific match.

# 3 Limitations

- Editors can only suggest bets, no update can be made by an editor.

- Users can only bet a particular match once.

- Users cannot change a bet that they had already made and paid.

- Users cannot bet after the starting time of the match.

- Users cannot make a bet on a closed event.

- In a match between two teams, a player can play in only one of the teams.

- Users and editors cannot create or update a survey.

- Users cannot create a bet.

- Comments section has a character limit.

- Age restriction permits the users that are 18 and above.

- Lottery tickets are not available for the purchase of editors and the admin.

- A user can only be a member of one team community in one sport type.

# 4 E/R Diagram
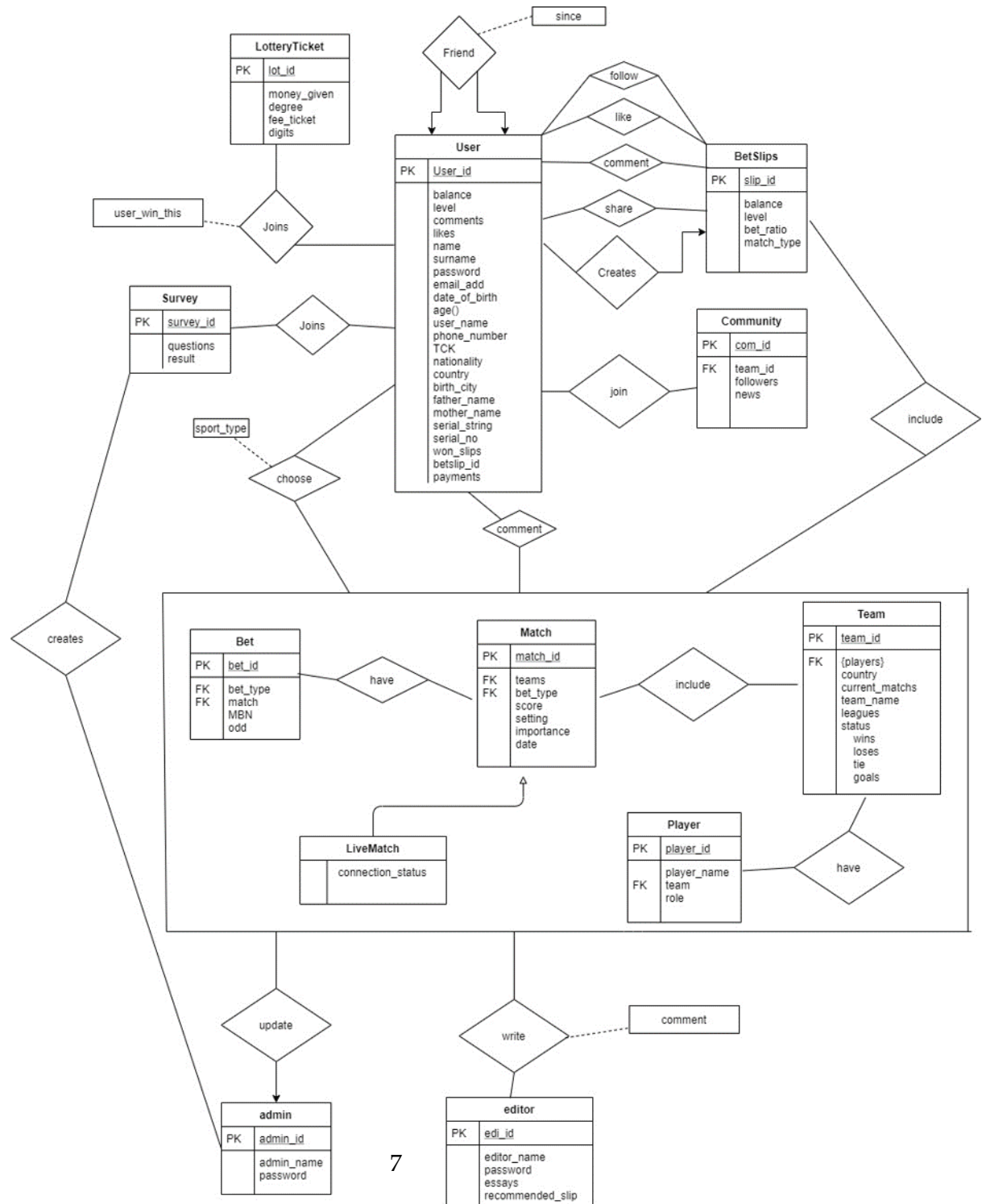
# 5 Website Address

Our project can be accessed from https://mellonaran.github.io

# References

[1] "Tuttur.com İddaa Spor Toto Milli Piyango TJK At Yarışı" [Online] Available: www.tuttur.com , Accessed March 2, 2020

[2] "Flowchart Maker & Online Diagram Software" [Online] Available: draw.io , Accessed March 2, 2020