



THE TOTAL SOCCER APP

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OBJECTIVES

- Soccer Data Conceptual & Logical Modeling
- Soccer Data Acquisition
- Historical Soccer Data Understanding
- Microsoft PowerApps - Visualize Soccer Data (External Layer)
- Audience - anyone interested in knowing about current Soccer leagues/players/teams.



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Inserting the data into
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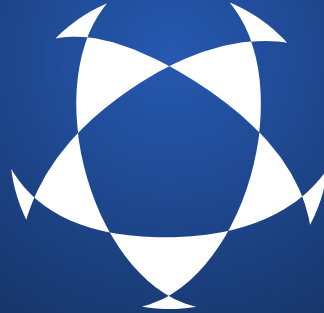
POWERAPPS

Creating the interface of
our Total Soccer App

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CONCLUSION

How this App can be
used?



DATA MODELING

- CONCEPTUAL DATA MODELING
- LOGICAL DATA MODELING



CONCEPTUAL DATA MODELING

- In this phase, we understood our data requirements and defined our problem formally.
- We prioritize our requirements according to the business needs.
- We identified our entities with attributes and relationships among themselves.
- We drew a Crow's Foot E-R diagram and using that, designed our Logical Model.



ENTITIES

Entities and Attributes			
Entity	Attribute	Props	Description
<u>Player</u>	Name	RC	Name of the player
	Team	R	Current team which he is playing for
	Email	RU	email of the player
	Age	R	age of the player
	Nationality	R	Country
	Position	R	position at which player plays - GK, DF, MID, FW
	Debut year	R	when did the player started playing?
	Career length	RD	Years played
	League Name	R	Current league that he is playing
	Main foot	R	whether player is left footed or right footed
	Games Played	RD	How many games has a player played?
	Goals Scored	R	How many goals scored?
	Fouls Committed	R	Number of fouls committed
	Rating	R	From 1-5 (constraint)
<u>Team</u>	Name	RU	Name of the team
	City	RU	City to which team belongs
	Country	R	Country
	Coach Name	RU	Manager of the team
	Email	RU	email of the team
	No. of matched played	RD	how many matched has the team played in the league?
	No. of wins	R	How many games has team won in league?
	No. Of losses	R	How many games has team lost in league?
	No. of draws	R	How many games has team drawn in league?
	Goals Scored	R	No of goals scored
	Goals Conceded	R	Number of goals conceded
	Points	RD	Total Points
	Stadium Name	RU	Home stadium
	Jersey Color	RM	Jersey color of team

<u>Stadium</u>	Name	RU	name of the stadium?
	City	RU	City in which stadium is located
	Email	RU	email of the owner
	Capacity	R	how many person can be seated
	Owner Name	RUC	owner
	Address	RC	address
<u>Coach</u>	Name	RC	name of the coach
	Nationality	R	country to which coach belongs
	DOB	R	date of birth
	Email	RU	email
	Teams Managed	R	Number of teams managed
	Rating	R	rating of the coach
<u>League</u>	Debut Year	R	year in which he became coach
	Default Formation		Favoured formation by the coach
	Name	RU	Name of the league
	Debut year	R	When did the league originated?
	League Start Date	R	When did the league start
<u>Match</u>	League End Date	R	When did the league end?
	League Sponsors	RM	Who is sponsoring the league?
	League Prize Money	R	Prize money for winner
	League size	R	number of teams playing in the league
<u>Bid</u>	Stadium	RU	Stadium in which match was played
	Home team	R	Which was home team?
	away team	R	Which was away team?
	Score	R	Final Score
	Date Played	R	Date when the match was played
	Attendance	R	How many people attended the match?
<u>Bid</u>	Winning team	RD	Which team won?
	Bid player	RU	Bid on players players
	Bid Date	RU	Date the Bid was placed
	Bid amount	RU	what was the bid amount
	Bid status	RU	The status of the Bid (High, Medium, Low)

RELATIONSHIPS

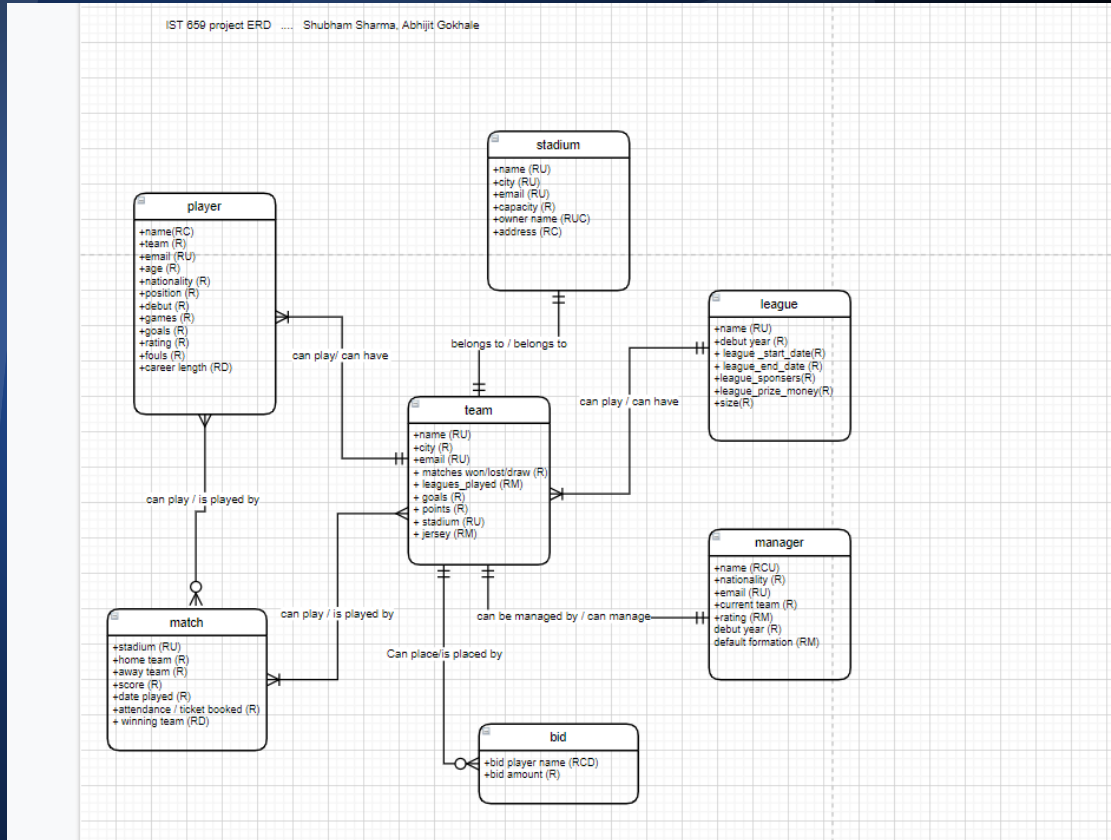
Relationships					
Relationship	Entity	Rule	Min	Max	Entity
Player - Team	<u>Player</u>	plays in	1	1	<u>Team</u>
	<u>Team</u>	can have	1	M	<u>Player</u>
Team - Match	<u>Team</u>	can play	1	M	<u>Match</u>
	<u>Match</u>	is played by	2	2	<u>Team</u>
Team - Stadium	<u>Team</u>	belong to	1	1	<u>Stadium</u>
	<u>Stadium</u>	belongs to	1	1	<u>Team</u>
Team - League	<u>Team</u>	can play	1	1	<u>League</u>
	<u>League</u>	can have	1	M	<u>Team</u>

Coach - Team	<u>Coach</u>	can manage	1	1	<u>Team</u>
	<u>Team</u>	can be managed by	1	1	<u>Coach</u>
Player - Match	<u>Player</u>	can play in	0	M	<u>Match</u>
	<u>Match</u>	is played by	M	M	<u>Player</u>
Team - Bid	<u>Team</u>	can place	0	M	<u>Bid</u>
	<u>Bid</u>	is placed by	1	1	<u>Team</u>

CROW'S FOOT E-R DIAGRAM

Entities -

- Player
- Match
- Stadium
- Team
- Manager
- Bid
- League

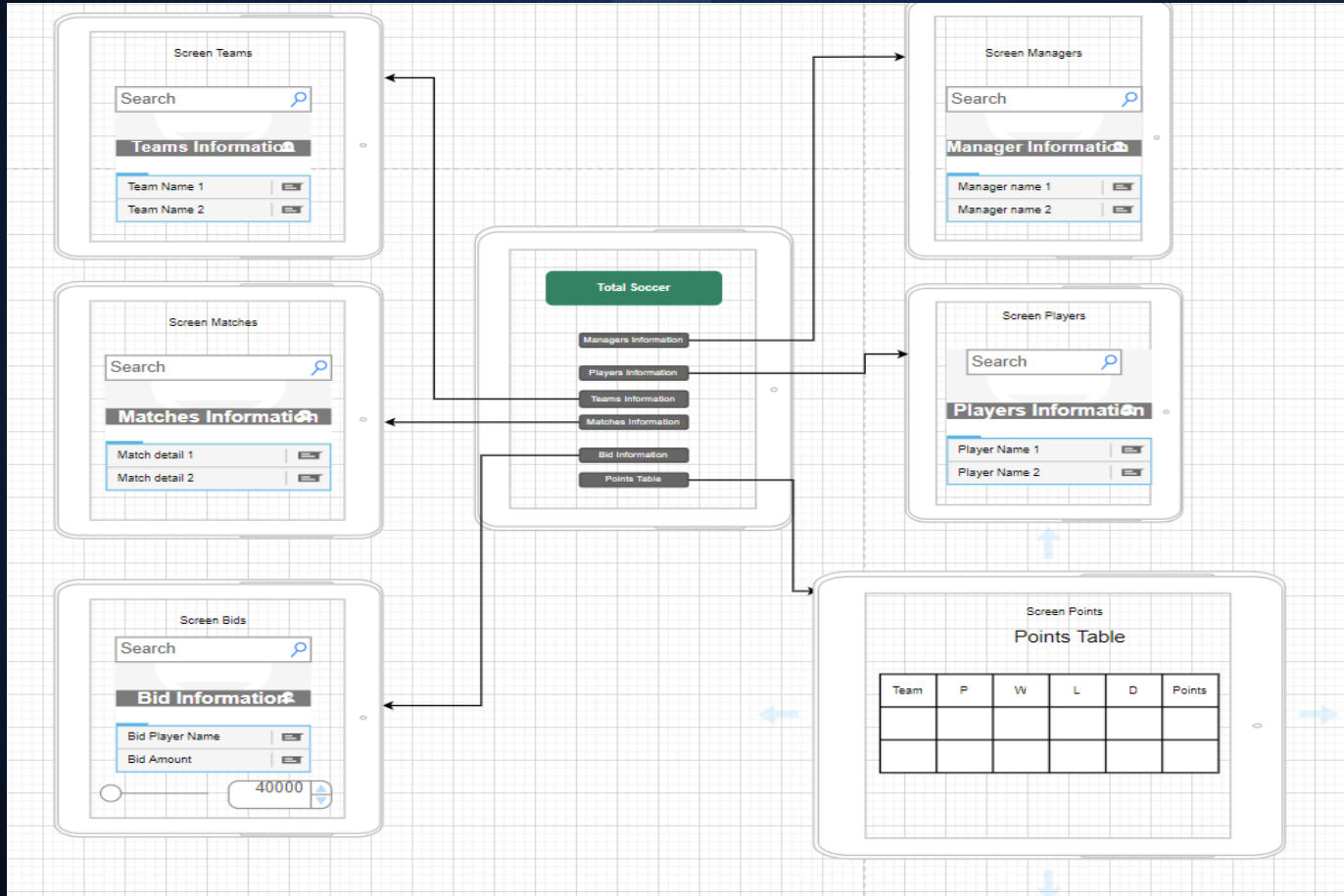


LOGICAL DATA MODELING

- In this phase, we implemented our Conceptual Data Model using a relational database model.
- So, we defined our tables, columns, keys and constraints.
- We mapped the entities to tables and mapped the attributes.



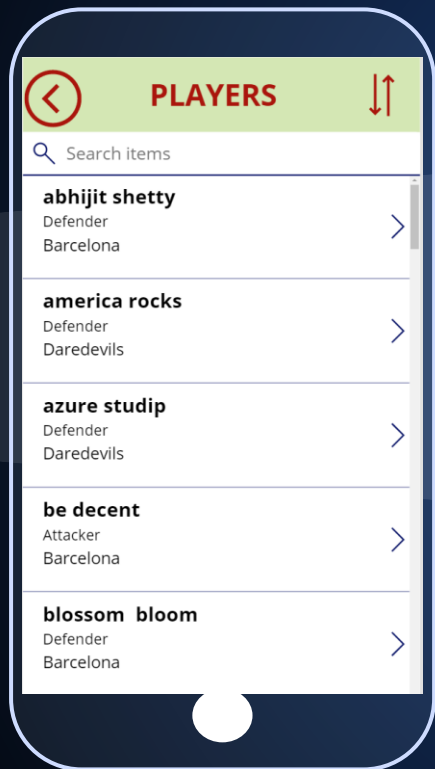
SCREENS DESIGN



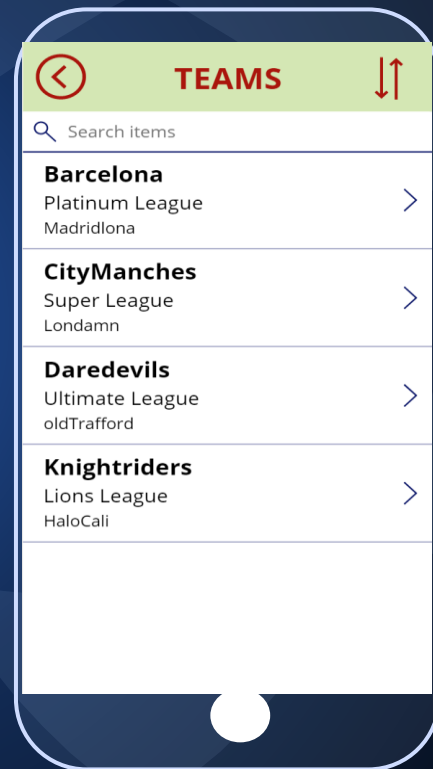
MOBILE APP - MAIN SCREEN



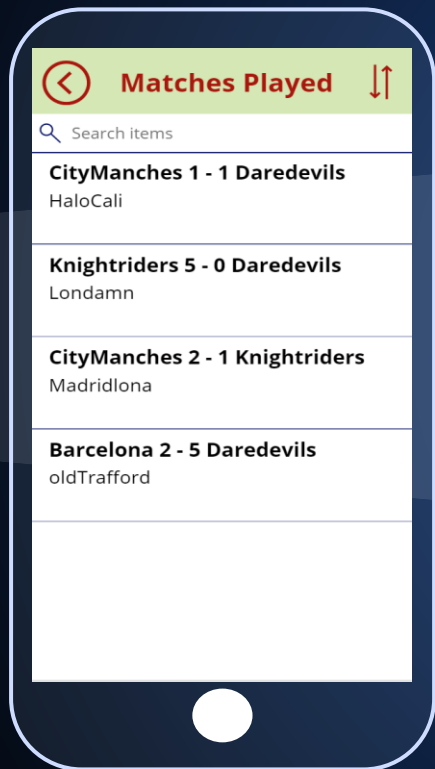
PLAYERS INFO



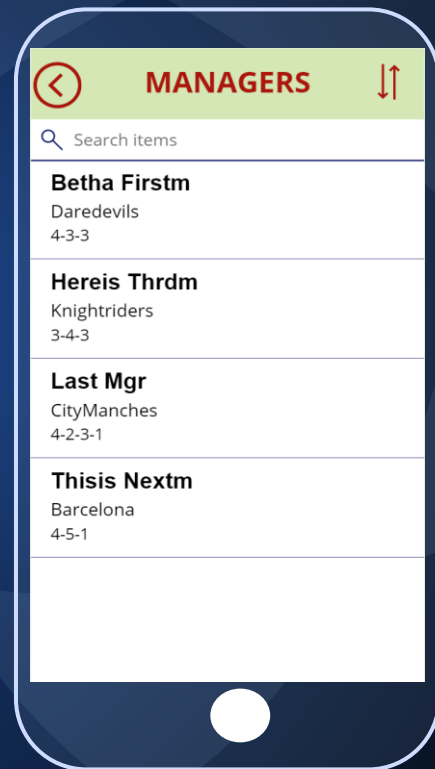
TEAMS INFO



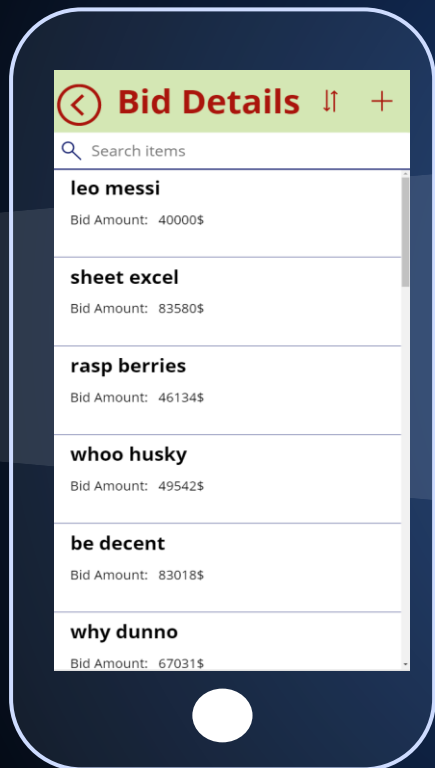
MATCHES INFO



MANAGERS INFO



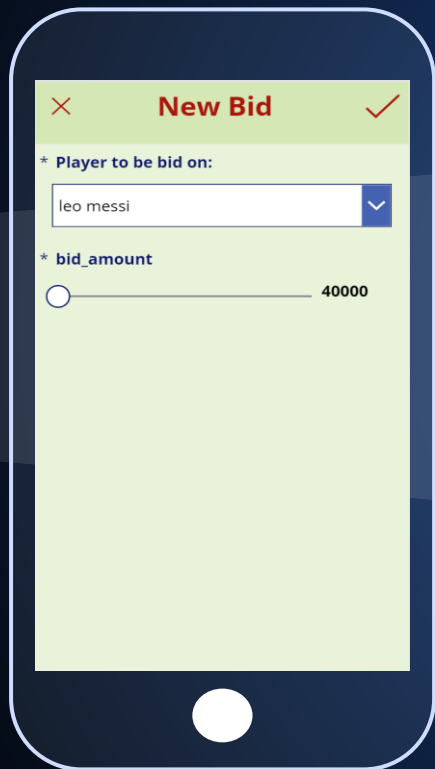
BIDS INFO



POINTS TABLE



MAKE A BID



The 'New Bid' screen features a light green header with a red 'X' icon on the left and a red checkmark icon on the right. Below the header, the text '* Player to be bid on:' is followed by a text input field containing 'leo messi' and a blue dropdown arrow. Below this, the text '* bid_amount' is followed by a horizontal slider control with a white circle on the left and the number '40000' on the right.

✕ New Bid ✓

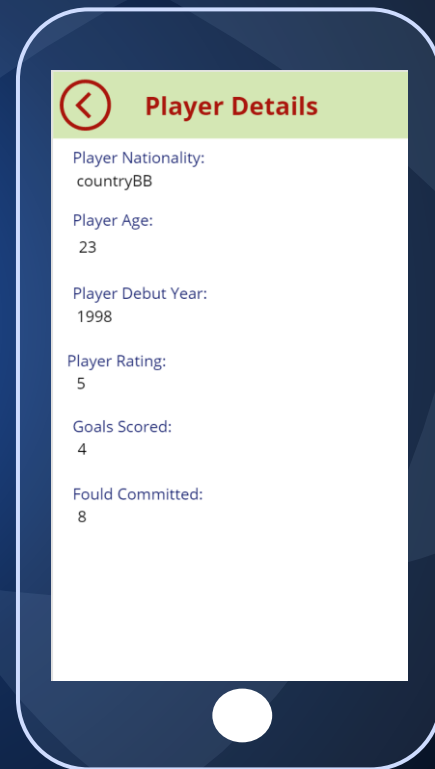
* Player to be bid on:

leo messi ▼

* bid_amount

○ ————— 40000

INDIVIDUAL PLAYER



The 'Player Details' screen features a light green header with a red back arrow icon on the left and the text 'Player Details' on the right. Below the header, the following player statistics are listed: 'Player Nationality: countryBB', 'Player Age: 23', 'Player Debut Year: 1998', 'Player Rating: 5', 'Goals Scored: 4', and 'Fould Committed: 8'.

⬅ Player Details

Player Nationality:
countryBB

Player Age:
23

Player Debut Year:
1998

Player Rating:
5

Goals Scored:
4

Fould Committed:
8

CONCLUSIONS

- We created a database that a person can use for keeping track of Soccer matches held in 8 leagues in USA.
- Our objective was to make available players info, managers info, teams info so that a team can see players' and managers' rating and their performance and decide to make a bid for the player.
- The database structure is quite simple and scalable, which makes it easy for also other programmers to understand it.
- While doing this project we understood this information can be used for understanding existing soccer data. We can leverage this information to perform predictive analysis and reporting.
- We gained deeper understanding on database design and how it can be implemented in real life situations using Microsoft PowerApps.

A close-up photograph of a soccer player's legs and feet on a grass field. The player is wearing white socks and black cleats. A black and white soccer ball is positioned next to the right foot. The word "THANKS" is overlaid in large, white, serif capital letters across the center of the image. The background is dark, and there is a faint, large, stylized soccer ball watermark in the background.

THANKS