

NBA information query and management system based on Php and MySQL

Chang Zhou and Jiang Song

04/21/2016

Introduction

- NBA has world-wide influence and hundreds of millions of fans.
- NBA fans need an easy way to query NBA information.
- Database administrators require an easy way to maintain NBA data.
- We designed and implemented an easy-to-use website which can be used to query and maintain NBA data.

Requirements

- By Administrator:

Query teams	Query players	Delete a player
Insert a player	Update the performance of a player	Insert the performance of a player
Update the performance of a team	Update the coach of a team	Insert the honor of a player

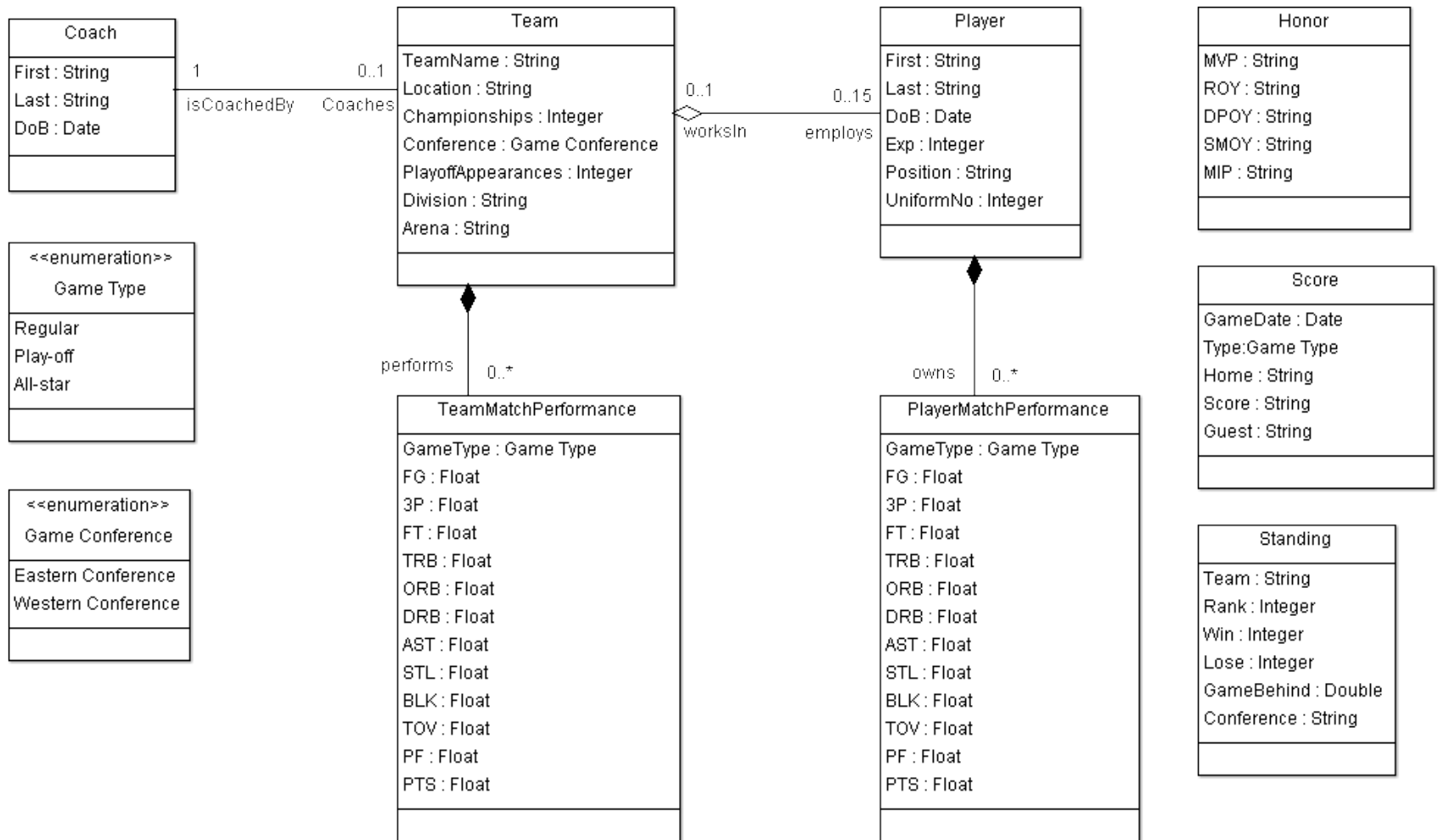
- By User:

Query teams	Query players	Query coaches
-------------	---------------	---------------

- Additional:

Query schedules&scores	Update schedules&scores	Query standings
------------------------	-------------------------	-----------------

Design



Database and data resource-1

- MySQL: phpMyAdmin

Databases

 Create database 

NBA

Collation

Create

- Create tables

 Create table

Name: Player

Number of columns: 8

Name

Type 

Length/Values 

id

INT

20

Pick from Central Columns

Name

VARCHAR

255

Database and data resource-2

- NBA data from <http://www.basketball-reference.com>

Current Roster					Glossary · SHARE · Embed · CSV · Export · PRE · LINK ·		
No.	Player	Pos	Ht	Wt	Birth Date	Exp	College
0	Avery Bradley	SG	6-2	180	November 26, 1990		5 University of Texas at Austin
7	Jared Sullinger	PF	6-9	260	March 4, 1992		3 Ohio State University
44	Tyler Zeller	C	7-0	253	January 17, 1990		3 University of North Carolina
41	Kelly Olynyk	C	7-0	238	April 19, 1991		2 Gonzaga University
4	Isaiah Thomas	PG	5-9	185	February 7, 1989		4 University of Washington
36	Marcus Smart	PG	6-4	220	March 6, 1994		1 Oklahoma State University
13	James Young	SG	6-6	215	August 16, 1995		1 University of Kentucky
11	Evan Turner	SG	6-7	220	October 27, 1988		5 Ohio State University
12	Terry Rozier	PG	6-2	190	March 17, 1994		R University of Louisville
28	R.J. Hunter	SG	6-5	185	October 24, 1993		R Georgia State University
99	Jae Crowder	SF	6-6	235	July 6, 1990		3 Marquette University
8	Jonas Jerebko	PF	6-10	231	March 2, 1987		5
90	Amir Johnson	PF	6-9	240	May 1, 1987		10
55	Jordan Mickey	PF	6-8	235	July 9, 1994		R Louisiana State University
30	John Holland	G-F	6-5	205	November 6, 1988		R Boston University

- Import the data into the database: Select one table→Import→Choose File→Format: CSV using LOAD DATA→Columns separated with: “,”→Use LOCAL keyword→Go

Discussion

- Examples of query a player

NBA STATS

[Teams](#)

[Players](#)

[Coaches](#)

[Scores&Schedules](#)

[Standings](#)

[Honors](#)

[Log in](#)



Use case: query a player

NBA Players

[Home](#)[Teams](#)[Coaches](#)[Scores&Schedules](#)[Standings](#)[Honors](#)

Enter Player Name:

© 2016 NBA

NBA Players

[Home](#)[Teams](#)[Coaches](#)[Scores&Schedules](#)[Standings](#)[Honors](#)

Enter Player Name:

Players Search Results

Name	BirthDate	NBAYears	Position	Team	Uniform Number
James Johnson	1987-02-20	6	PF	Toronto Raptors	3
James Young	1995-08-16	1	SG	Boston Celtics	13
LeBron James	1984-12-30	12	SF	Cleveland Cavaliers	23
James Jones	1980-10-04	12	SF	Cleveland Cavaliers	1
James Michael McAdoo	1993-01-04	1	PF	Golden State Warriors	20
James Anderson	1989-03-25	4	SG	Sacramento Kings	5
James Harden	1989-08-26	6	SG	Houston Rockets	13
James Ennis	1990-07-01	1	SF	New Orleans Pelicans	4

© 2016 NBA

NBA PLAYER STATS

[Home](#)[Teams](#)[Players](#)[Coaches](#)[Scores&Schedules](#)[Standings](#)[Honors](#)

LeBron James 2015-16 SEASON

Per Game

Game Type	FG%	3P%	FT%	TRB	ORB	DRB	AST	STL	BLK	TOV	PF	PTS
Regular	0.514	0.293	0.728	7.5	1.4	6	6.8	1.4	0.6	3.3	1.9	25

© 2016 NBA

Use case: update team performance-1

NBA STATS Admin

[Log out](#)

Manage Teams

Boston Celtics	Dallas Mavericks	Chicago Bulls	Denver Nuggets	Atlanta Hawks	Golden State Warriors
Brooklyn Nets	Houston Rockets	Cleveland Cavaliers	Minnesota Timberwolves	Charlotte Hornets	Los Angeles Clippers
New York Knicks	Memphis Grizzlies	Detroit Pistons	Portland Trail Blazers	Miami Heat	Los Angeles Lakers
Philadelphia 76ers	New Orleans Pelicans	Indiana Pacers	Oklahoma City Thunder	Orlando Magic	Phoenix Suns
Toronto Raptors	San Antonio Spurs	Milwaukee Bucks	Utah Jazz	Washington Wizards	Sacramento Kings

Manage Players

Enter Player Name:

Manage Scores

Enter Game Date:

Use case: update team performance-2

Boston Celtics Admin

[Admin Home](#)[Log out](#)

Boston Celtics INFO 2015-16

Conference	Division	Arena	Location	Playoffs	Champions	Head Coach
Eastern	Atlantic	TD Garden	Boston, Massachusetts	53	17	Brad Stevens
Enter New Coach Info:		<input type="text" value="Brad"/>	<input type="text" value="Stevens"/>	<input type="text" value="1976-10-22"/>	<input type="button" value="Update"/>	

Boston Celtics STATS 2015-16

Game Type	FG%	3P%	FT%	TRB	ORB	DRB	AST	STL	BLK	TOV	PF	PTS
Regular	0.439	0.333	0.788	45.2	11.7	33.5	24.1	9.3	4.2	13.5	22	105.6
Playoff	0.422	0.256	0.775	40.8	10	30.8	20	5.3	3.8	13.5	26.8	94.8
<input type="text" value="Playoff"/>	<input type="text" value="0.422"/>	<input type="text" value="0.256"/>	<input type="text" value="0.775"/>	<input type="text" value="40.8"/>	<input type="text" value="10"/>	<input type="text" value="30.8"/>	<input type="text" value="20"/>	<input type="text" value="5.3"/>	<input type="text" value="3.8"/>	<input type="text" value="13.5"/>	<input type="text" value="26.8"/>	<input type="text" value="94.8"/>
<input type="text" value="20"/>	<input type="text" value="5.3"/>	<input type="text" value="3.8"/>	<input type="text" value="13.5"/>	<input type="text" value="26.8"/>	<input type="text" value="94.8"/>	<input type="button" value="Update"/>		<input type="button" value="Insert"/>				

Boston Celtics Players List

Name	BirthDate	NBAYears	Position	Uniform Number
Avery Bradley	1990-11-26	5	SG	0
Jared Sullinger	1992-03-04	3	PF	7
Tyler Zeller	1990-01-17	3	C	44
Kelly Olynyk	1991-04-19	2	C	41
Isaiah Thomas	1989-02-07	4	PG	4
Marcus Smart	1994-03-06	1	PG	36

NBA STATS Admin

[Admin Home](#)[Log out](#)

Update complete!

References

- [1] https://en.wikipedia.org/wiki/National_Basketball_Association
- [2] <https://www.codecademy.com/learn/make-a-website>
- [3] <http://www.w3schools.com/php/>
- [4] <https://www.apachefriends.org/index.html>
- [5] <http://www.basketball-reference.com>