Collegiate Basketball Program Database for Prospective Athletes and Parents

Team 32

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Project Design - Revision #2

Team Members

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Christopher Douglas Quang "Lance" Ngo Sandro Sallenbach

Entity/Relationship Diagram

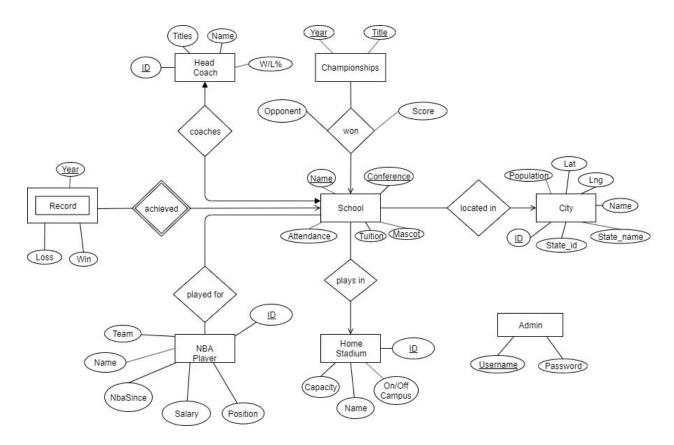


Figure 1: E/R Diagram

Definition of Entities and Relationships

School

Uses the name of the school and the conference attended as the key and holds stats such as attendance, tuition, and school mascot.

City

The city the school (university) is located in. This includes a unique ID, Name, State_id, State_name, Population, Latitude and Longitude of the location.

Championship

A championship is a title that a school can win at the end of each season. Championships are identified using the year it was won and the title of the championship. Currently, we are considering only Conference champions and NCAA champions.

Head Coach

Head coaches are stored with their name, win/loss percentage, number of titles won as well as a unique ID.

Record

A record tracks the wins and losses recorded by a team in a given year. Records are identified using the year and the name and conference of the school that achieved the record.

NBA Player

We track current NBA players that played for their respective colleges as a measure of how successful a college basketball program is. NBA Players are identified by a unique ID key with attributes of name, team, position, salary, and nba since.

Home Stadium

Home stadium identifies where a school's basketball team plays its home games. Home stadium is stored with the stadium name, has a number of people that it can hold, and if they're on or off campus, as well as an ID.

Admin

Controls who's allowed to access to add/edit data on the site. Uses the string Username as the key and has a password

Definition of Relationships

Located In

This is the relationship connecting City and School. It will display which school is located in which city, and include the following attributes City id, School name, and School conference.

Coaches

The relationship between head coach and school will help us identify who is currently coaching which team. The attributes will include Coach_id, School_name, and School_conference.

Played for

A relation to connect and NBA player with the school or schools that he played for.

Won

A relation to connect a school with the championship titles it has won. The WON relation uses the CHAMPIONSHIP's title+year key to uniquely identify an entity in WON. The WON relation also has the opponent, score, schoolName and conference attributes.

Plays in

Plays in is the relationship between a School and a Home Stadium. Every school can have exactly one Home Stadium.

Achieved

The ACHIEVE relationship will not be converted into a relation, as it is a weak relationship and would only introduce duplicate knowledge already covered in the weak entities.

Schemas

```
Schools (
       Name: string,
       Conference: string,
       Mascot: string,
       Attendance: integer,
       Tuition: integer
       )
City (
       ID: integer,
       Name: string,
       State_id: string,
       State_name: string,
       Population: integer
       Lat: double,
       Lng: double,
       )
Championship (
       Year: integer,
       Title: string
Head Coach (
       ID: integer,
       Name: string,
       W/L%: double,
       Titles: integer
       )
Record (
       Year: integer,
       <u>TeamName</u>: string,
       Conference: string,
       Win: integer,
       Loss: integer
       )
NBA Player (
       ID: integer,
       Name: string,
       Team: string,
       Position: string,
       NbaSince: integer,
```

```
Salary: integer
Home Stadium (
       ID: integer
       Name: string,
       Capacity: integer,
       OffCampus: boolean
Admin (
       <u>Username</u>: string,
       Password: string
Located In (
       City_id: integer,
       School name: string,
       School_conference: string
Won (
       SchoolName: string,
       Conference: string,
       Title: string,
       Year: integer,
       Opponent: string,
       Score: string
Coaches (
       Coach id: integer,
       School_name: string,
       School_conference: string
Played For (
       PlayerID: integer,
       SchoolName: string,
       Conference: string
Plays In (
       StadiumID: integer,
       SchoolName: string,
       Conference: string
```

<u>Tables</u>

Schools

	SchoolName	conf	attendance	tuition	mascot
>	San Jose State University	Mountain West	32828	7418	Sammy
	San Diego State University	Mountain West	33778	7510	Montezuma the Aztec Warrior
	California State University, Fresno	Mountain West	22071	6313	Victor E. Bulldog
	University of Nevada, Las Vegas	Mountain West	30471	6197	Hey Reb!
	University of Nevada	Mountain West	20194	7142	Alphie, Wolfie Jr and Luna
	University of New Mexico	Mountain West	27353	7350	Lobo
	University of Wyoming	Mountain West	12397	5055	Pistol Pete and Cowboy Joe
	Colorado State University	Mountain West	33413	11052	CAM the Ram
	Boise State University	Mountain West	25540	7080	Buster Bronco
	Utah State University	Mountain West	24880	7426	Big Blue
	U.S. Air Force Academy	Mountain West	4336	0	Aurora
	University of Utah	Pacific 12	32760	8518	Utes
	University of Colorado, Boulder	Pacific 12	33246	11531	Buffaloes
	Arizona State University	Pacific 12	71946	10370	Sun Devil
	University of Arizona	Pacific 12	44831	11769	Wildcats
	University of California, Los Angeles	Pacific 12	44947	12920	Bruins
	Stanford University	Pacific 12	16914	47940	Cardinal
	University of California, Berkeley	Pacific 12	41910	13509	Golden Bears
	Markingkon Chake Heimenik.	n:£_ +n	20000	11041	C

City

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	ID	Name	State_id	State_name	Population	Lat	Lng	
•	1840105790	San Jose	CA	California	1821899	37.3021	-121.8489	
	1840107761	San Diego	CA	California	3210314	32.8312	-117.1225	
	1840011462	Fresno	CA	California	698021	36.7831	-119.7941	
	1840051122	Las Vegas	NV	Nevada	2073045	36.2333	-115.2654	
	1840051413	Reno	NV	Nevada	433271	39.5497	-119.8483	
	1840055453	Albuquerque	NM	New Mexico	758523	35.1053	-106.6464	
	1840102894	Laramie	WY	Wyoming	33508	41.3099	-105.6085	
	1840008986	Fort Collins	CO	Colorado	303184	40.5475	-105.0651	
	1840018335	Boise	ID	Idaho	385218	43.6007	-116.2312	
	1840090822	Logan	UT	Utah	100774	41.74	-111.8419	
	1840009069	Colorado Sp	CO	Colorado	623946	38.8674	-104.7606	
	1840090981	Salt Lake City	UT	Utah	1098400	40.7774	-111.93	
	1840008032	Boulder	CO	Colorado	126054	40.0249	-105.2523	
	1840000186	Tempe	AZ	Arizona	185038	33.3881	-111.9318	
	1840001451	Tucson	AZ	Arizona	868391	32.1545	-110.8782	
	1840107920	Los Angeles	CA	California	12815475	34, 1139	-118.4068	
	1840113490	Stanford	CA	California	15277	37,4252	-122, 1674	

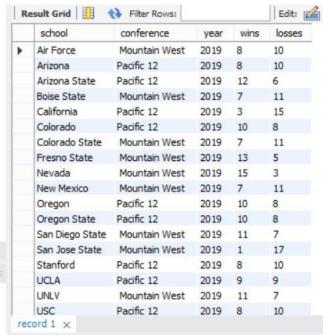
Championship



Head Coach

	ID	Name	W/L%	Titles
•	1	Brian Dutcher	0.642	1
	2	Allen Edwards	0.495	0
	3	Justin Hutson	0.719	0
	4	Niko Medved	0.375	0
	5	Marvin Menzies	0.5	0
	6	Eric Musselman	0.764	4
	7	Dave Pilipovich	0.428	0
	8	Jean Prioleau	0.131	0
	9	Leon Rice	0.602	1
	10	Craig Smith	0.8	2
	11	Paul Weir	0.5	0
	12	Dana Altman	0.71	5
	13	Murry Bartow	0.5	0
	14	Tad Boyle	0.602	1
	15	Andy Enfield	0.542	0
	16	Jerod Haase	0.495	0
	17	Mike Hopkins	0.686	1

Record



NBA Players



Home Stadium

	ID	StadiumName	onOffCampus	capacity
Þ	0	Event Center at San Jose State University	1	5000
	1	Viejas Arena	1	12411
	2	Save Mart Center	1	15544
	3	Thomas & Mack Center	1	17932
	4	Lawlor Events Center	1	11536
	5	Dreamstyle Arena	0	15411
	6	Arena0Auditorium	1	15028
	7	Moby Arena	1	8745
	8	ExtraMile Arena	1	12644
	9	Dee Glen Smith Spectrum	1	10270
	10	Clune Arena	1	5858
	11	John M. Huntsman Center	1	15000
	12	CU Events Center	1	11064
	13	Wells Fargo Arena	1	14000
	14	McKale Memorial Center	1	14655
	15	Pauley Pavilion	1	13800
	16	Stanford Maples Pavilion	1	7392
	17	Hass Pavilion	1	11858
	10	Danalan Calianna	4	11571

Admin

username	pass
ChrisDouglas	58646da85114df54417955867d76162638bef41
LanceNgo	03653c14f11e10653f6869a2cd9a2c488bba094
SandroSallenbach	217ae82419798bad482403db095bd29971b518
MikeWu	5cc9042f70ff92805ef1e8c863ecf25585902d3cc
AmitGarg	84149dc5c9129ebd148f6ca9cb701d157be2944
SriramPriyathamSiram	8c63b2762b939b70d14de5d1636a1ba0732d39
AvinavTyagi	67d7b15e3e9ec49fe39545b1b9fe13eaf6214de
BarackObama	1c4fb8a88cdaea916e24d0e22c919d2b7f805cdf
ElonMusk	1c4fb8a88cdaea916e24d0e22c919d2b7f805cdf
BillGates	9072661b569b51397d87038dcf46a82b5709c47
JuliusCaesar	5ae 1e4b373f8a58fdaaf215acac4e720bb48624f
WinstonChurchill	536a3f8fede62c3a2c587c592c93914cec702dac
HenryFord	9ed8da264144428f9ae82944f629749067a50bc
BruceWayne	b70e9184b9ce0a5036eab678eb6e3aca9cadc4f
Batman	b70e9184b9ce0a5036eab678eb6e3aca9cadc4f

Located In

	City_id	School_name	School_conference
•	1840105790	San Jose State University	Mountain West
	1840107761	San Diego State University	Mountain West
	1840011462	California State University, Fresno	Mountain West
	1840051122	University of Nevada, Las Vegas	Mountain West
	1840051413	University of Nevada	Mountain West
	1840055453	University of New Mexico	Mountain West
	1840102894	University of Wyoming	Mountain West
	1840008986	Colorado State University	Mountain West
	1840018335	Boise State University	Mountain West
	1840090822	Utah State University	Mountain West
	1840009069	U.S. Air Force Academy	Mountain West
	1840090981	University of Utah	Pacific 12
	1840008032	University of Colorado, Boulder	Pacific 12
	1840000186	Arizona State University	Pacific 12
	1840001451	University of Arizona	Pacific 12
	1840107920	University of California, Los Angeles	Pacific 12
	1840113490	Stanford University	Pacific 12

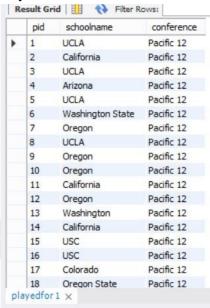
Won



Coaches

	Coach_id	School_name	School_conference
Þ	1	San Diego State University	Mountain West
	2	University of Wyoming	Mountain West
	3	California State University, Fresno	Mountain West
	4	Colorado State University	Mountain West
	5	University of Nevada, Las Vegas	Mountain West
	6	University of Nevada	Mountain West
	7	U.S. Air Force Academy	Mountain West
	8	San Jose State University	Mountain West
	9	Boise State University	Mountain West
	10	Utah State University	Mountain West
	11	University of New Mexico	Mountain West
	12	University of Oregon	Pacific 12
	13	University of California, Los Angeles	Pacific 12
	14	University of Colorado, Boulder	Pacific 12
	15	University of Southern California	Pacific 12
	16	Stanford University	Pacific 12
	17	University of Washington	Pacific 12

Played For



Plays In

	SchoolName	conf	id
>	San Jose State University	Mountain West	0
	San Diego State University	Mountain West	1
	California State University, Fresno	Mountain West	2
	University of Nevada, Las Vegas	Mountain West	3
	University of Nevada	Mountain West	4
	University of New Mexico	Mountain West	5
	University of Wyoming	Mountain West	6
	Colorado State University	Mountain West	7
	Boise State University	Mountain West	8
	Utah State University	Mountain West	9
	U.S. Air Force Academy	Mountain West	10
	University of Utah	Pacific 12	11
	University of Colorado, Boulder	Pacific 12	12
	Arizona State University	Pacific 12	13
	University of Arizona	Pacific 12	14
	University of California, Los Angeles	Pacific 12	15
	Stanford University	Pacific 12	16
	University of California, Berkeley	Pacific 12	17