

Forbes

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About Forbes

- Forbes.com is a leading American business prestigious magazine which releases Articles on diversified domains and Rankings that focuses on popular people, companies and universities
- Values: “Forbes’ key values are purpose, integrity, innovation, respect and being bold. Our employees, just like the global audiences we serve, know that Forbes is the global champion of free-market enterprise and entrepreneurial capitalism”.
- Change the World is Forbes magazine's motto. Mike Federle serves as its CEO, and Steve Forbes is its chairman and editor-in-chief. It was sold to Integrated Whale Media Investments, an investment company located in Hong Kong, in 2014.



“Allow people to pursue happiness”.

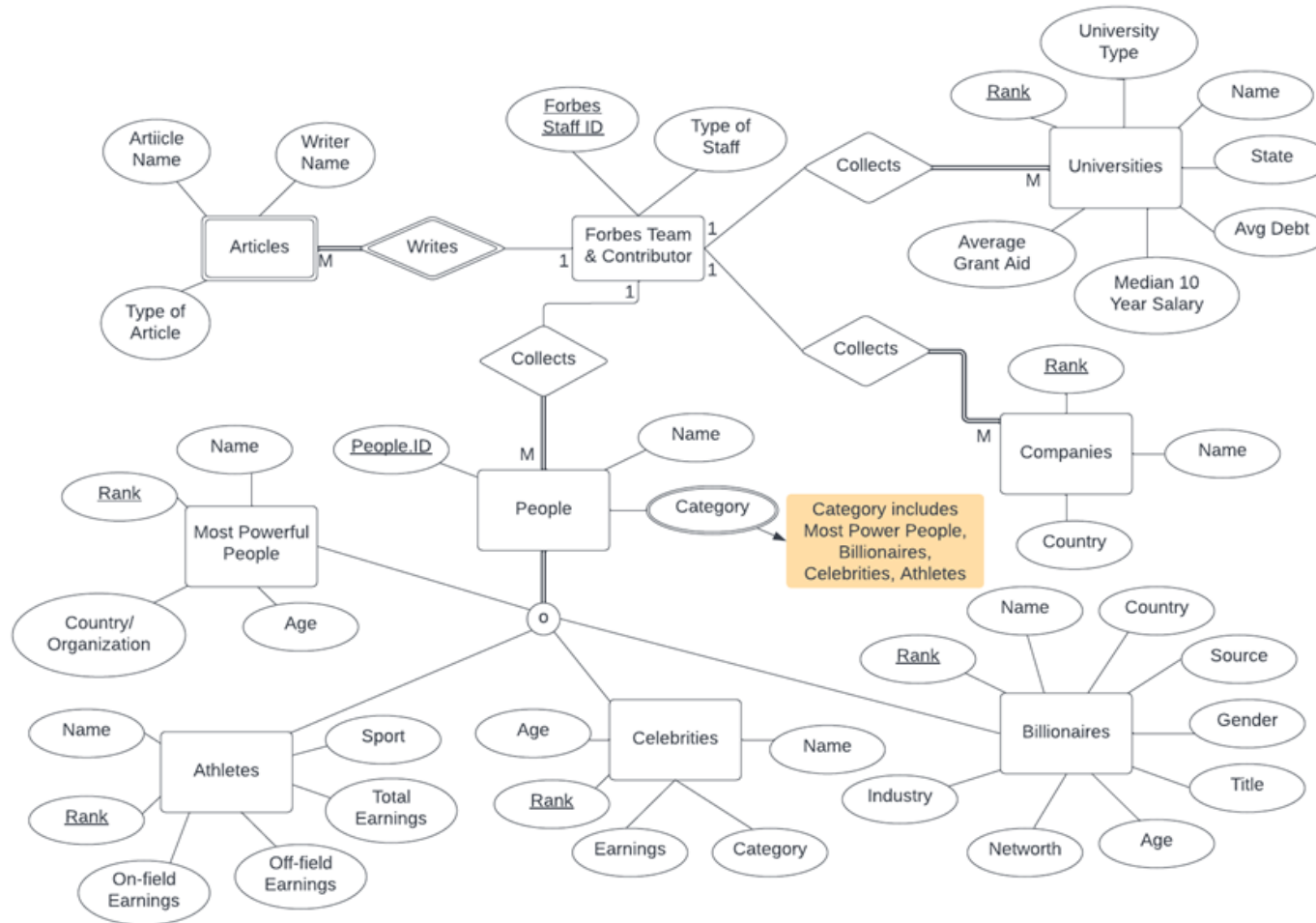
Advantages of this Database

- Gets the total number of billionaires and their combined wealth using the Forbes Billionaires' database so that the respective governments of the countries can assess the wealth inequality among their citizens.
- Can obtain information on wealthy women around the world so that the distribution of wealth among females can be examined.
- Possibility of viewing a list of self-made billionaires and the youngest billionaires from start-up unicorns they established across different sectors.
- Able to determine which industry is expanding rapidly where investors are primarily generating wealth.

Key Business Requirements

- Forbes Team and Contributors collects data regarding universities in US, companies in the entire world and Popular people around the globe and also publishes articles.
- One contributor can collect data from one or more entity types (Companies, Universities, People etc.).
- Forbes team and contributors are uniquely identified by **Forbes staff ID** and contains type of staff.
- People, Universities, Companies are uniquely identified by **Rank**
- People details are uniquely identified by **People ID** which is provided by the Forbes ID
- The sub-categories of the people category are:
 - The World's Billionaires List
 - The World's Most Power People
 - The World's Highest Paid Athletes
 - The Celebrity 100

Conceptual Model



Strong Entities:

Forbes Team &
Contributor
Universities
Companies
People

Weak Entities:

Articles

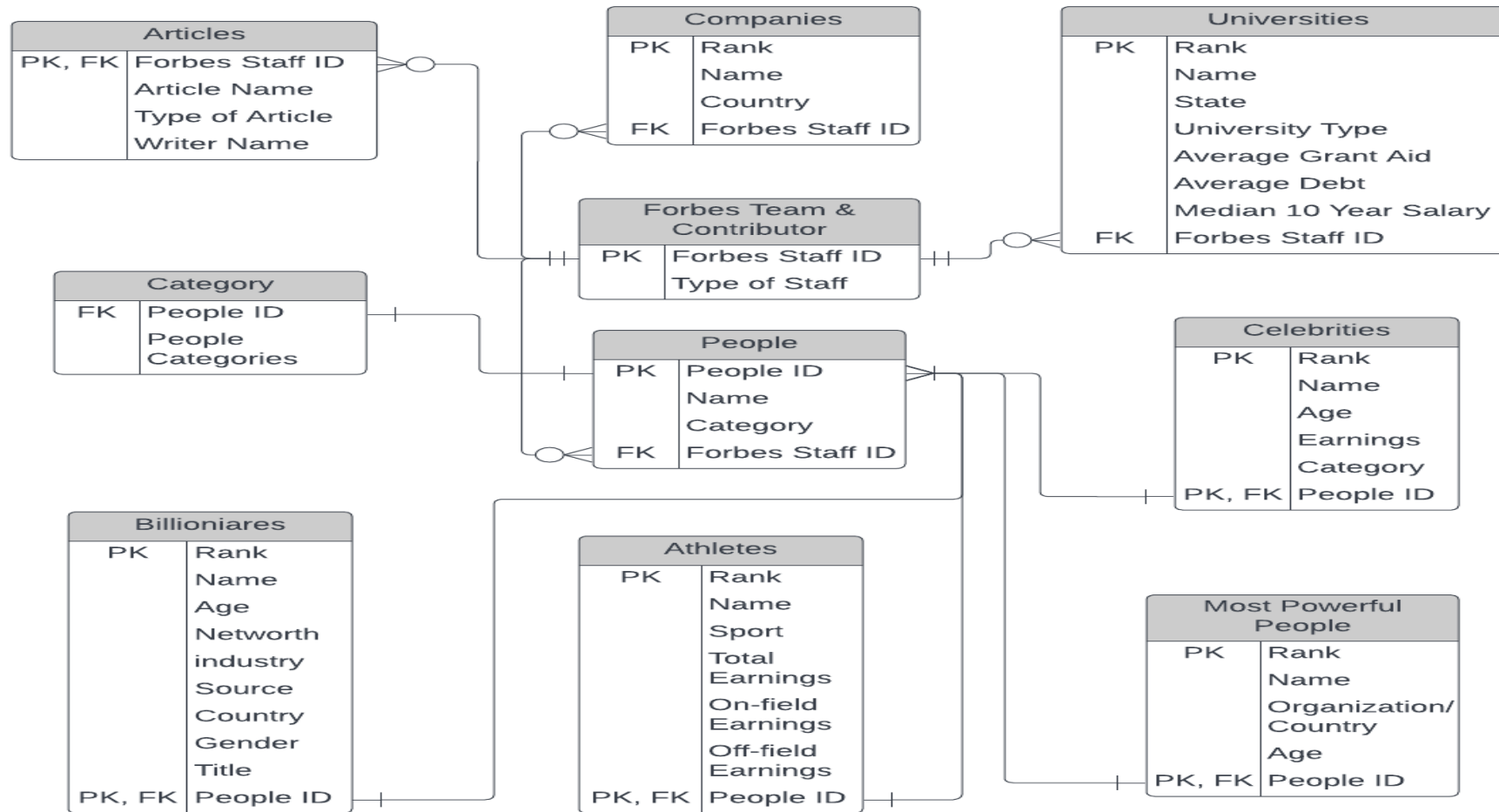
Super Type Entities:

People

Sub Type Entities:

Most Powerful People
Athletes
Celebrities
Billionaires

Logical Model



Physical Model

	FORBES_STAFF_ID	TYPE_OF_STAFF
1	73942	Forbes Staff
2	73943	Contributor
3	73944	Contributor
4	73945	Senior Contributor
5	73946	Senior Contributor



Randall Lane

	ARTICLE_NAME	FORBES_STAFF_ID	TYPE_OF_ARTICLE	WRITER_NAME
1	Verizon And AT&T C-Band Launch Portends Future Of 5G	73943	5G	Bob O'Donnell
2	With Finance Cloud, Rippling Hopes To Become The Salesforce Of Employee Data	73949	Cloud	Kenrick Cai
3	Intel 13th Gen Core Raptor Lake Processors Impress In A Variety Of Workloads	73990	Consumer Tech	Dave Altavilla
4	Apple AirTag Used To Find Over 100 Stolen Democratic Campaign Signs, Police Say	73994	Cybersecurity	Thomas Brewster
5	Mark Zuckerberg's Metaverse Is Solving No Problems	73997	Enterprise Tech	Paul Tassi

Physical Model

	UNIVERSITY_RANK	FORBES_STAFF_ID	UNIVERSITY_NAME	STATE_OF_THE_UNIV	TYPE_OF_THE_UNIV	AVERAGE_GRANT_AID	AVERAGE_DEBT	MEDIAN_10_YR_SALARY
1	1	73942	Massachusetts Institu	MA	Private not-for-profit	\$53,162	\$10,070	\$173,700
2	2	73949	Stanford University	CA	Private not-for-profit	\$54,547	\$11,765	\$173,500
3	3	73950	University of Californi	CA	Public	\$18,831	\$7,086	\$154,500
4	4	73951	Princeton University	NJ	Private not-for-profit	\$55,465	\$3,647	\$167,600
5	5	73953	Columbia University	NY	Private not-for-profit	\$57,642	\$12,141	\$148,800
6	6	73954	University of Californi	CA	Public	\$15,461	\$6,243	\$137,200
7	7	73957	Williams College	MA	Private not-for-profit	\$53,164	\$5,044	\$152,600
8	8	73964	Yale University	CT	Private not-for-profit	\$59,134	\$5,262	\$163,700
9	9	73965	Duke University	NC	Private not-for-profit	\$50,914	\$8,494	\$155,000
10	10	73966	University of Pennsylv	PA	Private not-for-profit	\$54,019	\$10,681	\$164,000

Universities

	COMPANIES_RANK	FORBES_STAFF_ID	COMPANY_NAME	COUNTRY
1	1	74058	Berkshire Hathaway	United States
2	2	74059	ICBC	China
3	3	74062	Saudi Arabian Oil Company (Saudi Aramco)	Saudi Arabia
4	4	74069	JPMorgan Chase	United States
5	5	74070	China Construction Bank	China
6	6	74071	Amazon	United States
7	7	74073	Apple	United States
8	8	74074	Agricultural Bank of China	China
9	9	74077	Bank of America	United States
10	10	74084	Toyota Motor	Japan
11	11	74085	Alphabet	United States
12	12	74086	Microsoft	United States

Companies

Physical Model

	PEOPLE_ID	FORBES_STAFF_ID	PEOPLE_NAME	PEOPLE_CATEGORY
19	8394891	74139	Angelina Jolie	CELEBRITIES
20	8394892	74140	Mohamed Salah	CELEBRITIES
21	8394893	74141	Xi Jinping	MOST_POWERFUL_PEOPLE
22	8394894	73942	Vladimir Putin	MOST_POWERFUL_PEOPLE
23	8394895	73943	Donald Trump	MOST_POWERFUL_PEOPLE



	RANK_OF_MOST_POWERFUL_PEOPLE	PEOPLE_ID	NAME	ORGANIZATION	AGE
1	1	8394893	Xi Jinping	China	69
2	2	8394894	Vladimir Putin	Russia	70
3	3	8394895	Donald Trump	United States	76
4	4	8394896	Angela Merkel	Germany	68
5	5	8394897	Jeff Bezos	Amazon.com	58
6	6	8394898	Pope Francis	Roman Catholic Church	85
7	7	8394899	Bill Gates	Bill & Melinda Gates Foundation	66
8	8	8394900	Mohammed bin Salman Al Saud	Saudi Arabia	37
9	9	8394901	Narendra Modi	India	72
10	10	8394902	Larry Page	Alphabet	49
11	11	8394904	Jerome H. Powell	United States	69
12	12	8394905	Emmanuel Macron	France	44

Physical Model

	RANK_OF_BILIONAIRE	PEOPLE_ID	BILIONAIRE_NAME	AGE	NET_WORTH	INDUSTRY	SOURCE	COUNTRY	GENDER	TITLE
1	1	8394294	Elon Musk	50	219000	Automotive	Tesla, SpaceX	United States	M	CEO
2	2	8394295	Jeff Bezos	58	171000	Technology	Amazon	United States	M	Entrepreneur
3	3	8394296	Bernard Arnault & family	73	158000	Fashion & Retail	LVMH	France	M	Chairman and CEO
4	4	8394297	Bill Gates	66	129000	Technology	Microsoft	United States	M	Cofounder
5	5	8394298	Warren Buffett	91	118000	Finance & Investments	Berkshire Hathaway	United States	M	CEO
6	6	8394299	Larry Page	49	111000	Technology	Google	United States	M	Entrepreneur
7	7	8394300	Sergey Brin	48	107000	Technology	Google	United States	M	Cofounder and board
8	8	8394301	Larry Ellison	77	106000	Technology	software	United States	M	CTO and Founder
9	9	8394302	Steve Ballmer	66	91400	Technology	Microsoft	United States	M	Owner
10	10	8394303	Mukesh Ambani	64	90700	Diversified	diversified	India	M	Founder and Chairma



Elon Musk: The World's Richest

Physical Model


	RANK_OF_ATHLETES	PEOPLE_ID	ATHELETE_NAME	SPORT	TOTAL_EARNINGS	ON_THE_FIELD_EARNINGS	OFF_THE_FIELD_EARNINGS
1	1	8394975	Lionel Messi	Soccer	\$130M	\$75M	\$55M
2	2	8394976	LeBron James	Basketball	\$121.2M	\$41.2M	\$80M
3	3	8394977	Cristiano Ronaldo	Soccer	\$115M	\$60M	\$55M
4	4	8394978	Neymar	Soccer	\$95M	\$70M	\$25M
5	5	8394979	Stephen Curry	Basketball	\$92.8M	\$45.8M	\$47M
6	6	8394980	Kevin Durant	Basketball	\$92.1M	\$42.1M	\$50M
7	7	8394981	Roger Federer	Tennis	\$90.7M	\$700K	\$90M
8	8	8394982	Canelo Alvarez	Boxing	\$90M	\$85M	\$5M
9	9	8394983	Tom Brady	Football	\$83.9M	\$31.9M	\$52M
10	10	8394984	Giannis Antetokounmpo	Basketball	\$80.9M	\$39.9M	\$41M
11	11	8394985	Russell Westbrook	Basketball	\$79.2M	\$44.2M	\$35M
12	12	8394986	James Harden	Basketball	\$74.4M	\$44.4M	\$30M







Athletes

	RANK_OF_CELEBRITIES	PEOPLE_ID	CELEBRITY_NAME	AGE	EARNINGS	CATEGORY
1	1	8394793	Kylie Jenner	25	\$590 M	Fashion & Retail
2	2	8394794	Kanye West	45	\$170 M	music, sneakers
3	3	8394795	Roger Federer	41	\$106.3 M	Sport & Entertainment
4	4	8394796	Cristiano Ronaldo	37	\$105 M	Sport & Entertainment
5	5	8394797	Lionel Messi	35	\$104 M	Sport & Entertainment
6	6	8394798	Tyler Perry	53	\$97 M	Media & Entertainment
7	7	8394799	Neymar	30	\$95.5 M	Sport & Entertainment
8	8	8394800	Howard Stern	68	\$90 M	Radio & Television
9	9	8394801	LeBron James	37	\$88.2 M	Sport & Entertainment
10	10	8394802	Dwayne Johnson	50	\$87.5 M	Sports, Media & Entertainment, Entrepreneur
11	11	8394803	Rush Limbaugh	71	\$85 M	Media & Poilitics
12	12	8394804	Ellen DeGeneres	64	\$84 M	Media & Entertainment


Celebrities




Feature-1 Demonstration:

Forbes queries* ▾  Consumer group: LOW ▾

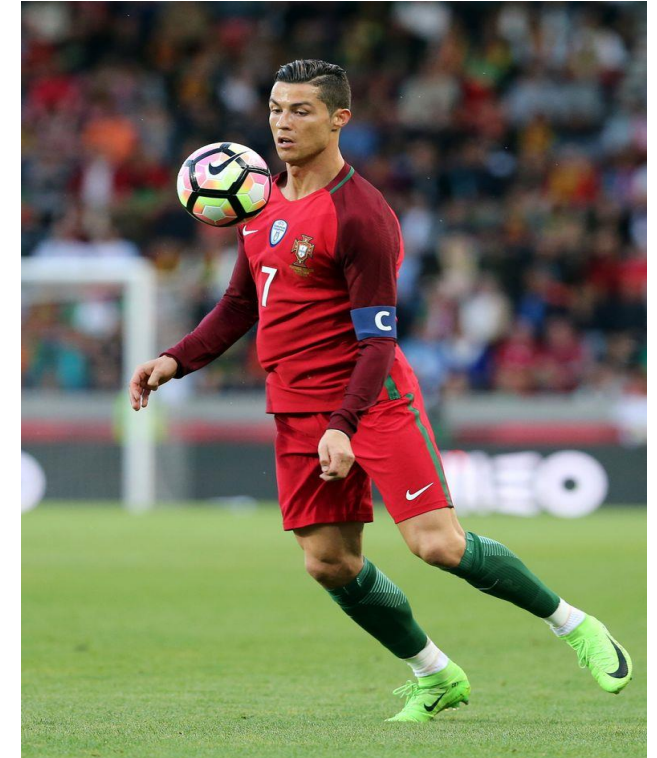
  Aa ▾  [Data Load](#)   

```
212 select * from people
213 where people_name in (select people_name from (SELECT people_name,COUNT(*)FROM people
214 GROUP BY people_name HAVING COUNT(*) > 1))
215 order by people_name;
```

Query Result Script Output DBMS Output Explain Plan Autotrace SQL History 

   Download ▾ Execution time: 0.027 seconds

	PEOPLE_ID	FORBES_STAFF_ID	PEOPLE_NAME	PEOPLE_CATEGORY
13	8394977	74018	Cristiano Ronaldo	ATHELETES
14	8394796	74044	Cristiano Ronaldo	CELEBRITIES
15	8394994	74035	Damian Lillard	ATHELETES
16	8394884	74132	Damian Lillard	CELEBRITIES
17	8394294	73942	Elon Musk	BILLIONAIRES
18	8394919	73965	Elon Musk	MOST_POWERFUL_PEOPLE



Cristiano Ronaldo

Feature-2 Demonstration

Forbes queries*
Data Load

Consumer group: LOW

```
220  
221 select* from US_UNIVERSITIES where UNIVERSITY_NAME ='University of Utah';  
222  
223
```

Query Result

Script Output

DBMS Output

Explain Plan

Autotrace

SQL History

Download

Execution time: 0.008 seconds

	UNIVERSITY_RANK	FORBES_STAFF_ID	UNIVERSITY_NAME	STATE	TYPE	AVERAGE_GRANT_AID	AVERAGE_DEBT	MEDIAN_10_YR_SALARY
1	88	73949	University of Utah	UT	Public	\$9,336	\$10,495	\$119,300



Feature-3 Demonstration

Forbes queries*
Data Load

Consumer group: LOW

```
223  
224 select RANK_OF_BILIONAIRE,BILLIONAIRE_NAME,NET_WORTH,SOURCE,TITLE from BILLIONAIRES  
225 where source in (select COMPANY_NAME from COMPANIES);  
226  
---
```

Query Result

Script Output

DBMS Output

Explain Plan

Autotrace

SQL History

Download

Execution time: 0.012 seconds

	RANK_OF_BILIONAIRE	BILLIONAIRE_NAME	NET_WORTH	SOURCE	TITLE
1	5	Warren Buffett	118000	Berkshire Hathaway	CEO
2	2	Jeff Bezos	171000	Amazon	Entrepreneur
3	30	MacKenzie Scott	43600	Amazon	Philanthropist
4	4	Bill Gates	129000	Microsoft	Cofounder
5	9	Steve Ballmer	91400	Microsoft	Owner

Final Requirements

Category	Description	Status
Articles	Users must be able to see the data related to articles.	Done
Universities	Users must be able to view the content regarding the American universities along with their rankings.	Done
Companies	Users must be able to see the content regarding the companies along with their rankings.	Done
Forbes Team	Users must be to view the data of the Forbes Team.	Done
Billionaires	Users must be able to see the content regarding the billionaires along with their rankings.	Done
Most Power People	Users must be able to see the content regarding the most power people along with their rankings.	Done
Athletes	Users must be able to see the content regarding the athletes along with their rankings.	Done
Celebrities	Users must be able to see the content regarding the celebrities along with their rankings.	Done

A rustic wall made of corrugated metal and wooden planks. Two rectangular openings in the upper part of the wall are covered with wooden planks. At the bottom, a wooden plank sign with the words 'THANK YOU.' painted in bright yellow is mounted on the wall. The foreground is a dark, textured surface, possibly asphalt or concrete.

THANK YOU.