Database model documentation

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1. Model details

Model name:

    Nba_Physical_Model

Version:

    2.4

Database engine:

    PostgreSQL

Description:

    Logical Model of Nba season stats management

2. Tables

2.1. Table Team

Description:

Team table

2.1.1. Columns

Column name	Type	Properties	Description
id	int	PK	Id of nba team
name	char(50)		Describe the name of the nab team
abbr	char(10)	null	Abbreviation for the name of team
nickname	char(50)	null	Nickname used for a nab team
Arena_id	int		

2.2. Table Coach

Description:

Coach table

2.2.1. Columns

Column name	Type	Properties	Description
ID	int	PK	
name	char(50)		
CoachStats_ID	int		

2.3. Table Player

Description:

Table that represent a player of nba

2.3.1. Columns

Column name	Type	Properties	Description
ID	int	PK	
name	char(50)		Name of a player
pos	char(10)		Position on the bench

age	int	null	Age of the player
Team_Season_id	int		
PlayerStats_ID	int		

2.4. Table TeamStats

Description:

Table describing the statistics of an nba team

2.4.1. Columns

Column name	Type	Properties	Description
ID	int	PK	
ELO	Float(32)		Advanced derived measure to calculate strength of a nba team
FG_PCT	Float(32)		Field Goal Point Percentage
FG3_PCT	Float(32)		Three Field Goal Point Percentage
FGM	Float(32)		Field Goal made
FG_Missed	Float(32)		Field Goal Missed
FGA	Float(32)		Field Goal Attempted
FG3M	Float(32)		Three Field Goal Point
FG3A	Float(32)		Three Field Goal Point Attempted
FG2M	Float(32)		Two Field Goal Point
FG2A	Float(32)		Two Field Goal Point Attempted

FTM	Float(32)		Free Throws
FTA	Float(32)		Free Throws Attempted
FT_PCT	Float(32)		Free Throws Percentage
FT_Missed	Float(32)		Free Throws Missed
ORB	Float(32)		Offensive Rebound
DRB	Float(32)		Defensive Rebound
TRB	Float(32)		Total Rebounds
AST	Float(32)		Assist
STL	Float(32)		Steals
BLK	Float(32)		Block
TOV	Float(32)		no
PF	Float(32)		no
EFFICACY	Float(32)		no

2.5. Table PlayerStats

Description:

Table describing the statistics of a player

2.5.1. Columns

Column name	Type	Properties	Description
ID	int	PK	
Gms	int		Games played during the season
Gstart	int		Games started from 1" minute
MP	int		Minutes played during the season
FG	int		Field Goal
FGA	int		Field Goal Attempted

FGP	float(32)		Field Goal Percentage
ThreeP	int		Three Field Goal Point
ThreePP	float(32)		Three Field Goal Point Percentage
ThreePA	int		Three Field Goal Point Attempted
TwoP	int		Two Field Goal Point
TwoPP	float(32)		Two Field Goal Point Percentage
FT	float(32)		Free Throws
FTA	float(32)		Free Throws Attempted
FTP	float(32)		Free Throws Percentage
TwoPA	int		Two Field Goal Point Attempted
DRB	float(32)		Defensive Rebound
TRB	float(32)		Total Rebounds
AST	float(32)		Assist
ORB	float(32)		Offensive Rebound
BLK	float(32)		Block
STL	float(32)		Steals
PF	int		Personal Fouls
PTS	int		Total Points of the season
TOV	float(32)		TurnOvers
eFGP	float(32)		Effective Field Goal Percentage

2.6. Table CoachStats

Description:

Table describing the statistics of a coach during the season

2.6.1. Columns

Column name	Type	Properties	Description

ID	int	PK	
SeasG	int		Season Game
SeasW	int		Season Win
SeasL	float(32)		Season Lose
FranG	int		Franchise Game
FranW	int		Franchise Win
FranL	int		Franchise Lose
CareW	int		Career Win
CareL	int		Career Lose
CareWP	float(32)		Career Win Percentage
PoseasG	float(32)		Playoff Game
PoseasW	float(32)		Playoff Win
PoseasL	float(32)		Playoff Lose
PofranG	float(32)		Playoff Franchise Game
PofranW	float(32)		Playoff Franchise Win
PofranL	float(32)		Playoff Franchise Lose
PocareG	float(32)		Playoff Career Game
PocareW	float(32)		Playoff Career Win
PocareL	float(32)		Playoff Career Game Lose

2.7. Table Arena

2.7.1. Columns

Column name	Type	Properties	Description
id	int	PK	
city	char(40)	null	
name	char(40)		
capacity	int	null	

2.8. Table Staff

2.8.1. Columns

Column name	Type	Properties	Description
id	int	PK	
owner	char(50)		
manager	char(50)	null	
Team_id	int		Id of nba team

2.9. Table Season

Description:

Describe a nab season

2.9.1. Columns

Column name	Type	Properties	Description
season	int	PK	Year of nba season
start_date	date		Start Date of a season
end_date	date		End Date of a season

2.10. Table Team_Season

Description:

Refers to a singular season for a team

2.10.1. Columns

Column name	Type	Properties	Description
id	int	PK	
season	int		Year of nba season
team_id	int		Id of nba team
team_stat_id	int		
coach_id	int		

3. References

3.1. Reference Team_Season_Season

Season	0..*	Team_Season
season	<->	season

3.2. Reference Team_Season_Team

Team	0..*	Team_Season
id	<->	team_id

3.3. Reference Arena_Team

Arena	1..*	Team
id	<->	Arena_id

3.4. Reference Team_Season_Player

Team_Season	1..*	Player
id	<->	Team_Season_id

3.5. Reference Team_Season_Coach

Coach	0..*	Team_Season
ID	<->	coach_id

3.6. Reference Staff_Team

Team	1..1	Staff
id	<->	Team_id

3.7. Reference Player_PlayerStats

PlayerStats	1..1	Player
ID	<->	PlayerStats_ID

3.8. Reference Team_Season_TeamStats

TeamStats	1..1	Team_Season

ID	**<->**	team_stat_id

3.9. Reference Coach_CoachStats

CoachStats	**1..1**	Coach
ID	**<->**	CoachStats_ID

4. Sequences

Sequence name	Starts with	Description
Team_seq	1	
Coach_seq	1	
Player_seq	1	
TeamStats_seq	1	
PlayerStats_seq	1	
CoachStats_seq	1	
Arena_seq	1	
Staff_seq	1	
Season_seq	1	
Team_Season_seq	1	