OLYMPICS MANAGEMENT SYSTEM

This sort of management system is essentially helpful to manage a number of sports of a particular event at a time. It will also cater to all the related activities quickly. We are basically storing all the data related to a sport.
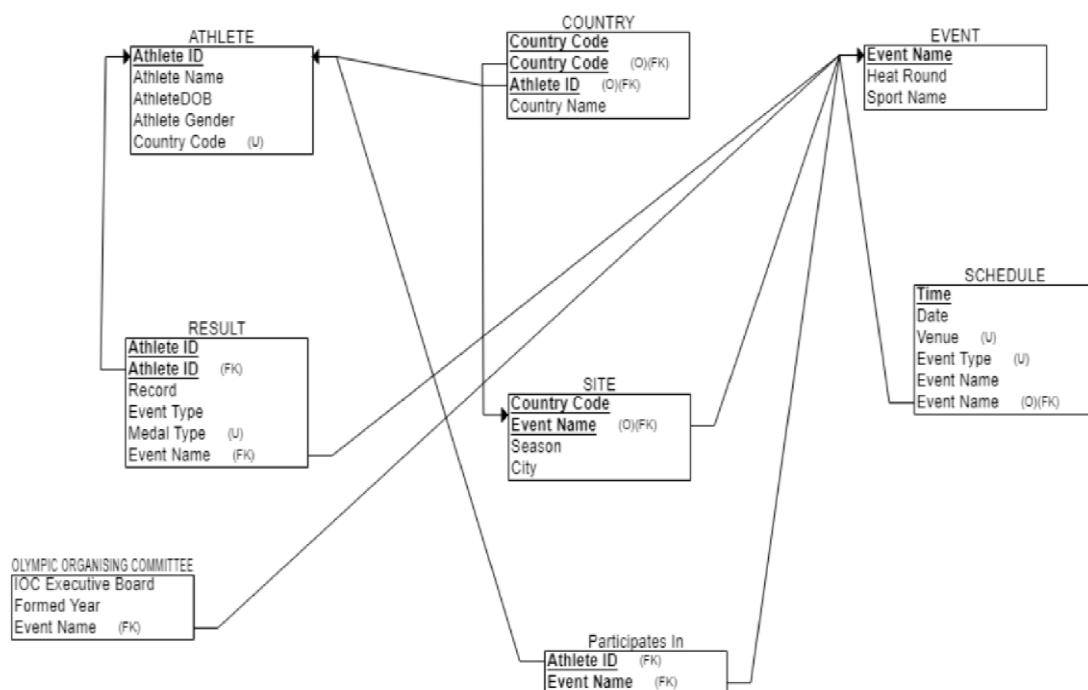
We are using a Relational Database Management System as our data model, and hence we're implementing PostgreSQL here.

The reason why we're using RDBMS is:

-it is very user-friendly

-in case we go wrong somewhere and cause an error, the backup and recovery facilities as very good

-We could easily avoid redundancy of data

-Manipulation is simple, and multiple users can access the model quickly and efficiently.

The implementation of PostgreSQL helped us access its diverse extended functions which can make use of later. Since it is an open-source DBMS, it is all the more suitable for our use. Apart from this it is very flexible and easy to use.

Relational table:

Our two .sql script files here are Create and Insert.

The Commands used in the Create sql file are:

drop database olympic;

create database olympic;

\c olympic

Creating tables :

create table country(c_name varchar(20), c_id varchar(3));

create table athlete(a_id varchar(5), a_name varchar(20), age int, DOB date not null, gender char(1), c_id varchar(3));

create table site(c_id varchar(3), city varchar(20), session int);

create table result(a_id varchar(5), type varchar(10), score varchar(10),e_name varchar(50), record varchar(10) default 0);

create table schedule(e_date date not null,e_time time not null, venue varchar(50), e_name varchar(50));

create table event(s_name varchar(50), e_name varchar(50));

create table ooc(ioc varchar(20),founded date not null);

Altering tables:

alter table country add constraint pk1 primary key(c_id);
alter table athlete add constraint pk2 primary key(a_id);
alter table event add constraint pk3 primary key(e_name);
alter table athlete add constraint fk1 foreign key(c_id) references country(c_id);
alter table site add constraint fk2 foreign key(c_id) references country(c_id);
alter table result add constraint fk3 foreign key(a_id) references athlete(a_id);

alter table schedule add constraint fk4 foreign key(e_name) references event(e_name);

alter table result add constraint fk5 foreign key(e_name) references event(e_name);

The Commands used in the Insert sql file are:

\c Olympic

Inserting into Olympic Organising Committee table:

insert into ooc values('International Olympic Comitte','1894-6-23');

Inserting into Country table:

insert into country values('India','IND');

insert into country values('Czech Republic','CZE');

insert into country values('China','CHN');

insert into country values('Indonasia','INA');

insert into country values('Russia','ROC');

insert into country values('United States','USA');

insert into country values('Turkey','TUR');

insert into country values('Taiwan','TPE');

insert into country values('Japan','JPN');

insert into country values('Azerbaijan','AZE');

Inserting into Event table:

insert into event values('Athletics','Mens Javelin Throw');

insert into event values('Weightlifting','Womens 49kg Weightlifting');

insert into event values('Wrestling','Mens Freestyle 57kg Wrestling');

insert into event values('Boxing','Womens Welter Weight(64-69) Boxing');

insert into event values('Badminton','Womens Singles Badminton');

insert into event values('Wrestling','Mens Freestyle 65kg Wrestling');

insert into event values('Swimming','Mens Freestyle 200 Swimming');

insert into event values('Swimming','Mens Freestyle 400 Swimming');

insert into event values('Swimming','Mens Freestyle 100 Swimming');

Inserting into Site table:

insert into site values('JPN','Tokyo',19);

insert into site values('JPN','Chiba',11);

Inserting into Schedule table:

insert into schedule values('2021-7-24','13:50','Tokyo International Forum','Womens 49kg Weightlifting');

insert into schedule values('2021-8-1','20:30','Musashino Forest Sport Plaza','Womens Singles Badminton');

insert into schedule values('2021-8-4','14:30','Kokugikan Arena','Womens Welter Weight(64-69) Boxing');

insert into schedule values('2021-8-5','19:30','Makuhari Messe','Mens Freestyle 65kg Wrestling');

insert into schedule values('2021-8-5','19:30','Makuhari Messe','Mens Freestyle 65kg Wrestling');

insert into schedule values('2021-8-7','20:00','Olympic Stadium-Long Throws','Mens Javelin Throw');

insert into schedule values('2021-8-10','20:00','Olympic Swimming Stadium','Mens Freestyle 200 Swimming');

insert into schedule values('2021-8-9','20:00','Olympic Swimming Stadium','Mens Freestyle 400 Swimming');

insert into schedule values('2021-8-5','20:00','Olympic Swimming Stadium','Mens Freestyle 100 Swimming');

Inserting into Athlete table:

insert into athlete values(1,'Neeraj Chopra',23,'1997-12-24','M','IND');

insert into athlete values(2,'Jakub Vadlejoh',31,'1990-10-10','M','CZE');

insert into athlete values(3,'Vitezslav Vesely',38,'1983-2-27','M','CZE');

insert into athlete values(4,'Hou Zhihui',24,'1997-3-18','F','CHN');

insert into athlete values(5,'Mirabai Chanu',27,'1994-8-8','F','IND');

insert into athlete values(6,'Aisah Windy',19,'2002-6-11','F','INA');

insert into athlete values(7,'Zavur Vguev',26,'1995-3-27','M','ROC');

insert into athlete values(8,'Ravi Kumar',23,'1997-12-12','M','IND');

insert into athlete values(9,'Thomas Gilman',27,'1994-5-28','M','USA');

insert into athlete values(10,'Busenaz Surmeneli',23,'1998-5-26','F','TUR');

insert into athlete values(11,'Gu Hong',32,'1988-11-6','F','CHN');

insert into athlete values(12,'Lovlina Borgohain',24,'1997-10-2','F','IND');

insert into athlete values(13,'Chen Yufei',23,'1998-3-1','F','CHN');

insert into athlete values(14,'Tai Tzu-ying',27,'1994-6-20','F','TPE');

insert into athlete values(15,'PV Sindhu',26,'1995-7-5','F','IND');

insert into athlete values(16,'Takuto Otaguro',22,'1998-12-13','M','JPN');

insert into athlete values(17,'Haji Aliyev',29,'1991-4-21','M','AZE');

insert into athlete values(18,'Bajrang Punia',27,'1994-2-26','M','IND');

insert into athlete values(19,'Smith',28,'1993-4-26','M','AZE');

Inserting into Result table:
insert into result values(1,'Gold',87.58,'Mens Javelin Throw',87.58);
insert into result values(2,'Silver',86.67,'Mens Javelin Throw',87.58);
insert into result values(3,'Bronze',85.44,'Mens Javelin Throw',87.58);
insert into result values(4,'Gold',180,'Womens 49kg Weightlifting',180);
insert into result values(5,'Silver',170,'Womens 49kg Weightlifting',180);
insert into result values(6,'Bronze',165,'Womens 49kg Weightlifting',180);
insert into result values(7,'Gold',210,'Mens Freestyle 57kg Wrestling',210);
insert into result values(8,'Silver',200,'Mens Freestyle 57kg Wrestling',210);
insert into result values(9,'Bronze',180,'Mens Freestyle 57kg Wrestling',210);
insert into result values(10,'Gold',10,'Womens Welter Weight(64-69) Boxing',10);
insert into result values(11,'Silver',9,'Womens Welter Weight(64-69) Boxing',10);
insert into result values(12,'Bronze',8,'Womens Welter Weight(64-69) Boxing',10);

insert into result values(13,'Gold',3,'Womens Singles Badminton');
insert into result values(14,'Silver',2,'Womens Singles Badminton');
insert into result values(15,'Bronze',1,'Womens Singles Badminton');
insert into result values(16,'Gold',15,'Mens Freestyle 65kg Wrestling',15);
insert into result values(17,'Silver',13,'Mens Freestyle 65kg Wrestling',15);
insert into result values(18,'Bronze',8,'Mens Freestyle 65kg Wrestling',15);
insert into result values(19,'Bronze',100,'Mens Freestyle 400 Swimming',90);
insert into result values(19,'Silver',50,'Mens Freestyle 200 Swimming',45);
insert into result values(19,'Gold',20,'Mens Freestyle 100 Swimming',20);

Team members:

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Sathvik K - PES1UG19CS435

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