**Project Report**

Olympic Database

# Database Systems Semester 2

# Purpose

This database contains information on Athletes, Coaches, Events and Medals at the Tokyo Olympic games.

Description

# Relational Schema

Olympics(olympicsID, year, city, season, isPara, *countryName*)

Country(countryName, playerCount, *olympicsID, rank*)

Athlete(athleteID, name, gender, medalCount, *coachID*)

Coach(coachID, name)

Event(eventID, gender, date, time, title)

Medal(medalID, value, *eventID*)

–MedalTable(rank, total, gold, silver, bronze, *countryName*)

# Relationships:

**hosts**

Country - (1 : N) – Olympics

Can Only be held in one country, with one exception(KOR/JP)

**features**

Olympics - (1 : N) – Event

An individual event takes place at one only Olympic game at a time

**part of**

Country - (1 : N) – Athlete

Country - (1 : N) – Coach

Athletes or coaches can only belong to one national team

**prize for**

Event - (1 : N) – Medal

multiple medals can be awarded at one event, medals can be awarded multiple times

**wins**

Athlete - (N : N) – Medal

one athlete can win multiple medals

**trains**

Coach - (1 : N) – Athlete

1 coach may train multiple athletes, athletes have 1 coach

**competes**

Athlete - (N : N) – Event

Multiple Athletes can compete at any number of events as long as they qualify.

# Data types

Olympics

(

olympicsID | CHAR(6) PRIMARY KEY

yearHeld | YEAR

city | VARCHAR(50)

season | CHAR(2) | ‘s for Summer ‘w’ for winter

isPara | BOOLEAN | notes: true for Paralympics and false for not

*countryID* | VARCHAR(60) FOREIGN KEY

)

Country

(

countryID | VARCHAR(60)

playerCount | INT

*ranking* | INT

*olympicsID* | CHAR(6) FOREIGN KEY

)

Athlete

(

athleteID | CHAR(6) PRIMARY KEY

name | VARCHAR(150) NOT NULL

gender | CHAR(2) NOT NULL | ‘m’ for Male ‘f’ for Female

birthDate DATE

medalCount | INT

*coachID* | CHAR(6) FOREIGN KEY

*countryID* | VARCHAR(60) FOREIGN KEY

)

Coach

(

coachID | CHAR(10) PRIMARY KEY

name VARCHAR(150) NOT NULL

)

Event

(

eventID | CHAR(10) PRIMARY KEY

date | DATE

eventDate| TIME

eventTime| CHAR(2) NOT NULL | ‘m’ for Male ‘f’ for Female

title | VARCHAR(150) NOT NULL

)

Medal

(

medalID | CHAR(10) PRIMARY KEY

denom | CHAR(2) NOT NULL | ‘g’ for Gold ‘s’ for Silver ‘b’ for Bronze

*eventID* | CHAR(10) FOREIGN KEY

*countryID* | VARCHAR(60) FOREIGN KEY

)

–MedalTable(rank, total, gold, silver, bronze, *countryName*)