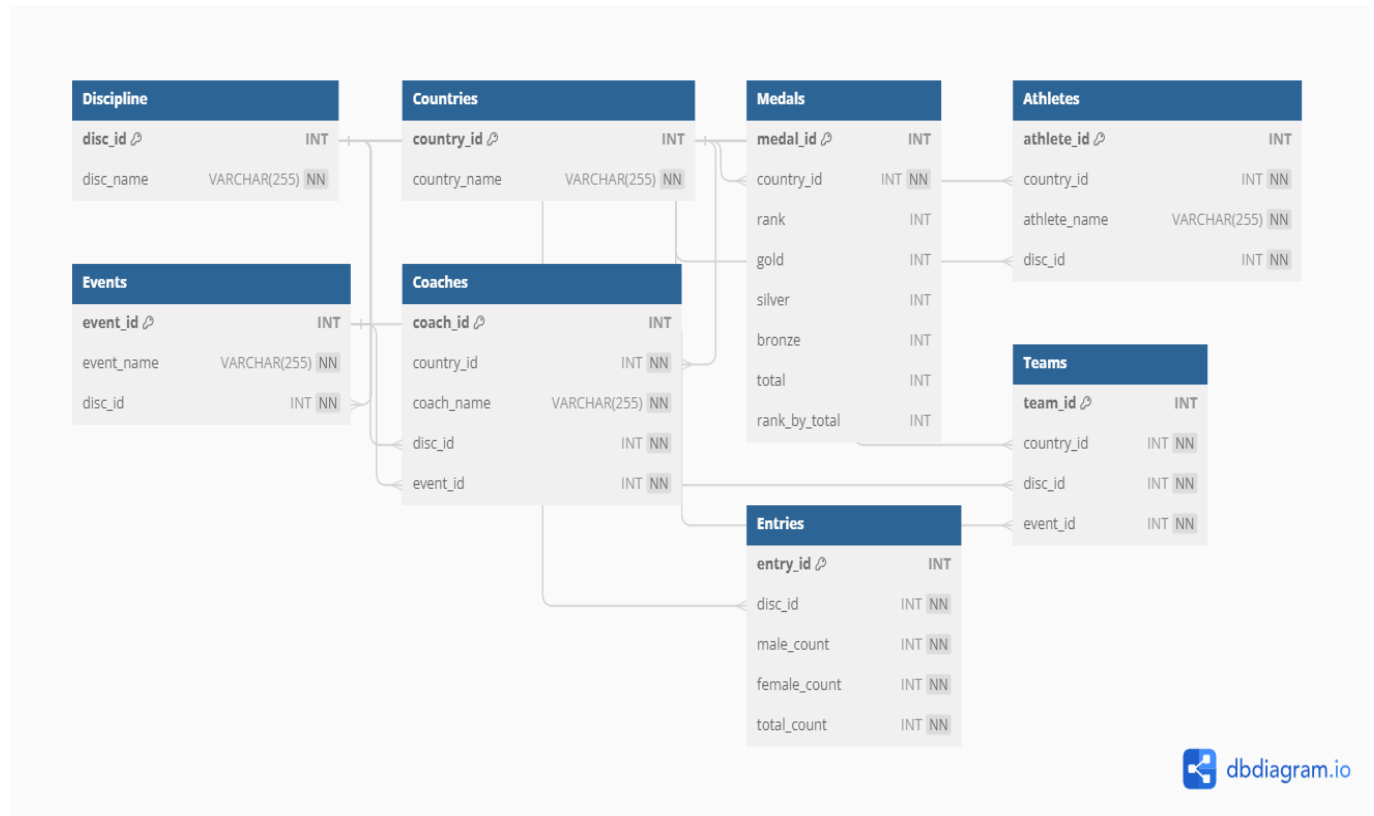


# Deliverable 2

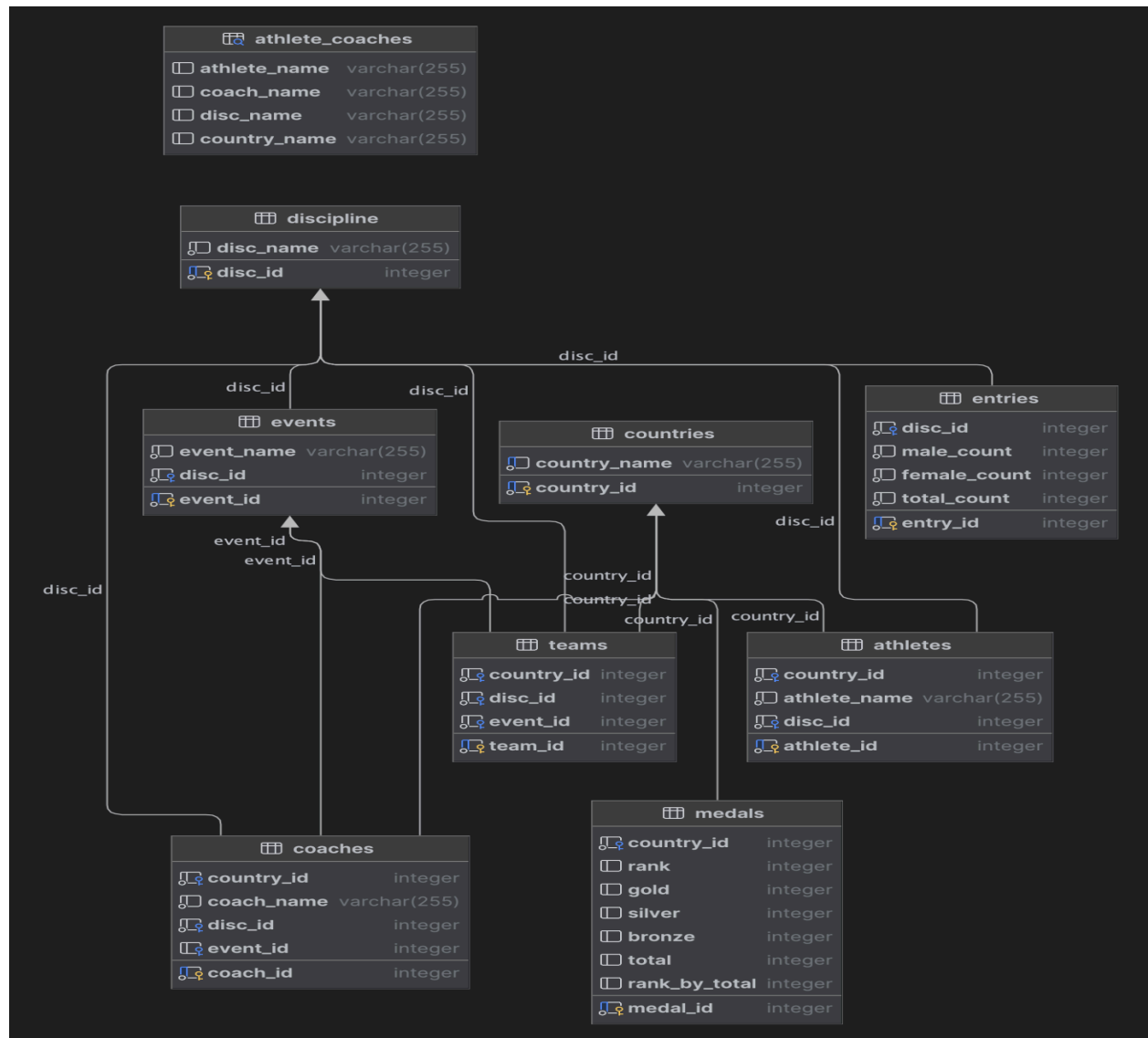
Team: Chethana Muppalam and Orobosa Ekhaton

Topic: Tokyo Olympics Database

## ER Diagram:



## Relational Schema:



## DDL Commands:

The attached consists of the schema and table creation queries for the 2021 tokyo olympics database.

```
1 DROP SCHEMA IF EXISTS tokyo_olympics CASCADE;
2
3 CREATE SCHEMA tokyo_olympics;
4
5 SET search_path TO tokyo_olympics;
6
7 CREATE TABLE Discipline (
8     disc_id INT generated by default as identity primary key,
9     disc_name VARCHAR(255) NOT NULL
10 );
11
12 CREATE TABLE Countries (
13     country_id INT generated by default as identity primary key,
14     country_name VARCHAR(255) NOT NULL ADD CONSTRAINT unique_country_name UNIQUE (country_name);
15 );
16
17 CREATE TABLE Medals (
18     medal_id INT generated by default as identity primary key,
19     country_id INT NOT NULL,
20     rank INT,
21     gold INT,
22     silver INT,
23     bronze INT,
24     total INT,
25     rank_by_total INT,
26     FOREIGN KEY (country_id) REFERENCES Countries(country_id)
27 );
```

```
29 CREATE TABLE Athletes (
30     athlete_id INT generated by default as identity primary key,
31     country_id INT NOT NULL,
32     athlete_name VARCHAR(255) NOT NULL,
33     disc_id INT NOT NULL,
34     FOREIGN KEY (country_id) REFERENCES Countries(country_id),
35     FOREIGN KEY (disc_id) REFERENCES Discipline(disc_id)
36 );
37
38 CREATE TABLE Events (
39     event_id INT generated by default as identity primary key,
40     event_name VARCHAR(255) NOT NULL,
41     disc_id INT NOT NULL,
42     FOREIGN KEY (disc_id) REFERENCES Discipline(disc_id)
43 );
44
45 CREATE TABLE Coaches (
46     coach_id INT generated by default as identity primary key,
47     country_id INT NOT NULL,
48     coach_name VARCHAR(255) NOT NULL,
49     disc_id INT NOT NULL,
50     event_id INT,
51     FOREIGN KEY (country_id) REFERENCES Countries(country_id),
52     FOREIGN KEY (disc_id) REFERENCES Discipline(disc_id),
53     FOREIGN KEY (event_id) REFERENCES Events(event_id)
54 );
```

```

55
56 CREATE TABLE Entries (
57     entry_id INT generated by default as identity primary key,
58     disc_id INT NOT NULL,
59     male_count INT NOT NULL,
60     female_count INT NOT NULL,
61     total_count INT NOT NULL,
62     FOREIGN KEY (disc_id) REFERENCES Discipline(disc_id)
63 );
64
65 CREATE TABLE Teams (
66     team_id INT generated by default as identity primary key,
67     country_id INT NOT NULL,
68     disc_id INT NOT NULL,
69     event_id INT NOT NULL,
70     FOREIGN KEY (country_id) REFERENCES Countries(country_id),
71     FOREIGN KEY (disc_id) REFERENCES Discipline(disc_id),
72     FOREIGN KEY (event_id) REFERENCES Events(event_id)
73 );
74
75 CREATE OR REPLACE VIEW Athlete_Coaches AS
76 SELECT
77     a.athlete_name,
78     COALESCE(c.coach_name, 'No Coach Assigned')::VARCHAR(255) AS coach_name,
79     d.disc_name,
80     cn.country_name

```

```

75 CREATE OR REPLACE VIEW Athlete_Coaches AS
76 SELECT
77     a.athlete_name,
78     COALESCE(c.coach_name, 'No Coach Assigned')::VARCHAR(255) AS coach_name,
79     d.disc_name,
80     cn.country_name
81 FROM
82     Athletes a
83 INNER JOIN
84     Discipline d ON a.disc_id = d.disc_id
85 INNER JOIN
86     Countries cn ON a.country_id = cn.country_id
87 LEFT JOIN
88     Coaches c ON a.country_id = c.country_id AND a.disc_id = c.disc_id;
89
90 ✓ Select * from Athlete_Coaches LIMIT 5;
91
92 ALTER TABLE Countries
93 ADD CONSTRAINT unique_country_name UNIQUE (country_name);

```

## **DML Commands:**

The attached document consists of the insert and select queries for the 2021 Tokyo Olympics database. The data is cleaned and loaded from CSV files into the tables using the COPY command.

```

1  --scp -r "dbms_olympics_project" chetha@linux.cs.pdx.edu:/u/chetha
2
3  --
4  \copy tokyo_olympics.countries(country_name)
5  FROM '/u/chetha/dbms_olympics_project/country.csv' DELIMITER ',' CSV HEADER;
6  \copy tokyo_olympics.discipline(disc_name)
7  FROM '/u/chetha/dbms_olympics_project/discipline.csv' DELIMITER ',' CSV HEADER;
8
9  select * from tokyo_olympics.countries LIMIT 5;
10
11 select * from tokyo_olympics.discipline LIMIT 5;
12
13 --Medals Table
14 CREATE TEMPORARY TABLE TempMedals (
15     rank INT,
16     gold INT,
17     silver INT,
18     bronze INT,
19     total INT,
20     rank_by_total INT,
21     country_name VARCHAR(255) NOT NULL
22 );

```

```

23 INSERT INTO tokyo_olympics.countries (c_id, c_country_name) VALUES (1, 'USA');
24
25 DROP TABLE TempMedals;
26
27 select * from tokyo_olympics.Medals LIMIT 5;
28
29 --Athletes Table
30
31 CREATE TEMPORARY TABLE TempAthletes (
32     athlete_name VARCHAR(255) NOT NULL,
33     country_name VARCHAR(255) NOT NULL,
34     discipline_name VARCHAR(255) NOT NULL
35 );
36
37 \copy TempAthletes (athlete_name, country_name, discipline_name)
38 FROM '/u/chetha/dbms_olympics_project/athletes.csv'
39 DELIMITER ',' CSV HEADER;
40
41 INSERT INTO tokyo_olympics.Athletes (athlete_name, country_id, disc_id)
42 SELECT t.athlete_name, c.country_id, d.disc_id
43 FROM TempAthletes t
44 INNER JOIN tokyo_olympics.Countries c ON t.country_name = c.country_name
45 INNER JOIN tokyo_olympics.Discipline d ON t.discipline_name = d.disc_name;
46
47 DROP TABLE TempAthletes;
48
49 select * from tokyo_olympics.Athletes LIMIT 5;
50
51

```

```

58 -- Events table
59
60 CREATE TEMPORARY TABLE TempEvents (
61     event_name VARCHAR(255) NOT NULL,
62     discipline_name VARCHAR(255) NOT NULL
63 );
64
65 \copy TempEvents (event_name, discipline_name)
66 FROM '/u/chetha/dbms_olympics_project/event.csv'
67 DELIMITER ',' CSV HEADER;
68
69 INSERT INTO tokyo_olympics.Events (event_name, disc_id)
70 SELECT te.event_name, d.disc_id
71 FROM TempEvents te
72 INNER JOIN tokyo_olympics.Discipline d ON te.discipline_name = d.disc_name;
73
74 -- Optional: Drop temporary table after use
75 DROP TABLE TempEvents;
76
77 select * from tokyo_olympics.Events LIMIT 5;
78
79 ---Coach Table
80
81 CREATE TEMPORARY TABLE TempCoaches (
82     coach_name VARCHAR(255) NOT NULL,
83     country_name VARCHAR(255) NOT NULL,
84     discipline_name VARCHAR(255),
85     event_name VARCHAR(255)
86 );

```

```

88
89 \copy TempCoaches (coach_name, country_name, discipline_name, event_name)
90 FROM '/u/chetha/dbms_olympics_project/coaches.csv'
91 DELIMITER ',' CSV HEADER;
92
93 INSERT INTO tokyo_olympics.Coaches (coach_name, country_id, disc_id, event_id)
94 SELECT tc.coach_name, c.country_id, d.disc_id, e.event_id
95 FROM TempCoaches tc
96 INNER JOIN tokyo_olympics.Countries c ON tc.country_name = c.country_name
97 LEFT JOIN tokyo_olympics.Discipline d ON tc.discipline_name = d.disc_name -- Optional: handle missing discipline
98 LEFT JOIN tokyo_olympics.Events e ON tc.event_name = e.event_name; -- Optional: handle missing event
99
100 -- Optional: Drop temporary table after use
101 DROP TABLE TempCoaches;
102
103 select * from tokyo_olympics.Coaches LIMIT 5;
104
105
106 ---Entries Table
107
108 CREATE TEMPORARY TABLE TempEntries (
109     discipline_name VARCHAR(255) NOT NULL,
110     female INT,
111     male INT,
112     total INT
113 );
114

```

```

115 \copy TempEntries (discipline_name, female, male, total)
116 FROM '/u/chetha/dbms_olympics_project/entries.csv'
117 DELIMITER ',' CSV HEADER;
118
119 INSERT INTO tokyo_olympics.Entries (disc_id, female_count, male_count, total_count)
120 SELECT d.disc_id, te.female, te.male, te.total
121 FROM TempEntries te
122 INNER JOIN tokyo_olympics.Discipline d ON te.discipline_name = d.disc_name;
123
124 -- Optional: Drop temporary table after use
125 DROP TABLE TempEntries;
126
127 select * from tokyo_olympics.Entries LIMIT 5;
128
129 ----Teams Table
130
131 CREATE TEMPORARY TABLE TempTeams (
132     country_name VARCHAR(255) NOT NULL,
133     discipline_name VARCHAR(255) NOT NULL,
134     event_name VARCHAR(255) NOT NULL
135 );
136
137 \copy TempTeams (country_name, discipline_name, event_name)
138 FROM '/u/chetha/dbms_olympics_project/teams.csv'
139 DELIMITER ',' CSV HEADER;
140
141 INSERT INTO tokyo_olympics.Teams (country_id, disc_id, event_id)

```

```

137 \copy TempTeams (country_name, discipline_name, event_name)
138 FROM '/u/chetha/dbms_olympics_project/teams.csv'
139 DELIMITER ',' CSV HEADER;
140
141 INSERT INTO tokyo_olympics.Teams (country_id, disc_id, event_id)
142 SELECT c.country_id, d.disc_id, e.event_id
143 FROM TempTeams tt
144 INNER JOIN tokyo_olympics.Countries c ON tt.country_name = c.country_name
145 INNER JOIN tokyo_olympics.Discipline d ON tt.discipline_name = d.disc_name
146 INNER JOIN tokyo_olympics.Events e ON tt.event_name = e.event_name;
147
148 -- Optional: Drop temporary table after use
149 DROP TABLE TempTeams;
150
151
152 ✓ select * from tokyo_olympics.Teams LIMIT 5;

```

## DISCIPLINE TABLE:

10  
11 ✓ `select count(*) from tokyo_olympics.discipline;`

Output win2024adb0046.tokyo\_olympics.teams count(\*):bigint

1 row

	count
1	46

9 ✓ `select * from tokyo_olympics.discipline LIMIT 5;`

10  
11 --Medals Table

Output win2024adb0046.tokyo\_olympics.discipline

5 rows

	disc_id	disc_name
1	1	3x3 Basketball
2	2	Archery
3	3	Artistic Gymnastics
4	4	Artistic Swimming
5	5	Athletics



ATHLETES TABLE:

58 ✓

select count(\*) from tokyo\_olympics.Athletes;

59

select \* from tokyo\_olympics.Athletes LIMIT 5;

60

Output

win2024adb0046.tokyo\_olympics.teams

count(\*)

1 row

count

20436

55 ✓

select \* from tokyo\_olympics.Athletes LIMIT 5;

56

57

-- Events table

58

Output

win2024adb0046.tokyo\_olympics.athletes

5 rows

	athlete_id	country_id	athlete_name	disc_id
1	1	64	AALERUD Katrine	16
2	2	81	ABAD Nestor	3
3	3	44	ABAGNALE Giovanni	30
4	4	81	ABALDE Alberto	8
5	5	81	ABALDE Tamara	8

MEDALS TABLE:

33

34

✓

```
select count(*) from tokyo_olympics.Medals;
```

35

```
select * from tokyo_olympics.Medals LIMIT 5;
```

Output

win2024adb0046.tokyo\_olympics.teams

count(\*)

1 row

count

186

32

33

✓

```
select * from tokyo_olympics.Medals LIMIT 5;
```

34

35

```
---Athlets Table
```

36

Output

win2024adb0046.tokyo\_olympics.medals

5 rows

Tx: Auto

DDL

CSV

	medal_id	country_id	rank	gold	silver	bronze	total	rank_by_total
1	1	91	1	39	41	33	113	1
2	2	65	2	38	32	18	88	2
3	3	46	3	27	14	17	58	5
4	4	34	4	22	21	22	65	4
5	5	73	5	20	28	23	71	3

## EVENTS TABLE:

79

80 ✓ `select count(*) from tokyo_olympics.Events;`

Output win2024adb0046.tokyo\_olympics.teams count(\*)

1 row

count
743

76 ✓ `select * from tokyo_olympics.Events LIMIT 5;`

77

78 ---Coach Table

Output win2024adb0046.tokyo\_olympics.events

5 rows

event_id	event_name	disc_id
1	Women	1
2	Men	1
3	Women	1
4	Women	1
5	Men	1

ENTRIES TABLE:

132

```
select count(*) from tokyo_olympics.Entries;
```

Output

win2024adb0046.tokyo\_olympics.teams

count(\*)

1 row

count

46

126 ✓

```
select * from tokyo_olympics.Entries LIMIT 5;
```

127

128

----Teams Table

129

130

```
CREATE TEMPORARY TABLE TempTeams (
```

Output

win2024adb0046.tokyo\_olympics.entries

5 rows

entry\_id

disc\_id

male\_count

female\_count

total\_count

1

1

1

32

32

64

2

2

2

64

64

128

3

3

3

98

98

196

4

4

4

0

105

105

5

5

5

1072

969

2041

TEAMS TABLE:

159

✓

`select count(*) from tokyo_olympics.Teams;`

Output

win2024adb0046.tokyo\_olympics.teams

count(\*)

1 row

count

26675

151

✓

`select * from tokyo_olympics.Teams LIMIT 5;`

Output

win2024adb0046.tokyo\_olympics.teams

×

5 rows

team\_id

country\_id

disc\_id

event\_id

1

1

3

4

1

2

2

15

44

1

3

3

38

44

1

4

4

46

44

1

5

5

60

44

1

COACHES TABLE:

107 ✓

select count(\*) from tokyo\_olympics.Coaches;

Output

win2024adb0046.tokyo\_olympics.teams

count(\*):t

1 row

count

21622

102 ✓

select \* from tokyo\_olympics.Coaches LIMIT 5;

103

104

105 ---Entries Table

106

Output

win2024adb0046.tokyo\_olympics.coaches

5 rows

coach\_id

country\_id

coach\_name

disc\_id

event\_id

1	1	3	MIHAILOVIC Predrag	44	1
2	2	15	PARADELO David	44	1
3	3	38	BIRO Attila	44	1
4	4	46	MOTOMIYA Makihiro	44	1
5	5	60	HAVENGA Arno	44	1

## COUNTRIES TABLE:

The screenshot shows a SQL IDE interface. The top panel displays a query: `select count(*) from tokyo_olympics.countries;`. The bottom panel shows the output of the query, which is a single row with the value 93. The output is displayed in a table with one column labeled 'count' and one row containing the value 93.

count
93

The screenshot shows a SQL IDE interface. The top panel displays a query: `select * from tokyo_olympics.countries LIMIT 5;`. The bottom panel shows the output of the query, which is a table with two columns: 'country\_id' and 'country\_name'. The output is displayed in a table with 5 rows, showing the first 5 countries: Argentina, Armenia, Australia, Austria, and Azerbaijan.

country_id	country_name
1	Argentina
2	Armenia
3	Australia
4	Austria
5	Azerbaijan

Athlete Coach View:

90 ✓

Select count(\*) from Athlete\_Coaches;

91

Output

count(\*) : bigint

1 row

count

1

970972

101 ✓

Select \* from Athlete\_Coaches LIMIT 5;

102

Output

win2024adb0046.tokyo...mpics.athlete\_coaches

5 rows

athlete\_name

coach\_name

disc\_name

country\_name

1

AALERUD Katrine

No Coach Assigned

Cycling Road

Norway

2

ABAD Nestor

No Coach Assigned

Artistic Gymnastics

Spain

3

ABAGNALE Giovanni

No Coach Assigned

Rowing

Italy

4

ABALDE Alberto

MONDELO GARCIA Lucas

Basketball

Spain

5

ABALDE Alberto

SCARIOLO Sergio

Basketball

Spain