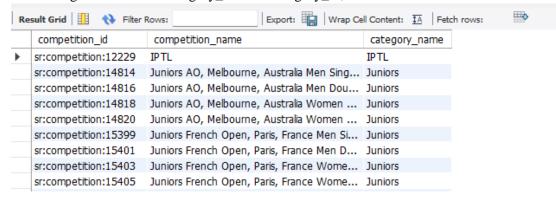# Game Analytics: Unlocking Tennis Data with SportRadar API

1. Competitions Analysis:

- List all competitions with category names.

  SELECT c.competition_id, c.competition_name, cat.category_name
  FROM competitions c
  JOIN categories cat ON c.category_id = cat.category_id;

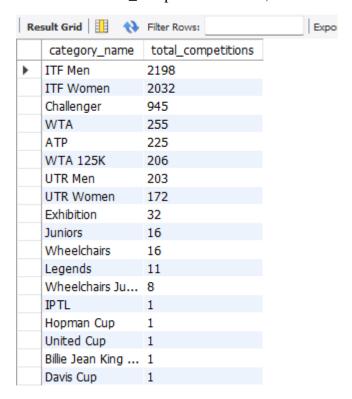|	competition_id	competition_name	category_name
▶	sr:competition:12229	IPTL	IPTL
	sr:competition:14814	Juniors AO, Melbourne, Australia Men Sing...	Juniors
	sr:competition:14816	Juniors AO, Melbourne, Australia Men Dou...	Juniors
	sr:competition:14818	Juniors AO, Melbourne, Australia Women ...	Juniors
	sr:competition:14820	Juniors AO, Melbourne, Australia Women ...	Juniors
	sr:competition:15399	Juniors French Open, Paris, France Men Si...	Juniors
	sr:competition:15401	Juniors French Open, Paris, France Men D...	Juniors
	sr:competition:15403	Juniors French Open, Paris, France Wome...	Juniors
	sr:competition:15405	Juniors French Open, Paris, France Wome...	Juniors

- Count the number of competitions in each category.

  SELECT cat.category_name, COUNT(c.competition_id) AS total_competitions
  FROM competitions c
  JOIN categories cat ON c.category_id = cat.category_id
  GROUP BY cat.category_name
  ORDER BY total_competitions DESC;

	category_name	total_competitions
▶	ITF Men	2198
	ITF Women	2032
	Challenger	945
	WTA	255
	ATP	225
	WTA 125K	206
	UTR Men	203
	UTR Women	172
	Exhibition	32
	Juniors	16
	Wheelchairs	16
	Legends	11
	Wheelchairs Ju...	8
	IPTL	1
	Hopman Cup	1
	United Cup	1
	Billie Jean King ...	1
	Davis Cup	1

- Find competitions of type 'doubles'.

  SELECT competition_id, competition_name, type
  FROM competitions

WHERE type = 'doubles';

	competition_id	competition_name	type
▶	sr:competition:10027	ITF Men Stara Zagora, Bulgaria Men Doubles	doubles
	sr:competition:10033	ITF Men Sibiu, Romania Men Doubles	doubles
	sr:competition:10039	ITF Men Busto Arsizio, Italy Men Doubles	doubles
	sr:competition:10045	ITF Men Sabac, Serbia Men Doubles	doubles
	sr:competition:10057	ITF Men Seefeld, Austria Men Doubles	doubles
	sr:competition:10075	ATP Challenger Portoroz, Slovenia Men D...	doubles

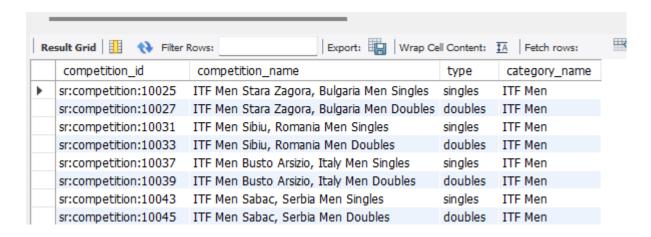- Get competitions in a specific category (e.g., ITF Men).

  SELECT c.competition_id, c.competition_name, c.type, cat.category_name
  FROM competitions c
  JOIN categories cat ON c.category_id = cat.category_id
  WHERE cat.category_name = 'ITF Men';

	competition_id	competition_name	type	category_name
▶	sr:competition:10025	ITF Men Stara Zagora, Bulgaria Men Singles	singles	ITF Men
	sr:competition:10027	ITF Men Stara Zagora, Bulgaria Men Doubles	doubles	ITF Men
	sr:competition:10031	ITF Men Sibiu, Romania Men Singles	singles	ITF Men
	sr:competition:10033	ITF Men Sibiu, Romania Men Doubles	doubles	ITF Men
	sr:competition:10037	ITF Men Busto Arsizio, Italy Men Singles	singles	ITF Men
	sr:competition:10039	ITF Men Busto Arsizio, Italy Men Doubles	doubles	ITF Men
	sr:competition:10043	ITF Men Sabac, Serbia Men Singles	singles	ITF Men
	sr:competition:10045	ITF Men Sabac, Serbia Men Doubles	doubles	ITF Men

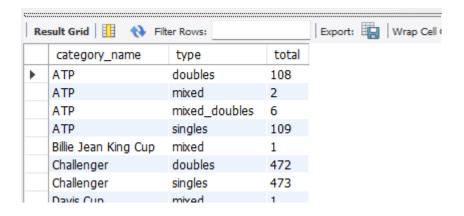- Identify parent competitions and their sub-competitions.

  SELECT p.competition_name AS parent_competition, c.competition_name AS sub_competition
  FROM competitions c
  JOIN competitions p ON c.category_id = p.category_id
  WHERE c.competition_id <> p.competition_id;

	parent_competition	sub_competition
▶	ITF Men Stara Zagora, Bulgaria Men Doubles	ITF Men Stara Zagora, Bulgaria Men Singles
	ITF Men Sibiu, Romania Men Singles	ITF Men Stara Zagora, Bulgaria Men Singles
	ITF Men Sibiu, Romania Men Doubles	ITF I ITF Men Stara Zagora, Bulgaria Men Single
	ITF Men Busto Arsizio, Italy Men Singles	ITF Men Stara Zagora, Bulgaria Men Singles
	ITF Men Busto Arsizio, Italy Men Doubles	ITF Men Stara Zagora, Bulgaria Men Singles
	ITF Men Sabac, Serbia Men Singles	ITF Men Stara Zagora, Bulgaria Men Singles
	ITF Men Sabac, Serbia Men Doubles	ITF Men Stara Zagora, Bulgaria Men Singles
	ITF Men Seefeld, Austria Men Singles	ITF Men Stara Zagora, Bulgaria Men Singles

- Analyze the distribution of competition types by category.

```
SELECT cat.category_name, c.type, COUNT(c.competition_id) AS total
FROM competitions c
JOIN categories cat ON c.category_id = cat.category_id
GROUP BY cat.category_name, c.type
ORDER BY cat.category_name;
```

category_name	type	total
ATP	doubles	108
ATP	mixed	2
ATP	mixed_doubles	6
ATP	singles	109
Billie Jean King Cup	mixed	1
Challenger	doubles	472
Challenger	singles	473
Davis Cup	mixed	1

- List all top-level competitions (no parent).

```
SELECT competition_id, competition_name, type
FROM competitions
WHERE category_id IS NOT NULL;
```

competition_id	competition_name	type
sr:competition:12229	IPTL	singles
sr:competition:14814	Juniors AO, Melbourne, Australia Men Sing...	singles
sr:competition:14816	Juniors AO, Melbourne, Australia Men Dou...	doubles
sr:competition:14818	Juniors AO, Melbourne, Australia Women ...	singles
sr:competition:14820	Juniors AO, Melbourne, Australia Women ...	doubles
sr:competition:15399	Juniors French Open, Paris, France Men Si...	singles
sr:competition:15401	Juniors French Open, Paris, France Men D...	doubles

2. Venue Analysis

- List all venues along with their associated complex names.

```
SELECT v.venue_id, v.venue_name, c.complex_name
FROM venues v
JOIN complexes c ON v.complex_id = c.complex_id;
```

venue_id	venue_name	complex_name
sr:venue:1008	Estadio Monumental	Club Tennis Las Terrazas de Miraflores
sr:venue:10390	Stadium	Shenzhen International Tennis Center
sr:venue:10394	Court 2	Shenzhen Longgang Sports Center
sr:venue:10472	Court 7	Olympic Park Tennis Center
sr:venue:10536	Court 20	Melbourne Park
sr:venue:10538	Court 22	Melbourne Park
sr:venue:10582	Estadio Ivan Elias Moreno	Club Tennis Las Terrazas de Miraflores
sr:venue:10644	Stade Numa-Daly Magenta	Complexe Tennistique Marie-Louise Lhuillier
sr:venue:11168	Noevir Stadium	Miki Disaster Management Park
sr:venue:1119	Shanghai Stadium	Qi Zhong Tennis Center

- Count the number of venues in each complex.

```
SELECT c.complex_name, COUNT(v.venue_id) AS total_venues
FROM venues v
JOIN complexes c ON v.complex_id = c.complex_id
GROUP BY c.complex_name
ORDER BY total_venues DESC;
```
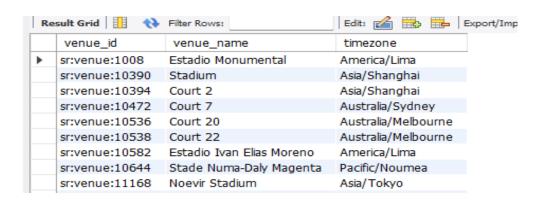
complex_name	total_venues
National Tennis Center	62
Buenos Aires Lawn Tennis Club	30
Melbourne Park	25
Hurd Tennis Center	24
Club Tennis Las Terrazas de Miraflores	22
Qi Zhong Tennis Center	22
Indian Wells Tennis Garden	21

- Get details of venues in a specific country.

```
SELECT venue_id, venue_name, city_name, country_name
FROM venues
WHERE country_name = 'France';
```

venue_id	venue_name	city_name	country_name
sr:venue:12245	Halle des Sports	Quimper	FRANCE
sr:venue:13366	Court 2	Montpellier	FRANCE
sr:venue:1339	Court Central	Metz	FRANCE
sr:venue:1340	Court 1	Metz	FRANCE
sr:venue:14040	Court Ideal Groupe	Metz ux	FRANCE
sr:venue:14042	Court 11	Bordeaux	FRANCE
sr:venue:14062	Court 12	Bordeaux	FRANCE

- Identify all venues with their timezones.

```
SELECT venue_id, venue_name, timezone
FROM venues
WHERE timezone IS NOT NULL;
```

venue_id	venue_name	timezone
sr:venue:1008	Estadio Monumental	America/Lima
sr:venue:10390	Stadium	Asia/Shanghai
sr:venue:10394	Court 2	Asia/Shanghai
sr:venue:10472	Court 7	Australia/Sydney
sr:venue:10536	Court 20	Australia/Melbourne
sr:venue:10538	Court 22	Australia/Melbourne
sr:venue:10582	Estadio Ivan Elias Moreno	America/Lima
sr:venue:10644	Stade Numa-Daly Magenta	Pacific/Noumea
sr:venue:11168	Noevir Stadium	Asia/Tokyo

- Find complexes with more than one venue.

```
SELECT c.complex_name, COUNT(v.venue_id) AS venue_count
FROM complexes c
JOIN venues v ON v.complex_id = c.complex_id
GROUP BY c.complex_name
HAVING COUNT(v.venue_id) > 1;
```

complex_name	venue_count
Kindarena	4
Estadio la Cartuja	2
Estadio German Becker	4
Palais des sports de Gerland	7
Sibur Arena	4
Palais Des Sport	7
Palasport	4
Salle Steredenn	6

- List venues grouped by country.

```
SELECT country_name, COUNT(venue_id) AS venue_count
FROM venues
GROUP BY country_name
ORDER BY venue_count DESC;
```

country_name	venue_count
UNITED STATES	579
ITALY	278
FRANCE	260
CHINA	234
SPAIN	209
GERMANY	161
MEXICO	128
AUSTRALIA	118

- Find all venues for a specific complex.

```
SELECT v.venue_id, v.venue_name, v.city_name, v.country_name
FROM venues v
JOIN complexes c ON v.complex_id = c.complex_id
WHERE c.complex_name = 'Melbourne Park';
```

3. Competitor Ranking Analysis

- Get all competitors with their rank and points.

  SELECT comp.name AS competitor_name, cr.rank_position, cr.points
  FROM competitor_rankings cr
  JOIN competitors comp ON cr.competitor_id = comp.competitor_id
  ORDER BY cr.rank_position ASC;

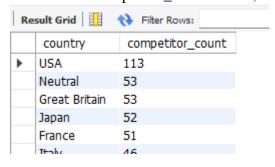| competitor_name	rank_position	points
Glasspool, Lloyd	1	8300
Siniakova, Katerina	1	8375
Cash, Julian	2	7735
Townsend, Taylor	2	7895
Pavic, Mate	3	7370
Arevalo-Gonzalez, Marcelo	3	7370

- Find competitors ranked in the top 5.

  SELECT comp.name, cr.rank_position, cr.points
  FROM competitor_rankings cr
  JOIN competitors comp ON cr.competitor_id = comp.competitor_id
  WHERE cr.rank_position <= 5
  ORDER BY cr.rank_position;

name	rank_position	points
Glasspool, Lloyd	1	8300
Siniakova, Katerina	1	8375
Cash, Julian	2	7735
Townsend, Taylor	2	7895
Pavic, Mate	3	7370
Arevalo-Gonzalez, Marcelo	3	7370
Errani, Sara	3	7115
Paolini, Jasmine	3	7115
Zeballos, Horacio	5	6915
Routliffe, Erin	5	6250

- List competitors with no rank movement (stable rank).

  SELECT comp.name, cr.rank_position, cr.movement
  FROM competitor_rankings cr
  JOIN competitors comp ON cr.competitor_id = comp.competitor_id
  WHERE cr.movement = 0;

name	rank_position	movement
Glasspool, Lloyd	1	0
Skupski, Neal	9	0
Krawietz, Kevin	10	0
Salisbury, Joe	12	0
Mektic, Nikola	13	0
Bolelli, Simone	14	0
Vavassori, Andrea	15	0
Harrison, Christian	16	0

- Get the total points of competitors from a specific country.

  SELECT comp.country, SUM(cr.points) AS total_points
  FROM competitor_rankings cr
  JOIN competitors comp ON cr.competitor_id = comp.competitor_id
  WHERE comp.country = 'France';

country	total_points
France	30503

- Count competitors per country.

  SELECT comp.country, COUNT(comp.competitor_id) AS competitor_count
  FROM competitors comp
  GROUP BY comp.country
  ORDER BY competitor_count DESC;

country	competitor_count
USA	113
Neutral	53
Great Britain	53
Japan	52
France	51
Italy	46

- Find competitors with the highest points in the current week.

  SELECT comp.name, comp.country, cr.points
  FROM competitor_rankings cr
  JOIN competitors comp ON cr.competitor_id = comp.competitor_id
  ORDER BY cr.points DESC
  LIMIT 10;

name	country	points
Siniakova, Katerina	Czechia	8375
Glasspool, Lloyd	Great Britain	8300
Townsend, Taylor	USA	7895
Cash, Julian	Great Britain	7735
Pavic, Mate	Croatia	7370
Arevalo-Gonzalez, Marcelo	El Salvador	7370
Errani, Sara	Italy	7115
Paolini, Jasmine	Italy	7115
Zeballos, Horacio	Argentina	6915
Granollers, Marcel	Spain	6825