country
- 🔑 code CHAR(2)
- 🔷 name VARCHAR(100)
- 🔷 flag_url TEXT
- Indexes ▶

user
- 🔑 id BIGINT(20)
- 🔷 username VARCHAR(255)
- 🔷 password VARCHAR(255)
- 🔷 role ENUM(...)
- Indexes ▶

fighter
- 🔑 id BIGINT(20)
- 🔷 name VARCHAR(255)
- 🔷 ufc_record VARCHAR(20)
- 🔷 mma_record VARCHAR(20)
- 🔷 elo_rating DOUBLE
- 🔷 is_active TINYINT(1)
- 🔶 country_code CHAR(2)
- 🔷 min_weight_class INT(11)
- 🔷 max_weight_class INT(11)
- Indexes ▶

rating_entry
- 🔑 id BIGINT(20)
- 🔷 ranking DOUBLE
- 🔶 fight_id BIGINT(20)
- 🔴 fighter_id BIGINT(20)
- 🔶 weight_class_id INT(11)
- Indexes ▶

fight
- 🔑 id BIGINT(20)
- 🔷 date DATE
- 🔷 result VARCHAR(255)
- 🔷 unique_description VARCHAR(255)
- 🔶 tournament_id BIGINT(20)
- 🔷 fighter1_id BIGINT(20)
- 🔷 fighter2_id BIGINT(20)
- 🔶 winner_id BIGINT(20)
- 🔶 weight_class_id INT(11)
- Indexes ▶

weight_class
- 🔑 id INT(11)
- 🔷 number INT(11)
- 🔷 name VARCHAR(50)
- Indexes ▶

tournament
- 🔑 id BIGINT(20)
- 🔷 name VARCHAR(255)
- 🔷 location VARCHAR(255)
- 🔷 date DATE
- Indexes ▶

Entities in the DB:

fighter	information about fighters
fight	specific fights between two fighters
tournament	UFC tournaments
rating_entry	fighter ratings (by ELO)
weight_class	weight categories
country	fighter countries (with flags)
user	system users (guest, manager, admin)

Key (strong) entities:

fighter

tournament

weight_class

country

user

Weak (weak) entities: There are no weak entities in the current schema, and they are not required (there are no entities that exist only if there is a foreign key without their own PK).

Associative (many-to-many or connecting) entities:

fight	links two fighters, also contains winner and weight class
rating_entry	links fighter to fight and weight_class, adding ELO score

Relationships, cardinality

tournament — fight	1:N	one tournament → many fights
fight — fighter1, fighter2	M:1 (twice)	each fight → 2 fighters
fight — winner	1:1	each fight → one winner
fighter — rating_entry	1:N	for fighter → many ratings
weight_class — rating_entry	1:N	for weight class → many ratings
country — fighter	1:N	for country → many fighters

Ordinality:

rating_entry.fighter_id → fighter.id   Rating does not exist without fighter

fight.fighter1_id, fighter2_id   Two fighters needed

fight.tournament_id → tournament.id   Each fight is part of a tournament

fight.weight_class_id → weight_class.id   Weight is required for the fight