

Relation	Constraint
Player ( <u>P_ID</u> int, A_ID int, Username varchar(50) , Email varchar(100), Pass varchar(255), User_Banned Boolean, Sign_In_Date date)	p_id: auto_increment primary key a_id: not null username: not null email: not null unique pass: not null user_banned: not null a_id: references Authorities
Authorities ( <u>a_id</u> int, question_management boolean, user_ban boolean)	a_id: auto_increment primary key question_management: not null users_ban: not null
Category ( <u>c_id</u> int, title varchar(50))	c_id: auto_increment primary key title: not null unique
Question ( <u>Q_ID</u> int, C_ID int, Question_Text text, Option_A varchar(100), Option_B varchar(100), Option_C varchar(100), Option_D varchar(100), Correct_Option char, Creator_ID int, Difficulty varchar(10), Approval_State Boolean)	q_id: auto_increment primary key c_id: not null references Category question_text: not null option_a: not null option_b: not null option_c: not null option_d: not null correct_option: not null - in ('A', 'B', 'C', 'D') creator_id: not null difficulty: not null - in ('Easy', 'Medium', 'Hard') approval_state: not null references player
Round ( <u>r_id</u> int, round_num int, p1_answer char, p2_answer char, start_time timestamp, end_time timestamp)	r_id: auto_increment primary key round_num: not null start_time: not null p1_answer in ('A', 'B', 'C', 'D') p2_answer in ('A', 'B', 'C', 'D') round_num > 0 and < 4
matches ( <u>m_id</u> int, p1_id int, p2_id int, winner_id int, start_time timestamp, end_time timestamp, match_active boolean)	m_id: auto_increment primary key p1_id: not null references player p2_id: references player start_time: not null match_active: not null winner_id: references player

R_Q_M ( <u>q_id</u> int, <u>r_id</u> int, <u>m_id</u> int)	Primary key (q_id, r_id, m_id) q_id references Question r_id references Round m_id references Matches
Statistics ( <u>s_id</u> int, p_id int, total_matches_count int, won_matches_count int, accuracy float, xp int)	s_id: auto_increment primary key p_id: unique not null references Player on delete cascade total_matches_count: not null won_matches_count: not null accuracy: not null xp: not null