			rag_search_history	voice_interactions
			search_id $𝒪$ integer  — ■ user_id $𝑉$ integer —	interaction_id ∂ integer  — user_id ∂ integer
			query_text text NN	session_id <i>𝑉</i> varchar(255)
	users		search_results jsonb	voice_command text
	user_id ₽ integer -C-		response_text text	audio_file_url varchar(500)
che_store cache_statistics  stat_id ∂ in	username varchar(255) NN		confidence_score decimal(3,2)    Im_model	language_detected varchar(10)  confidence_score decimal(3,2)
che_key Ø     varchar(255)       stat_uw Ø     in       che_value     jsonb NN       cache_type     varchar(58)	email varchar(255) NN		source_documents jsonb	response_text text
	password_hash varchar(255) NN nteger registration_date timestamp		execution_time_ms integer	response_audio_url varchar(500)
	nteger last_login timestamp		created_at timestamp	intent_detected varchar(100)
ateu_at timestamp	nteger points integer			entities_extracted jsonb
t_accessed timestamp avg_response_time_ms decimal(	(10,2)   level integer		voice_ai_sessions	processing_time_ms integer  Ilm_model_used varchar(180)
ess_count integer	experience_points integer		session_id Ø varchar(255) −○	tokens_used integer
	streak integer badges jsonb		user_id <b>∂</b> integer  start_time timestamp	timestamp timestamp
	profile_picture varchar(255)		end_time timestamp	created_at timestamp
	voice_enabled boolean		total_interactions integer	
	preferred_voice varchar(50)	challenges	session_context jsonb	
	created_at timestamp  updated_at timestamp	challenge_id	created_at timestamp	
	apared_dt cameremp	title varchar(255) NN  description text NN		
		problem_statement text NN	leaderboard	
		solution_template text	leaderboard_id	
		difficulty varchar(50) NN	rank integer	
		category varchar(100) NN  points_reward integer NN	total_points integer	
		input_example text	weekly_points integer	
		expected_output text	monthly_points integer  all_time_points integer	
		hints text	last_updated timestamp	
		tags text	created_at timestamp	
		created_at timestamp  updated_at timestamp		
			user_progress	
		badges	$progress_id$ $𝒪$ integer	
		badge_id ₽ integer →	→ user_id ∂ integer NN	
		name varchar(255) NN	level integer  experience_points integer	
		description text	points_to_next_level integer	
		icon_url varchar(255) criteria text	total_lessons_completed integer	
		points_reward integer	total_challenges_completed integer  longest_streak integer	lessons lesson_id   integer
		badge_type varchar(50)	current_streak integer	$\ll$ course_id $m{artheta}$ integer $NN$
		created_at timestamp	last_activity_date date	title varchar(255) NN
			created_at timestamp	content text
		programming concepts  concept_id   integer   integer	updated_at timestamp	order integer NN resources jsonb
		name varchar(255) NN		created_at timestamp
		title varchar(500) NN	user_feedback  feedback Id ∅ integer	updated_at timestamp
		content text NN	user_id   integer	
		category varchar(100) NN  difficulty varchar(50) NN	feedback_type varchar(50)	
		estimated_time integer	rating integer feedback_text text	
		prerequisites text	technical_details jsonb	
		related_concepts text	user_agent text	
		roadmap_url varchar(500) tools jsonb	page_url varchar(500)	
		timeline jsonb	created_at timestamp	
		resources jsonb		
		tags text search_index tsvector	daily_challenge_assignments  assignment_id   integer	
		created_at timestamp	■ user_id	
		updated_at timestamp	$\sim$ challenge_id $m{\sigma}$ integer NN	
			assignment_date date NN	
			completed boolean completed_at timestamp	
			user_answer text	
			points_earned integer	
			repetition_count integer	user_courses
			last_shown_date date  created_at timestamp	user_course_id ∂ integer
			updated_at timestamp	
				enrollment_date timestamp
			user_badges	progress float
			user_badge_id	last_accessed timestamp
			— user_id	completed_at timestamp  created_at timestamp
			earned_at timestamp	updated_at timestamp
			context jsonb	
			courses	
			course_id Ø integer	
			title varchar(255) NN description text	
			difficulty varchar(50)	
			thumbnail_url varchar(255)	
			created_at timestamp	



				rag_search_history	voice_interactions
				search_id ∅ integer	<pre>interaction_id  proper integer</pre>
				*     user_id 𝚱 integer	* user_id <i>♦</i> integer
				query_text text NN	* session_id <b>∂</b> varchar(255)
		users		search_results jsonb	voice_command text
		user_id Ø integer 1		response_text text	audio_file_url varchar(500)
ache_store	cache_statistics	username varchar(255) NN		confidence_score decimal(3,2)	language_detected varchar(10)
ache_key ⊘ varchar(255)	$stat\_id\ \mathscr{O}$ integer	email varchar(255) NN		llm_model varchar(100)	<pre>confidence_score decimal(3,2)</pre>
ache_value jsonb NN	cache_type varchar(50) NN	password_hash varchar(255) NN		source_documents jsonb	response_text text
ache_type varchar(50) NN	hit_count integer			execution_time_ms integer	response_audio_url varchar(500)
expiration_time timestamp NN	miss_count integer	registration_date timestamp		created_at timestamp	intent_detected varchar(100)
	total_requests integer	last_login timestamp			entities_extracted jsonb
reated_at timestamp	avg_response_time_ms decimal(10,2)	points integer			processing_time_ms integer
ast_accessed timestamp	date date	level integer		voice_ai_sessions	Ilm_model_used varchar(100)
ccess_count integer	created_at timestamp	experience_points integer		session_id Ø varchar(255) 0.1	tokens_used integer
		streak integer		user_id <i>⊕</i> integer	timestamp timestamp
		badges jsonb		start_time timestamp	
		profile_picture varchar(255)		end_time	created_at timestamp
		voice_enabled boolean		total_interactions integer	
		preferred_voice varchar(50)	challenges	session_context jsonb	
		created_at timestamp	challenge_id ∂ integer	<pre>created_at</pre>	
		updated_at timestamp	title varchar(255) NN		
			description text NN		
			problem_statement text NN	leaderboard	
				leaderboard_id	
			solution_template text	1 user_id <i>∂</i> integer NN	
			difficulty varchar(50) NN	rank integer	
			category varchar(100) NN	total_points integer	
			points_reward integer NN	weekly_points integer	
			input_example text	monthly_points integer	
			expected_output text	all_time_points integer	
			hints text	last_updated timestamp	
			tags text		
			created_at timestamp	created_at timestamp	
			updated_at timestamp		
				user_progress	
				progress_id ∅ integer	
			badges	1 user_id <i>⊕</i> integer NN	
			badge_id ∅ integer +	level integer	
			name varchar(255) NN	experience_points integer	
			description text	points_to_next_level integer	
			icon_url varchar(255)		
			criteria text		lessons
			points_reward integer	total_challenges_completed integer	lesson_id ∂ integer
			badge_type varchar(50)	longest_streak integer	* course_id & integer NN
			created_at timestamp	current_streak integer	
				last_activity_date date	title varchar(255) NN
				created_at timestamp	content text
			programming_concepts	updated_at timestamp	order integer NN
			concept_id <i>O</i> integer 0.1		resources jsonb
			name varchar(255) NN	user_feedback	<pre>created_at</pre>
			title varchar(500) NN		updated_at timestamp
			content text NN	*	
			category varchar(100) NN		
			difficulty varchar(50) NN	feedback_type varchar(50)	
			estimated_time integer	rating integer	
			prerequisites text	feedback_text text	
			related_concepts text	technical_details jsonb	
			roadmap_url varchar(500)	user_agent text	
			tools jsonb	page_url varchar(500)	
			timeline jsonb	created_at timestamp	
			resources jsonb		
			tags text	daily_challenge_assignments	
			search_index tsvector	assignment_id ∅ integer	
			created_at timestamp	*  « user_id ∂ integer NN	
			updated_at timestamp	*	
				assignment_date date NN	
				completed boolean	
				completed_at timestamp	
				user_answer text	
				points_earned integer	
				repetition_count integer	user_courses
				last_shown_date date	${\sf user\_course\_id} {\it \mathcal{O}}$ integer
				created_at timestamp	* user_id <b>∂</b> integer NN
				updated_at timestamp	* course_id <i>⊕</i> integer NN
					enrollment_date timestamp
				user_badges	progress float
				user_badge_id ∅ integer	last_accessed timestamp
				* user_id \$\theta\$ integer NN	completed_at timestamp
				* badge_id  € integer NN	created_at timestamp
					updated_at timestamp
				earned_at timestamp	apadica_at timestamp
				context jsonb	
				courses	
				course_id ⊘ integer 1	
				title varchar(255) NN	
				description text	
				difficulty varchar(50)	
				thumbnail_url varchar(255)	
				+	
				concept_id <i>∂</i> integer	
				<pre>created_at</pre>	

