gym
- id
- address — t

client
- id
- id_pass — t
- name — t
- address — t
- phone
- email — t

pass_client
- id_pass
- id_client

pass
- id
- name — t
- price — #

pass_gym
- id_pass
- id_gym

blacklist
- id_client
- date_from — d
- date_to — d

entry
- id — #
- enter_time — d
- exit_time — d
- id_client
- id_gym

employee_user
- id — #
- id_employee — t
- username — t
- password — t
- permission — t

gym_employee
- id
- id_gym
- id_employee

employee
- id
- name — t
- address — t
- phone
- email — t

equipment
- id
- id_type

gym_equipment
- gym_id
- equipment_id
- service_date — d

equipment_type
- id
- name — t

class
- id
- gym
- name — t
- description — t
- activity_type
- instructor
- capacity — t

class_client
- class_id
- client_id

schedule
- id — #
- id_gym_employee
- start_time — d
- end_time — d
- work_date — d

instructor
- id_employee
- bio — t
- photo — t

challange_award
- id_challange
- id_award
- quantity — t

challange
- id
- date_from — d
- date_to — d
- min_entries — t

gym_challange
- id_gym
- id_challange

award
- id
- name — t
- description — t

class_type
- id
- name — t

class_schedule
- id — #
- class_id
- start_time — d
- end_time — d
- day_of_week — t

Layout

Table award

Unq	id	serial
* Unq	name	varchar(100)
	description	varchar(500)

Indexes		
Unq	unq_award_name	name
Unq	pk_award	id

Table blacklist

* Unq	id_client	varchar
*	date_from	date
*	date_to	date

Indexes		
Unq	unq_blacklist_id_client	id_client

Foreign Keys	
	fk_blacklist client (id_client) ref client (id)

Constraints	
	check_dates	date_from < date_to

Table challange

Unq	id	serial
*	date_from	date
*	date_to	date
*	min_entries	varchar

Indexes		
Unq	pk_challange	id

Constraints		
	check_dates	date_from <= date_to

Table challange_award

Unq	id_challange	varchar
Unq	id_award	varchar
*	quantity	varchar

Indexes		
Unq	pk_challange_award	id_challange, id_award

Foreign Keys	
	fk_challange_award challange (id_challange) ref challange (id)
	fk_challange_award award (id_award) ref award (id)

Table class

Unq	id	serial
*	gym	varchar
*	name	varchar(255)
	description	text
*	activity_type	varchar
*	instructor	varchar
	capacity	varchar

Table class

Indexes		
Unq	pk_class	id
Foreign Keys		
	fk_class instructor (instructor) ref instructor (id_employee)	
	fk_class gym (gym) ref gym (id)	
	fk_class class_type (activity_type) ref class_type (id)	
Constraints		
	check_capacity	capacity > 0

Table class_client

* Pk	class_id	varchar
* Pk	client_id	varchar
Indexes		
Pk	pk_class_client	class_id, client_id
Foreign Keys		
	fk_class_client class (class_id) ref class (id)	
	fk_class_client client (client_id) ref client (id)	

Table class_schedule

Unq	id	serial
*	class_id	varchar
*	start_time	time
*	end_time	time
*	day_of_week	varchar
Indexes		
Unq	pk_class_schedule	id
Foreign Keys		
	fk_class_schedule class (class_id) ref class (id)	
Constraints		
	check_times	start_time <= end_time
	check_day	day_of_week BETWEEN 0 AND 6

Table class_type

Unq	id	serial
*	name	varchar(255)
Indexes		
Unq	pk_class_type	id

Table client

Unq	id	serial
*	id_pass	varchar
*	name	varchar(255)
*	address	varchar(255)
Unq	phone	varchar(255)
Unq	email	varchar(255)
Indexes		
Unq	unq_client_phone	phone
Unq	unq_client_email	email

Table client

Unq	pk_client	id

Table employee

Unq	id	serial
*	name	varchar(255)
*	address	varchar(255)
* Unq	phone	varchar(255)
* Unq	email	varchar(255)

Indexes

Unq	unq_employee_phone	phone
Unq	unq_employee_email	email
Unq	pk_employee	id

Table employee_user

Unq	id	serial
*	id_employee	varchar
* Unq	username	varchar(128)
*	password	varchar(256)
*	permission	varchar

Indexes

Unq	unq_employee_user_username	username
Unq	pk_employee_user	id

Foreign Keys

fk_employee_user gym_employee (id_employee) ref gym_employee (id)

Constraints

check_password	length(password) >= 8
check_username	length(username) >= 4
check_permission	permission BETWEEN 0 AND 2

Table entry

Unq	id	serial
*	enter_time	timestamp
*	exit_time	timestamp
*	id_client	varchar
*	id_gym	varchar

Indexes

Unq	pk_entry	id

Foreign Keys

fk_entry client (id_client) ref client (id)

fk_entry gym (id_gym) ref gym (id)

Constraints

check_times	enter_time <= exit_time

Table equipment

Unq	id	serial
*	id_type	varchar

Indexes

Unq	pk_equipment	id

Table equipment

Foreign Keys

fk_equipment equipment_type (id_type) ref equipment_type (id)

Table equipment_type

Unq	id	serial
*	name	varchar(255)

Indexes

Unq	pk_equipment_type	id

Table gym

Unq	id	serial
*	address	varchar(255)

Indexes

Unq	pk_gym	id

Table gym_challange

*	id_gym	varchar
*	id_challange	varchar

Foreign Keys

fk_gym_challange gym (id_gym) ref gym (id)

fk_gym_challange challange (id_challange) ref challange (id)

Table gym_employee

Unq	id	serial
	id_gym	varchar
*	id_employee	varchar

Indexes

Unq	pk_gym_employee	id

Foreign Keys

fk_gym_employee gym (id_gym) ref gym (id)

fk_gym_employee employee (id_employee) ref employee (id)

Table gym_equipment

* Pk	gym_id	varchar
* Pk	equipment_id	varchar
*	service_date	date

Indexes

Pk	pk_gym_equipment	gym_id, equipment_id

Foreign Keys

fk_gym_equipment gym (gym_id) ref gym (id)

fk_gym_equipment equipment (equipment_id) ref equipment (id)

Table instructor

Unq	id_employee	varchar
	bio	text
	photo	varchar(255)

Indexes

Unq	pk_instructor	id_employee

Table instructor

fk_instructor employee (id_employee) ref employee (id)

Table pass

Unq	id	serial
*	name	varchar(256)
*	price	numeric(10,2)
Indexes		
Unq	pk_pass	id
Constraints		
	price_check	price>=0

Table pass_client

* Pk	id_pass	varchar
* Pk	id_client	varchar
Indexes		
Pk	pk_pass_client	id_pass, id_client
Foreign Keys		

fk_pass_client pass (id_pass) ref pass (id)

fk_pass_client client (id_client) ref client (id)

Table pass_gym

*	id_pass	varchar
*	id_gym	varchar
Foreign Keys		

fk_pass_gym pass (id_pass) ref pass (id)

fk_pass_gym gym (id_gym) ref gym (id)

Table schedule

Unq	id	serial
*	id_gym_employee	varchar
*	start_time	time
*	end_time	time
*	work_date	date
Indexes		
Unq	pk_schedule	id
Foreign Keys		

fk_schedule gym_employee (id_gym_employee) ref gym_employee (id)

Constraints		
	check_times	start_time <= end_time