Cairo University
Faculty of Engineering
Computer Engineering Department
CMP2020

LIFTA Database Systems Database Schema Report Team Number: 6

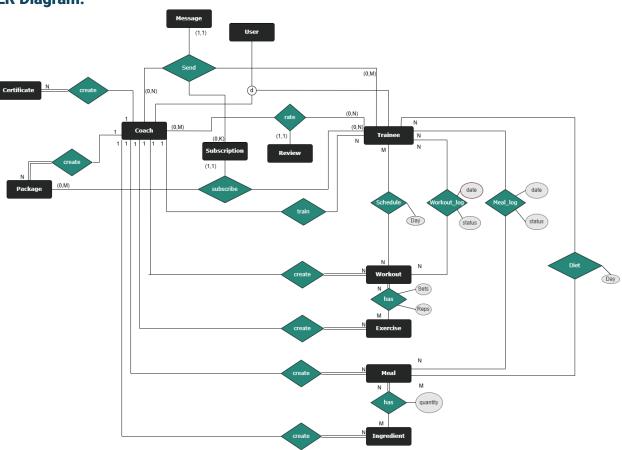
Team Members:

Name	Sec	BN
Alyaa Ali Abu El Yazeed Eissa	2	39
Anas Magdy Aied Aied	1	13
Omar Gamal Ahmed Ahmed	2	41
Shady Mohamed Mohamed Mostafa	1	26

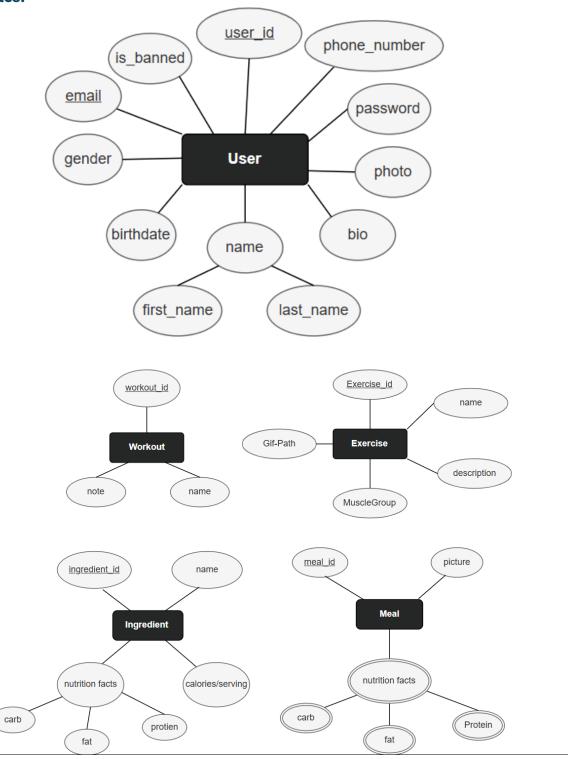
Contact Info:

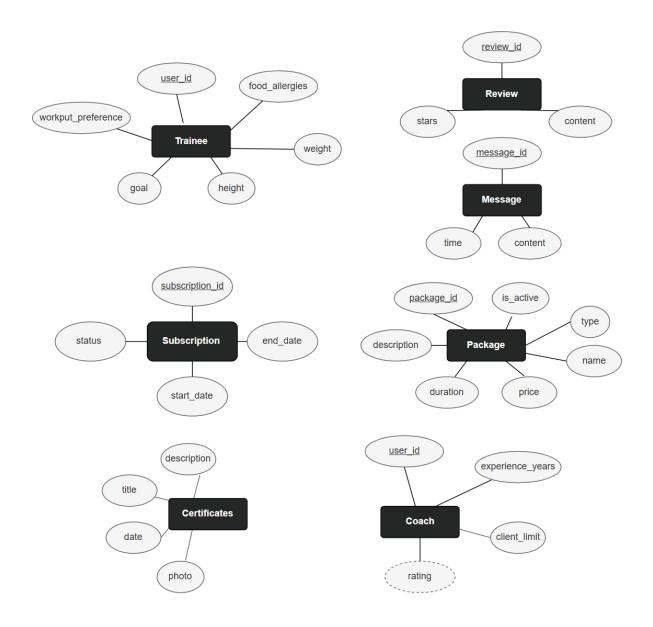
Name	email
Alyaa Ali	eissaalyaa@gmail.com
Anas Magdy	anasmagdy950@gmail.com
Omar Gamal	ogamal1011@gmail.com
Shady Mohamed	shadyshiko2004@gmail.com

ER Diagram:

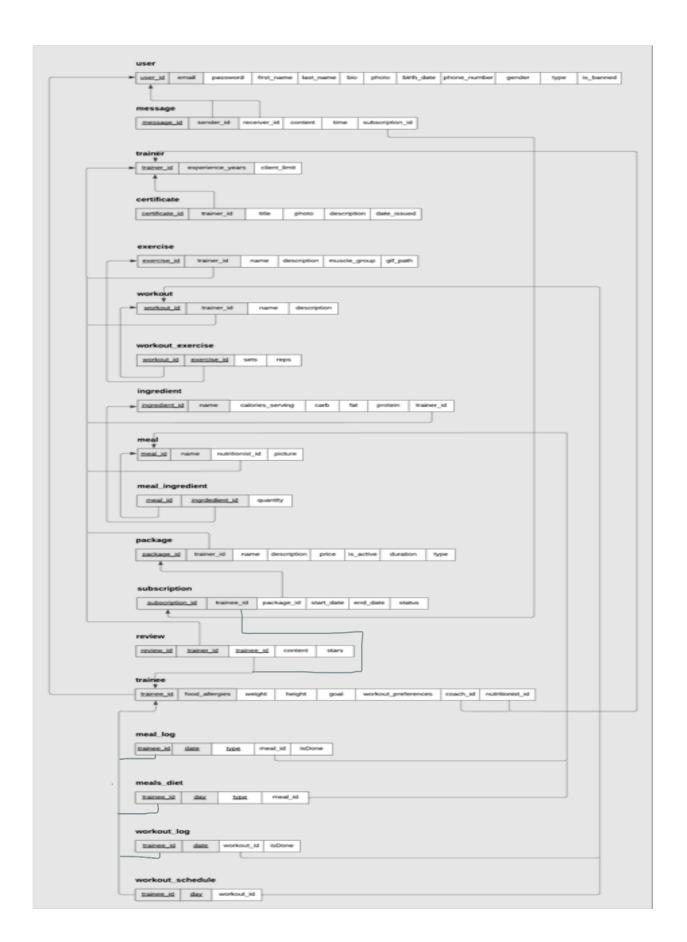


Attributes:





Schema Diagram



Database Constraints

User

- Primary Keys
 - 1. user id
- Foreign Keys

No foreign keys in the user table.

- Unique
 - email
- Not Null
 - 1. first name
 - 2. last name
 - 3. type
 - 4. is_banned (default: false)

Trainer

- Primary Keys
 - 1. trainer id
- Foreign Keys
 - 1. FOREIGN KEY (trainer id) \rightarrow users (user id)
 - ON UPDATE CASCADE
 - ON DELETE CASCADE
- Not Null
 - 1. experience year
 - 2. client limit

Trainee

- Primary Keys
 - 1. trainee id
- Foreign Keys
 - 1. FOREIGN KEY (coach_id) \rightarrow trainer (trainer_id)
 - ON UPDATE CASCADE
 - ON DELETE SET NULL
 - 2. FOREIGN KEY (nutritionist_id) \rightarrow trainer (trainer_id)
 - ON UPDATE CASCADE
 - ON DELETE SET NULL
 - 3. FOREIGN KEY (trainee id) \rightarrow users (user id)
 - ON UPDATE CASCADE
 - ON DELETE CASCADE
- Not Null

- 1. food allergies
- 2. weight
- 3. height
- 4. goal
- 5. workout preference

Certificates

- Primary Keys
 - 1. certificate id
- Foreign Keys
 - FOREIGN KEY (trainer id) → trainer (trainer id)
 - ON UPDATE CASCADE
 - ON DELETE CASCADE
- Not Null
 - 1. title
 - 2. date issued

Package

- Primary Keys
 - 1. package id
- Foreign Keys
 - FOREIGN KEY (trainer id) → trainer (trainer id)
 - ON UPDATE CASCADE
 - ON DELETE RESTRICT
- Unique
 - 1. Combination of name & trainer id
- Not Null
 - 1. price
 - 2. is_active
 - 3. duration
 - 4. type

Exercise

- Primary Keys
 - 1. exercise id
- Foreign Keys
 - FOREIGN KEY (trainer_id) → trainer (trainer_id)
 - ON UPDATE CASCADE
 - ON DELETE CASCADE
- Not Null

- 1. trainer id
- 2. name
- 3. muscle group

Workout

- Primary Keys
 - 1. workout id
- Foreign Keys
 - FOREIGN KEY (trainer id) → trainer (trainer id)
 - ON UPDATE CASCADE
 - ON DELETE CASCADE

Note: Deletion cascades only if no active assignments exist.

- Not Null
 - trainer_id
 - 2. name

Ingredient

- Primary Keys
 - 1. ingredient id
- Foreign Keys
 - FOREIGN KEY (trainer_id) → trainer (trainer_id)
 - ON UPDATE NO ACTION
 - ON DELETE NO ACTION
- Not Null
 - 1. name
 - 2. calorie_serving

Meal

- Primary Keys
 - 1. meal id
- Foreign Keys
 - FOREIGN KEY (nutritionist id) → trainer (trainer id)
 - ON UPDATE CASCADE
 - ON DELETE CASCADE

Note: Deletion cascades only if no active assignments exist.

- Not Null
 - 1. name
 - 2. nutritionist id

meal_ingredient

- Primary Keys
 - 1. meal id
 - 2. ingredient_id
- Foreign Keys
 - 1. FOREIGN KEY (ingredient_id) \rightarrow ingredient (ingredient_id)
 - ON UPDATE CASCADE
 - ON DELETE RESTRICT
 - 2. FOREIGN KEY (meal id) \rightarrow meal (meal id)
 - ON UPDATE CASCADE
 - ON DELETE CASCADE
- Not Null
 - 1. quantity

meal_log

- Primary Keys
 - 1. type
 - 2. date
 - 3. trainee id
- Foreign Keys
 - 1. FOREIGN KEY (meal_id) \rightarrow meal (meal_id)
 - ON UPDATE CASCADE
 - ON DELETE CASCADE
 - 2. FOREIGN KEY (trainee id) \rightarrow trainee (trainee id)
 - ON UPDATE CASCADE
 - ON DELETE CASCADE
- Not Null
 - 1. meal id
 - 2. is_done

workouts_schedule

- Primary Keys
 - 1. user id
- Foreign Keys
 - 1. FOREIGN KEY (trainee_id) \rightarrow trainee (trainee_id)
 - ON UPDATE CASCADE
 - ON DELETE CASCADE
 - 2. FOREIGN KEY (workout_id) \rightarrow workout (workout_id)
 - ON UPDATE CASCADE
 - ON DELETE RESTRICT
- Not Null

workout_id

Note: Days must be one of ['Friday', 'Saturday', etc.].

Workload

Alyaa Ali	 Trainee view/mark as done current workout/meals Trainee gives reviews 		
	Trainer views reviews		
	 Trainee/ Coach views package dashboard 		
	All Admin functionalities		
Anas Magdy	Users' profiles view/edit		
	Home page		
	Trainee browse coaches		
	Subscription requests		
	Authentication		
	Trainer views/remove his clients		
	Deactivate/activate packages		
Omar Gamal	Workout/meals logs		
	Messages/chat		
	Sending subscriptions requests		
	Subscriptions expiration		
	Trainee view his memberships		
	Check coach's client limit		
Shady Mohamed	Sign up		
	Create/edit/delete exercise/ingredient		
	Create/delete workout/meal		
	Trainer assigns meal/workout to trainees		

Add/edit/delete packages
Certificates
 validations