Indoor Gym System - Domain Model

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Domain Model
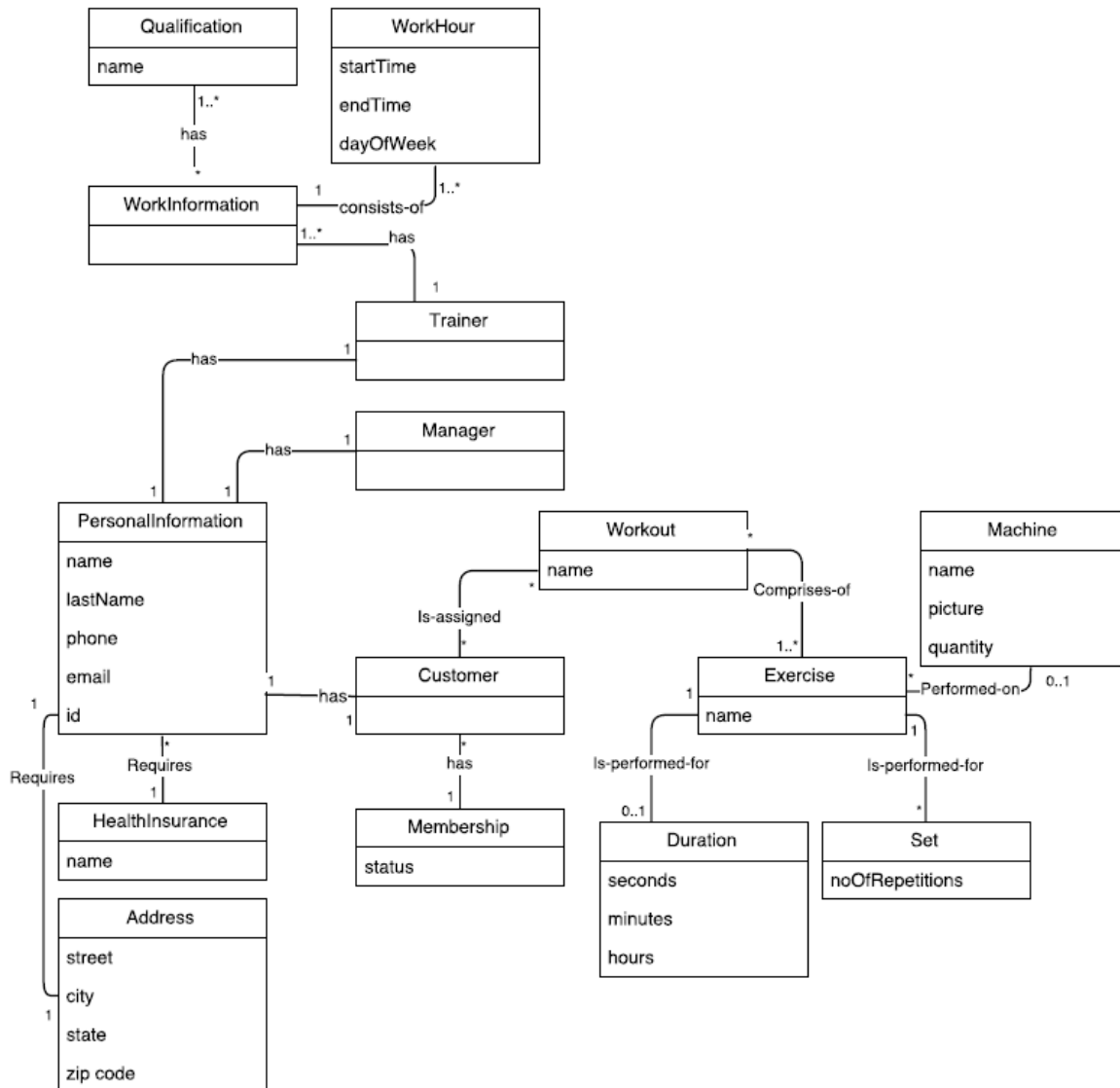
Glossary

Domain Model Glossary

Sr. No.	Name	Description
1	Address	1. Address contains information about a trainer or customer or a manager's place of residence. 2. Attributes: a. street: String, the name of the street b. city: String, city name c. State: String, state name d. zipcode: integer, zipcode of address 3. Associations . Address is required by 1 PersonalInfomation
2	Customer	1. A customer is a person who has joined the gym to become physically fit. 2. Associations a. Customer has a membership in the gym b. Customer needs 1 PersonalInformation c. Customer is assigned 0 to many workouts.
3	Duration	1. Duration contains the time in hours, minutes and seconds an exercise is performed for. 2. Attributes a. hours: int, the number of hours b. minutes: int, the number of minutes c. seconds: int, the number of seconds 3. Associations . Duration may be part of 1 Exercise.
4	Exercise	1. Exercise is any physical activity performed to sustain or improve physical or mental health. A trainer can add/modify exercises and assign exercises to workout routines. An exercise may require the use of a machine 2. Attributes a. name: String, the unique name of the exercise 3. Associations

		a. Exercise can be assigned to 0 to many workout routines b. Exercise can be performed on 0 to 1 machine c. Exercise may have 0 to many Sets d. Exercise may have 0 to 1 Duration
5	HealthInsurance	1. Health Insurance is a type of insurance that covers for a person's medical or surgical expenses. It is associated to the personal information of a trainer or a customer. 2. Attriubtes: a. name: String, the name of the health insurance 3. Associations a. HealthInsurance belongs to 0 to many PersonalInformation

6	Machine	1. Machine is an equipment using which an exercise is performed. It is part of the inventory of the gym.
		2. Attributes
		    a. name: String, the name of the machine
		    b. picture: String, the path of the image file
		    c. quantity: int, the number of machines in the inventory
		3. Associations
		    a. Machine belongs to a single EquipmentInventory
		    b. Machine is assigned to 0 to many Exercises

7	Manager	1. A manager is the supervisor of the gym. He hires trainers, registers customers and maintains the inventory. 2. Associations: a. Manager has 1 PersonalInformation
8	Membership	1. A membership allows a customer to be a part of the gym and use its facilities. Membership can be active or inactive 2. Attributes a. status: String, active or inactive 3. Associations a. Membership is assigned to 0 - many customers
9	PersonalInformation	1. PersonalInformation contains a personal information like name, phone number etc, about a trainer or a customer. 2. Attributes a. name: String, the first name b. lastName: String, the last name of a person c. phone: int, the phone number of a person d. email: String, the email id of a person e. id: int, the id of the personalInformation associated to a trainer or a manager or a customer

		3. Associations

		a. PersonalInformation belongs to a customer
		    b. PersonalInformation belongs to a trainer
		    c. PersonalInformation belongs to a manager
		    d. PersonalInformation has 1 address
		    e. PersonalInformation has 1 HealthInsurance

10	Qualification	1. Qualification is an attribute or quality that makes a person eligible for something. 2. Attributes a. name: String, the name of the qualification 3. Attributes . a. Qualifications belong to 0 - many WorkInformations
11	Set	1. A set contains the number of repetitions for an exercise. 2. Attributes: a. noOfRepetitions: int, the number of times the exercise must be performed. 3. Associations a. A Set is part of 1 exercise

12	Trainer	1. Trainer is a person who is hired by the manager of the gym. He trains the customers to perform exercises and supervises their progress. He can create workout routines and assign them to customers.
		2. Associations
		    a. Trainer has 1 PersonalInformation
		    b. Trainer has 1 WorkInformation

13	WorkHour	1. A workHour stores work information related to the trainers working hours and days
		2. Attributes
		    a. startDateTime: dateTime, the start time along with the date
		    b. endDateTime: dateTime, the end time along with the date
		    c. dayOfWeek: DayOfWeek enum, the day of the week
		3. Associations
		. Many WorkHours are part of 1 WorkInformation
		.

14	WorkInformation	1. WorkInformation stores work related information about a trainer. It has details about a trainer's work hours and qualifications. 2. Associations

		a. One WorkInformation contains information about one trainer b. One WorkInformation has 1 to many qualifications c. One WorkInformation contains information about 1 to many WorkHours

15	Workout	1. Workout is a series of exercises put together by a trainer.
		2. Attributes
		   a. name: String, the name of the workout routine
		3. Associations
		   a. Workout has 1-many exercises
		   b. Workout is assigned to 0 to many customers