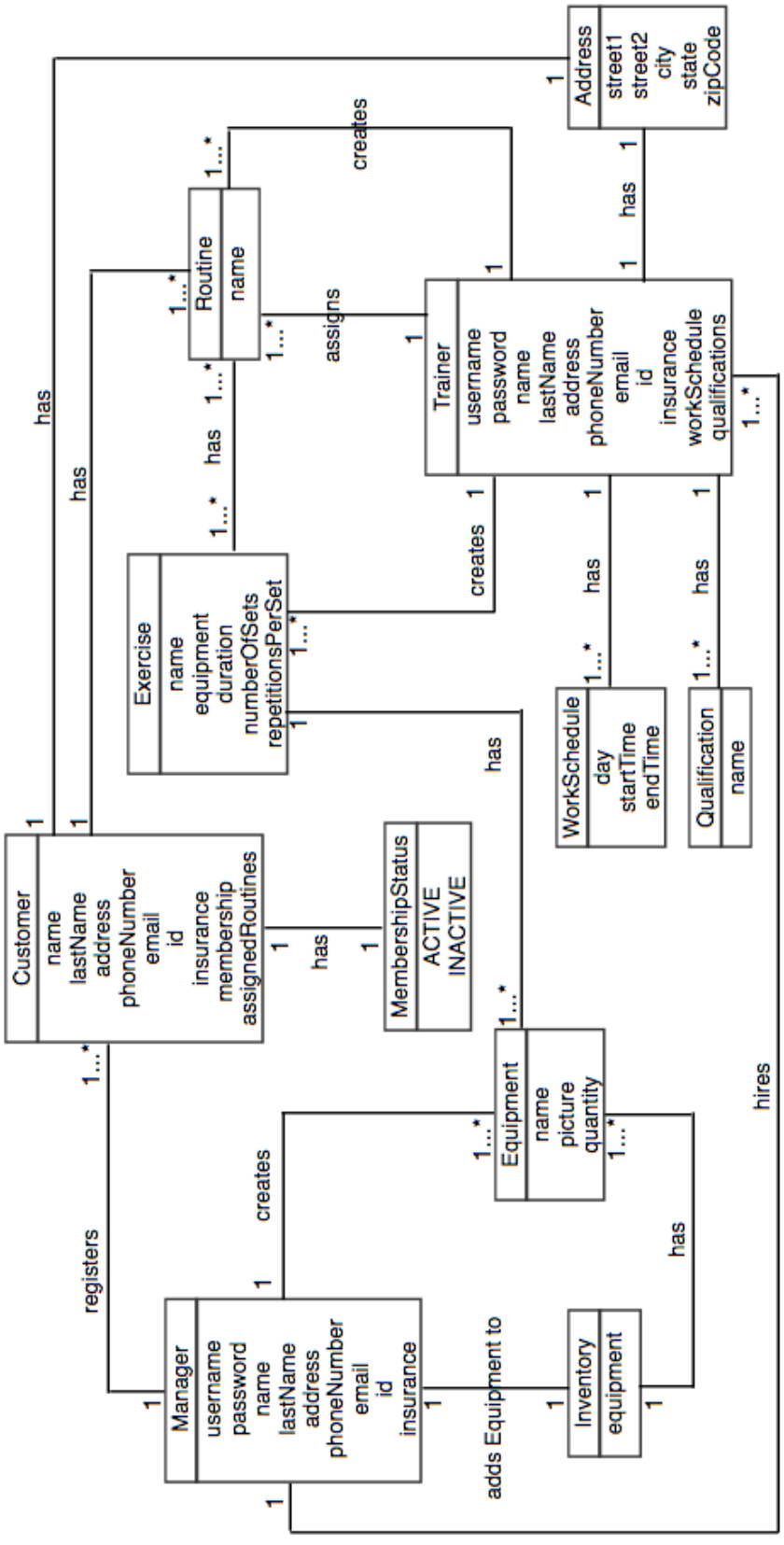
Domain Model



Glossary

Version	Date	Description	Author
Inception Draft (Iteration 2)	10/15/17	Third draft. Current revision made after receiving feedback from professor. To be continuously refined primarily during elaboration (Iteration 3, 4)	Ashton Creel

Term	Definition	Information
Address	The Address class in GGMS that contains the attributes for a Customer, Manager, and Trainer address.	- There can be multiple instances of this class created and added to a Customer, Manager, or Trainer instance in GGMS by a Manager instance. - Each Customer, Manager, and Trainer instance has one and only one Address instance associated with it.
address	The street address of a Customer, Manager, and Trainer in GGMS.	- Must be type Address. - Should be instantiated with the following attributes and their corresponding values: street1, street2, city, state, zipCode - Validate accuracy of address data against USPS API
assignedRoutines	The current routines assigned to a Customer in GGMS.	- Must be type ArrayList<Routine>
Customer	The Customer class in GGMS whose instances have a list of Routines that are assigned to it by a Trainer.	- There can be multiple instances of this class created and added to GGMS by a Manager instance. - Has no credential access to GGMS.
duration	The time period to perform an Exercise in GGMS.	- Must be type Duration. - This attribute is available when Exercise does not have a value for *numberOfSets* and *repetitionsPerSet*.
email	The primary email address for a Customer, Manager, and Trainer in GGMS.	- Must be type String. - Must pass validation in JavaMail API (Checks for '@' symbol and '.com', '.edu', '.org', etc.)
Equipment	The Equipment class in GGMS with no methods.	- There can be multiple instances of this class created and added to the

		Inventory instance in GGMS by a Manager instance.
equipment	The collection of Equipment entities included in the Inventory.	- Must be type ArrayList<Equipment>
id	The primary identifier for a Customer, Manager, and Trainer in GGMS.	- Must be type String. - Must start with 'C', 'M', 'T', respectively, and end in a numerical value (e.g. 'C0', 'M0', 'T1', 'C1', 'T25').
insurance	The primary health insurance provider for a Customer, Manager, and Trainer in GGMS.	- Must be type String.
lastName	The last name of a Customer, Manager, and Trainer in GGMS.	- Must be type String.
MembershipStatus	The MembershipStatus enumeration in GGMS with no methods.	- There can be multiple instances of this class created and added to a Customer instance in GGMS by a Manager instance.
membership	The current status of a Customer membership in GGMS.	- Must be type MembershipStatus. - Must be instantiated with Enum values of ACTIVE or INACTIVE.
name	- The first name of a Customer, Manager, and Trainer in GGMS. - The full name of an Equipment, Exercise, Qualification, and Routine in GGMS.	- Must be type String.
numberOfSets	The number of sets performed in an Exercise in GGMS.	- Must be type Integer - This attribute is available when Exercise does not have a value for *duration*. - This attribute must be non-null if *repetitionsPerSet* is non-null.
phoneNumber	The primary phone number for a Customer, Manager, and Trainer in GGMS.	- Must be type Integer. - Must be at least 10 digits.
picture	The picture for an Equipment in GGMS.	- Must be type Image - No standard size will be required
Qualification	The Qualification	- There can be multiple instances of this class created and added to a

	class in GGMS with no methods.	Trainer instance in GGMS by a Manager instance.
qualifications	The list of accomplishments that a Trainer in GGMS has.	- Must be type ArrayList<Qualification>
quantity	The quantity for Equipment in GGMS which is determined manually by the Manager.	- Must be type Integer
repetitionsPerSet	The number of repetitions performed of an Exercise per set.	- Must be type Integer - This attribute is available when Exercise does not have a value for *duration*. - This attribute must be non-null if *numberOfSets* is non-null.
WorkSchedule	The WorkSchedule class in GGMS with no methods.	- There can be multiple instances of this class created and added to a Trainer instance in GGMS by a Manager instance.
workSchedule	The Sunday – Saturday work schedule for a Trainer in GGMS.	- Must be type ArrayList<WorkSchedule> - A WorkSchedule entry in the ArrayList should be instantiated with the following attributes and their corresponding values: day, startTime, endTime - day must be type DayOfWeek - startTime, endTime must be type Java.time.LocalTime - Since LocalTime type stores time without a time-zone in ISO-8601 calendar system (e.g., 10:15:30)

References:

1. https://stackoverflow.com/questions/624581/what-is-the-best-java-email-address-validation-method
2. https://www.isr.umd.edu/~austin/ence688r.d/java-basics/basics-enum.d/WorkSchedule.java
3. https://docs.oracle.com/javase/8/docs/api/java/time/DayOfWeek.html