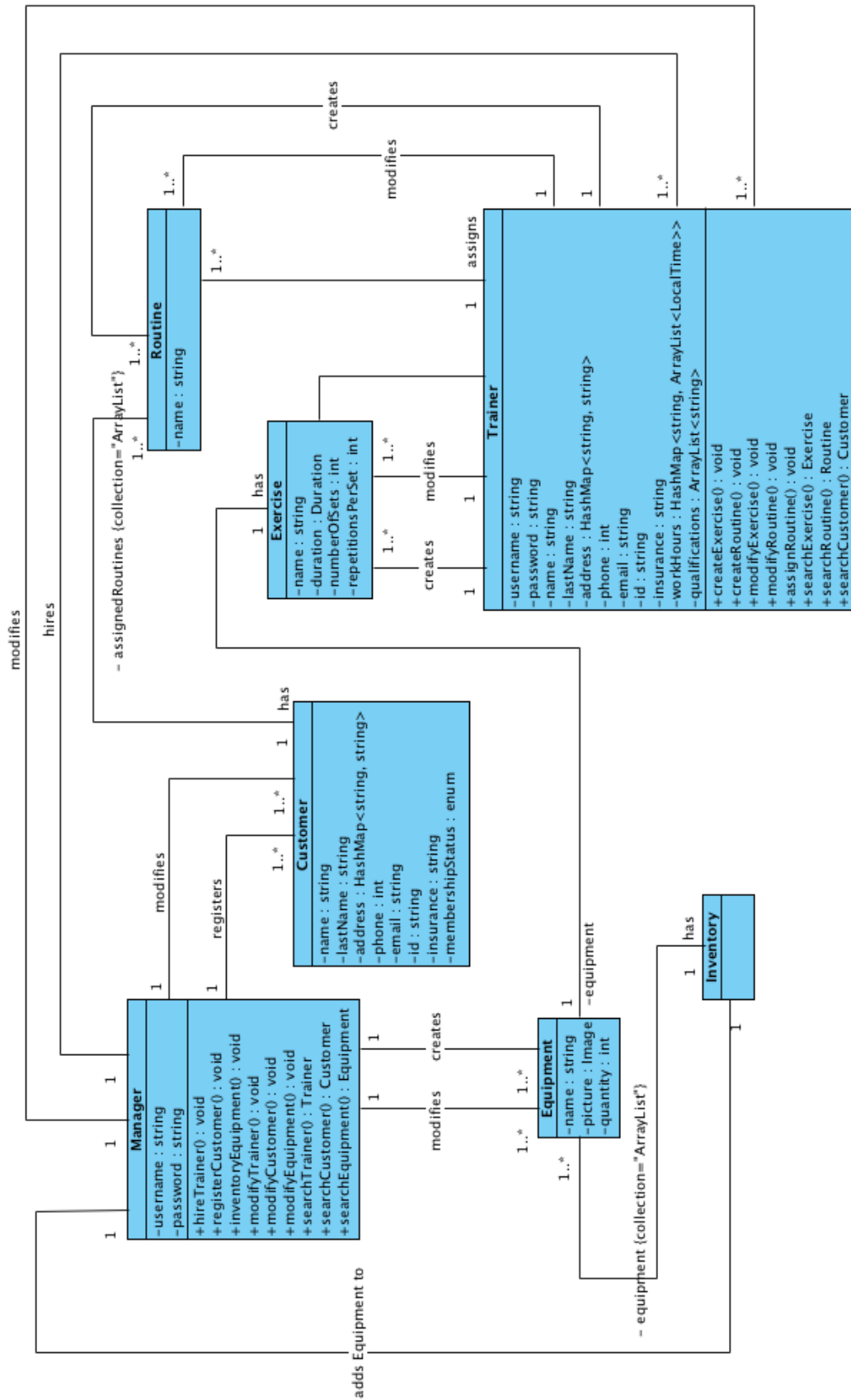


Domain Model



Glossary

Version	Date	Description	Author
Inception Draft (Iteration 2)	9/30/17	First draft. To be refined primarily during elaboration (Iteration 3, 4)	Ashton Creel

Term	Definition	Information
Manager	A registered User of GGMS with a number of methods (listed below).	
username	A Manager credential to access GGMS.	<ul style="list-style-type: none">- Must be type String.- Must be unique.- Must be at least 7 characters.- If username already exists, digit appended at its end<ul style="list-style-type: none">- Start numbering from 0 and add 1 for each consecutive match during username generation (i.e., 'jsmith0', 'jsmith1', etc.)
password	A Manager security credential to access GGMS.	<ul style="list-style-type: none">- Must be type String.- Must be at least 7 characters.- Must include at least 1 special character and 1 number.
hireTrainer()	A method in which a Manager creates and adds a new Trainer to GGMS.	<ul style="list-style-type: none">- Must be return type void.
registerCustomer()	A method in which a Manager creates and adds a new Customer to GGMS.	<ul style="list-style-type: none">- Must be return type void.
inventoryEquipment()	A method in which a Manager creates and adds new Equipment to the GGMS Inventory.	<ul style="list-style-type: none">- Must be return type void.
modifyTrainer()	A method in which a Manager modifies a Trainer in GGMS.	<ul style="list-style-type: none">- Must be return type void.
modifyCustomer()	A method in which a Manager modifies a Customer in GGMS.	<ul style="list-style-type: none">- Must be return type void.
modifyEquipment()	A method in which a Manager modifies	<ul style="list-style-type: none">- Must be return type void.

	Equipment in GGMS Inventory.	
searchTrainer()	A method in which a Manager searches for a Trainer in GGMS.	- Must be return type Trainer.
searchCustomer()	A method in which a Manager searches for a Customer in GGMS.	- Must be return type Customer.
searchEquipment	A method in which a Manager searches for Equipment in GGMS Inventory.	- Must be return type Equipment.
Trainer	A registered User of GGMS with a number of methods (listed below).	
Customer	A Customer entity saved in GGMS with no methods.	- Has no access to GGMS.
username	A Trainer credential to access GGMS.	- Must be type String. - Must be unique. - Must be at least 7 characters.
password	A Trainer security credential to access GGMS.	- Must be at least 7 characters. - Must include at least 1 special character and 1 number.
name	The first name of a Trainer/Customer in GGMS.	- Must be type String.
lastName	The last name of a Trainer/Customer in GGMS.	- Must be type String.
address	The street address of a Trainer/Customer in GGMS.	- Must be type HashMap<String, String> - Should be stored with the following keys: street, city, state, zip_code - Validate accuracy of address data against Google Maps API
phone	The primary phone number for a Trainer/Customer in GGMS.	- Must be type Integer. - Must be at least 10 digits.
email	The primary email address for a Trainer/Customer in GGMS.	- Must be type String. - Must pass validation in JavaMail API (Checks for '@' symbol and '.com', '.edu', '.org', etc.)

id	The primary identifier for a Trainer/Customer in GGMS.	<ul style="list-style-type: none"> - Must be type String. - Must start with 'T'/'C', respectively, and end in a numerical value (e.g. 'T0', 'C0', 'T1', 'C1', 'T25', 'C25').
insurance	The primary health insurance provider for a Trainer/Customer in GGMS.	<ul style="list-style-type: none"> - Must be type String.
workHours	The Sunday – Saturday work schedule for a Trainer in GGMS.	<ul style="list-style-type: none"> - Must be type HashMap<String, ArrayList<LocalTime>> - Must contain a value for each key. - Should be stored with the following String keys: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday - Should be stored in the following format for the values: [startTime+'AM/PM', endTime+'AM/PM'] <ul style="list-style-type: none"> - startTime, endTime must be of type java.time.LocalTime - This type stores time without a time-zone in the ISO-8601 calendar system (e.g., 10:15:30) - Example format <ul style="list-style-type: none"> - {Sunday=[10:30:00 AM, 2:30:00 PM], Monday=[], ..., Saturday=[]})
qualifications	The list of accomplishments that a Trainer in GGMS has.	<ul style="list-style-type: none"> - Must be type ArrayList<String>
membershipStatus	The current status of a Customer membership in GGMS.	<ul style="list-style-type: none"> - Must be type Enum. - Must have Enum values of ACTIVE and INACTIVE.
assignedRoutines	The current routines assigned to a Customer in GGMS.	<ul style="list-style-type: none"> - Must be type ArrayList<Routine>
createExercise()	A method in which a Trainer creates and	<ul style="list-style-type: none"> - Must be return type void.

	adds a new Exercise to GGMS.	
createRoutine()	A method in which a Trainer creates and adds a new Routine to GGMS.	- Must be return type void.
modifyExercise()	A method in which a Trainer modifies an Exercise in GGMS.	- Must be return type void.
modifyRoutine()	A method in which a Trainer modifies an Routine in GGMS.	- Must be return type void.
assignRoutine()	A method in which a Trainer adds a Routine to a Customer's assigned Routines in GGMS.	- Must be return type void.
searchExercise()	A method in which a Trainer searches for an Exercise in GGMS.	- Must be return type Exercise.
searchRoutine()	A method in which a Trainer searches for a Routine in GGMS.	- Must be return type Routine.
searchCustomer()	A method in which a Trainer searches for a Customer in GGMS.	- Must be return type Customer.
Exercise	An Exercise entity saved in GGMS with no methods.	
numberOfSets	The number of sets performed in an Exercise.	<ul style="list-style-type: none"> - Must be type Integer - This attribute is available when Routine does not have a value for duration. - This attribute must be non-null if repetitionsPerSet is non-null.
repetitionsPerSet	The number of repetitions performed of an Exercise per set.	<ul style="list-style-type: none"> - Must be type Integer - This attribute is available when Routine does not have a value for duration. - This attribute must be non-null if numberOfSets is non-null.

Routine	A Routine entity saved in GGMS with no methods.	
name	The name of a Routine in GGMS.	- Must be type String
Inventory	The entity in GGMS that contains the collection of Equipment.	
Equipment	An Equipment entity saved in GGMS with no methods.	
equipment	The collection of Equipment entities included in the Inventory.	- Must be type ArrayList<Equipment>
name	The name of an Equipment in GGMS.	- Must be type String - Must be unique
picture	The picture for an Equipment in GGMS.	- Must be type Image - No standard size will be required
quantity	The quantity for Equipment in GGMS which is determined manually by the Manager.	- Must be type Integer

References:

1. <https://stackoverflow.com/questions/624581/what-is-the-best-java-email-address-validation-method>