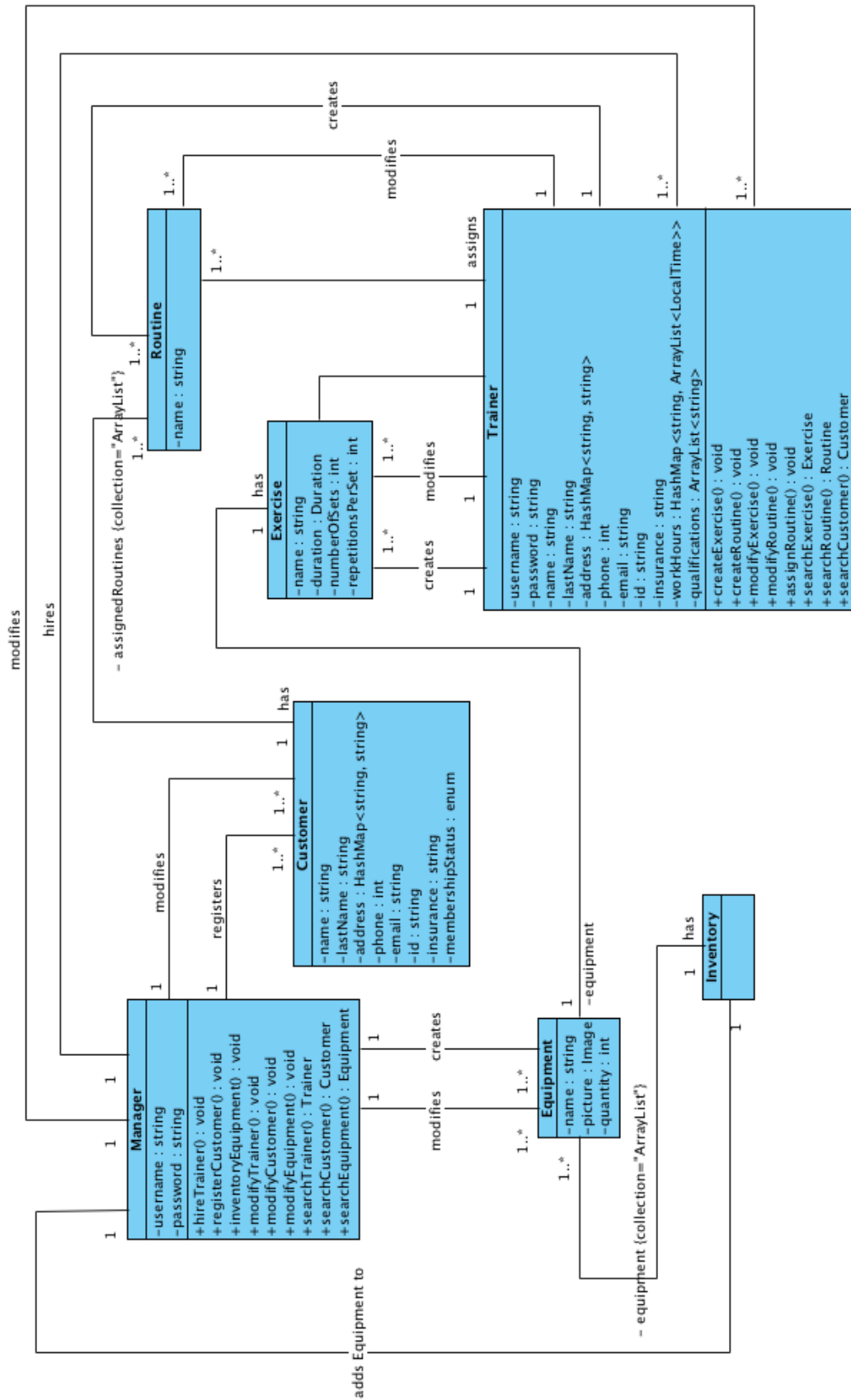


Domain Model



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. |

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| | 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.) |

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| 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. |

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| | 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. | |
| name | The name of an Exercise in 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 <i>numberOfSets</i> and <i>repetitionsPerSet</i> . |
| 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 <i>duration</i> . - This attribute must be non-null if <i>repetitionsPerSet</i> is non-null. |
| 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 <i>duration</i> . |

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| | | - This attribute must be non-null if <i>numberOfSets</i> 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>