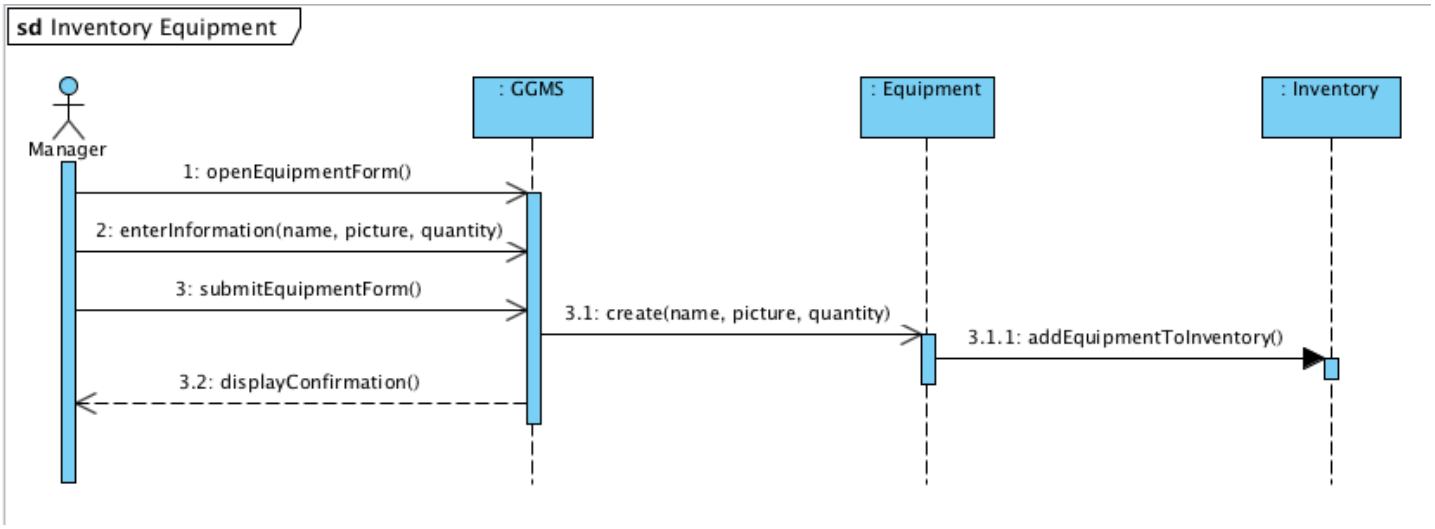
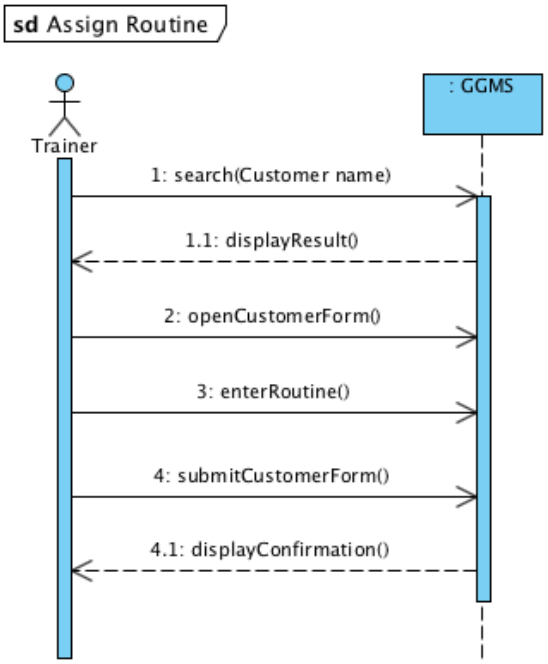
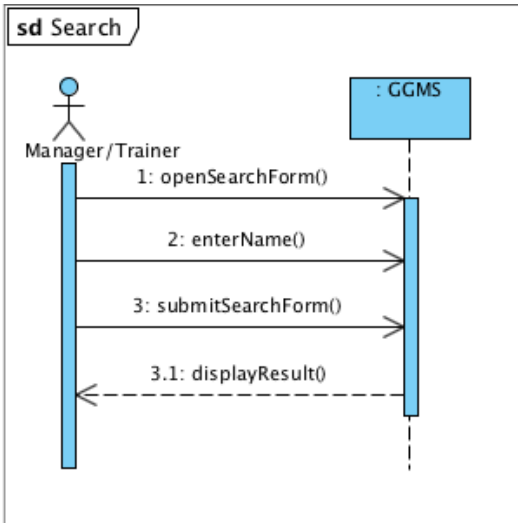
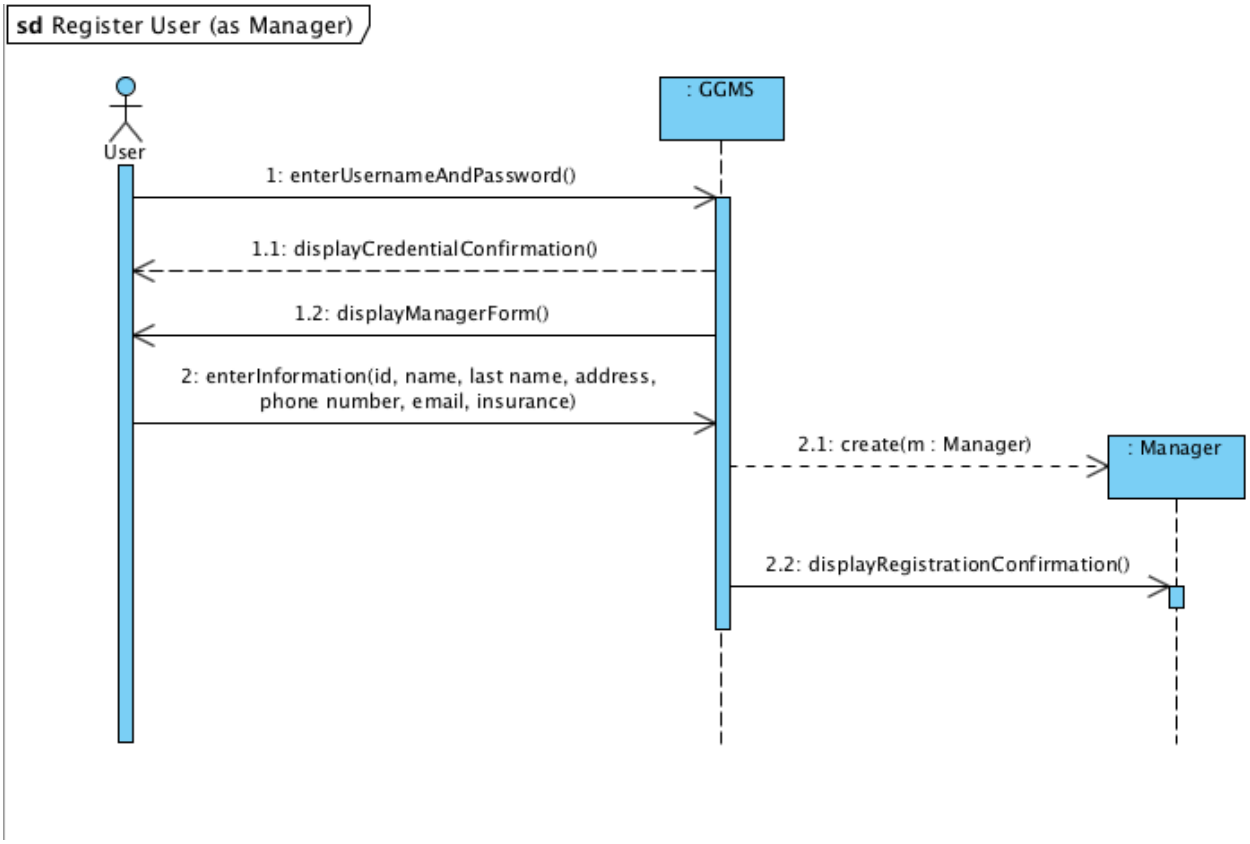
Design Document

Sequence Diagrams

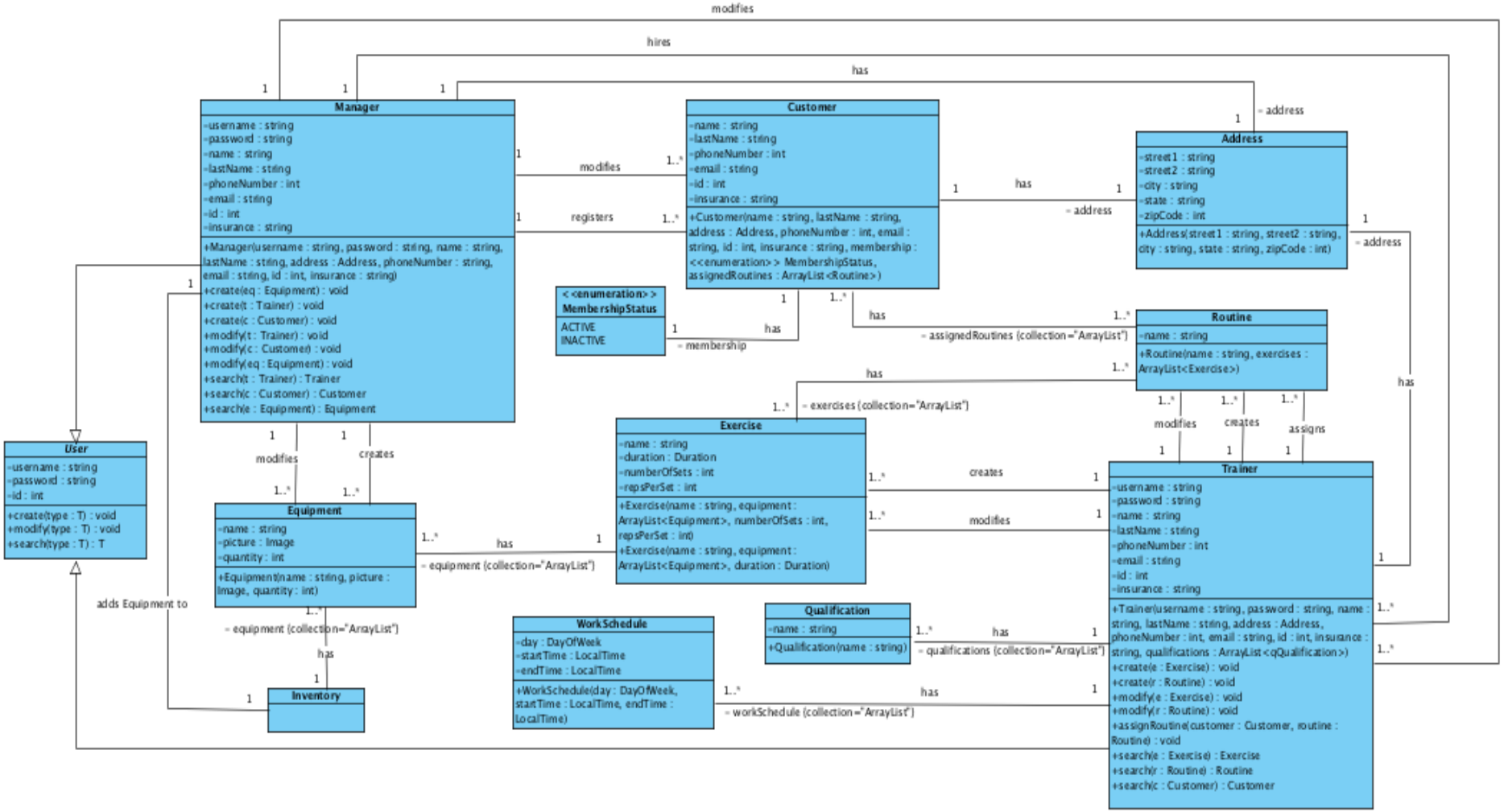








Design Class Diagram (See Below)


modifies
hires
has
Manager
-username : string
-password : string
-name : string
-lastName : string
-phoneNumber : int
-email : string
-id : int
-insurance : string
+Manager(username : string, password : string, name : string, lastName : string, address : Address, phoneNumber : string, email : string, id : int, insurance : string)
+create(eq : Equipment) : void
+create(t : Trainer) : void
+create(c : Customer) : void
+modify(t : Trainer) : void
+modify(c : Customer) : void
+modify(eq : Equipment) : void
+search(t : Trainer) : Trainer
+search(c : Customer) : Customer
+search(e : Equipment) : Equipment
modifies
registers
Customer
-name : string
-lastName : string
-phoneNumber : int
-email : string
-id : int
-insurance : string
+Customer(name : string, lastName : string, address : Address, phoneNumber : int, email : string, id : int, insurance : string, membership : <<enumeration>> MembershipStatus, assignedRoutines : ArrayList<Routine>)
has
= address
Address
-street1 : string
-street2 : string
-city : string
-state : string
-zipCode : int
+Address(street1 : string, street2 : string, city : string, state : string, zipCode : int)
<<enumeration>>
MembershipStatus
ACTIVE
INACTIVE
= membership
= assignedRoutines (collection="ArrayList")
Routine
-name : string
+Routine(name : string, exercises : ArrayList<Exercise>)
= exercises (collection="ArrayList")
User
-username : string
-password : string
-id : int
+create(type : T) : void
+modify(type : T) : void
+search(type : T) : T
modifies
creates
Equipment
-name : string
-picture : Image
-quantity : int
+Equipment(name : string, picture : Image, quantity : int)
= equipment (collection="ArrayList")
adds Equipment to
Inventory
Exercise
-name : string
-duration : Duration
-numberOfSets : int
-repsPerSet : int
+Exercise(name : string, equipment : ArrayList<Equipment>, numberOfSets : int, repsPerSet : int)
+Exercise(name : string, equipment : ArrayList<Equipment>, duration : Duration)
creates
modifies
assigns
Trainer
-username : string
-password : string
-name : string
-lastName : string
-phoneNumber : int
-email : string
-id : int
-insurance : string
+Trainer(username : string, password : string, name : string, lastName : string, address : Address, phoneNumber : int, email : string, id : int, insurance : string, qualifications : ArrayList<qQualification>)
+create(e : Exercise) : void
+create(r : Routine) : void
+modify(e : Exercise) : void
+modify(r : Routine) : void
+assignRoutine(customer : Customer, routine : Routine) : void
+search(e : Exercise) : Exercise
+search(r : Routine) : Routine
+search(c : Customer) : Customer
WorkSchedule
-day : DayOfWeek
-startTime : LocalTime
-endTime : LocalTime
+WorkSchedule(day : DayOfWeek, startTime : LocalTime, endTime : LocalTime)
= workSchedule (collection="ArrayList")
Qualification
-name : string
+Qualification(name : string)
= qualifications (collection="ArrayList")