System Operations and Operation Contracts

Contract: viewLocations
Operation: viewLocations()
Cross reference : Administrator success SSD
Preconditions:
1. The user has already been authenticated by the system.
Postconditions:
1. List of locations is fetched from the system.
2. List of locations is returned.

Contract: makeLocationAvailable
Operation: makeLocationAvailable(location: Location, availability: Availability)
Cross reference : Administrator success SSD
Preconditions:
1. The user is already signed into the system as an administrator.
2. Location and Availability objects already exist.
Postconditions:
1. Instance of Availability was associated with location.

Contract: registerAsInstructor
Operation: registerAsInstructor(credentials: Credentials, specialization: Specialization)
Cross reference : Instructor success SSD
Preconditions:
1. Credentials and Specialization already exist.
2. There is no other instructor with the same phone number already existing.
Postconditions:
1. An instance of Instructor, i, has been created and stored.
2. The instance i, was associated with credentials.
3. The instance i, was associated with specialization.

Contract: registerAvailabilities
Operation: registerAvailabilities(cities: City[])
Cross reference : Instructor success SSD
Preconditions:
1. The user is already signed into the system as an instructor.
2. City objects in cities already exist.
Postconditions:
1. An instance of Instructor, i, was fetched from the system.
2. Instance i, was associated with cities.

Contract: viewOfferings
Operation: viewOfferings()
Cross reference : Instructor success SSD
Preconditions:
1. The user is already signed into the system as an instructor.
Postconditions:
1. The existing offerings are fetched from the system and put into a collection Offerings.
2. The collection Offerings is returned.

Contract: takeOffering
Operation: takeOffering(offering: Offering)
Cross reference : Instructor success SSD
Preconditions:
1. 1The user is already signed into the system as an instructor.
2. Offering object already exists
Postconditions:
1. An instance of Instructor, i, was fetched from the system.
2. Instance I was associated with Offering.

Contract: modifyOffering
Operation: modifyOffering(offering: Offering, newOffering: Offering)
Cross reference : Administrator success SSD
Preconditions:
1. The user is already signed into the system as an administrator.
2. Offering and newOffering objects already exists.
Postconditions:
1. An instance of Offering o, is fetched from the system.
2. The instance o, is updated with the info from newOffering.
3. The instance o, is saved in the system.

Contract: deleteAccount
Operation: deleteAccount(account: Account)
Cross reference :
Preconditions:
1. The user is already signed into the system as an administrator.
2. Account object already exists.
Postconditions:
1. An instance of account a, is fetched from the system.
2. Instance a is deleted from the system.

Contract: deleteOffering
Operation: deleteAccount(offering: Offering)
Cross reference :
Preconditions:
1. The user is already signed into the system as an administrator.
2. Offering object already exists.
Postconditions:
1. An instance of offering o, is fetched from the system.
2. Instance o is deleted from the system.

Contract: takeBooking
Operation: takeBooking(offering: Offering, client: Client)
Cross reference :
Preconditions:
1. The user is already signed into the system as a client above the age of 18.
2. Offering object already exists.
Postconditions:
1. An instance of client, c, was fetched from the system.
2. Instance c was associated with Offering.