

## Iteration 1

### Operation Contract for createObjectOfInterest(...)

Contract: createObjectOfInterest

Operation: createObjectOfInterest(details, ownedByInstitution, auctioned)

Cross reference(s): Use Case: Admin Makes Object of Interest Available

Preconditions:

1. The Actor (Administrator) has already been authenticated by the system.

Postconditions:

1. An instance of Object of Interest, object, has been created. [instance creation]
2. Variable id is initialized in object. [modification of variable]
3. Instance object was associated with Objects of Interest. [association formation]

### Operation Contract for createExpert(...)

Contract: createExpert

Operation: createExpert(email, password, firstName, lastName, areaOfExpertise, license)

Cross reference(s): Use Case: Expert Views Object of Interest

Preconditions:

1. The Actor (Administrator) has already been authenticated by the system.
2. The input email is not already associated with an expert account

Postconditions:

1. An instance of Expert, expert, has been created. [instance creation]
2. Variable id is initialized in expert. [modification of variable]
3. Instance expert was associated with Experts. [association formation]

#### Operation Contract for createClient(...)

Contract: createClient

Operation: createClient(email, password, firstName, lastName, affiliation, accountApproved)

Cross reference(s): Use Case: Client Views Object of Interest

Preconditions:

1. The Client is not currently logged in
2. The input email is not already associated with an existing client account

Postconditions:

1. An instance of Client, client, has been created. [instance creation]
2. Variable id is initialized in client. [modification of variable]
3. Instance client was associated with Clients. [association formation]

#### Operation Contract for approveAccount(...)

Contract: approveAccount

Operation: approveAccount(email)

Cross reference(s): Use Case: Client Views Object of Interest

Preconditions:

1. The Actor (Administrator) has already been authenticated by the system.
2. Client object already exists
3. The Client has not been approved/declined by the administrator yet

Postconditions:

1. Variable accountApproved is modified in client. [modification of variable]

## Iteration 2

### Operation Contract for createRequestService(...)

Contract: createRequestService

Operation: createRequestService(name, expertise, type, claimed date)

Cross reference(s): Use Case: Client Request Service

Preconditions:

1. The Client has already been approved by the administrator and authenticated by the system

Postconditions:

1. An instance of ServiceRequest, serviceRequest, has been created. [instance creation]
2. Variable id is initialized in serviceRequest. [modification of variable]
3. Instance serviceRequest was associated with ServiceRequests. [association formation]

### Operation Contract for createClient(...)

Contract: createClient

Operation: createClient(email, password, firstName, lastName, affiliation, accountApproved)

Cross reference(s): Use Case: Client Views Object of Interest

Preconditions:

3. The Client is not currently logged in
4. The input email is not already associated with an existing client account

Postconditions:

4. An instance of Client, client, has been created. [instance creation]
5. Variable id is initialized in client. [modification of variable]
6. Instance client was associated with Clients. [association formation]

