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createAccount(email, password, affiliation, contact info, description)
logIn ()
requestService()
clientBookServiceTime(Client, serviceId)
searchObject()
selectObject()
viewingRegistration(Client)
searchAuctions()
selectAuction(auctionId)
createService()
```

Contract CO1: createAccount

Operation: createAccount(id,email, password, affiliation, contact info, description)

Cross Reference: Client Sign Up and Approval (Success and Failure)

Preconditions:

- Client is not already registered in the system
- Email is unique and valid
- All required fields are provided by the user (email, password, affiliation, contact info, description)
- Administrator account must exist

Post conditions:

- A new Client account, c, is created with status awaiting approval [Instance Creation]
- System stores the clients information [Association Formed]
- System sends account request to administrator to review [Association Formed]
- 1. If request approved
 - client account status is created in system [Instance Creation]
- 2. If request not approved
 - client account status is deleted in system [Instance Deletion]

Contract CO2: logIn

Operation: logIn()

Cross Reference:

- Requesting Service (Success and Failure)
- Object Selection and Viewing Sign up
- Expert sets availability for service (Success and Failure)

Preconditions:

- The client account has been approved by the administrator
- Username and password combination is correct

Post conditions:

- A client session instance, c, is created [Instance Creation]

Contract CO3: RequestService**Operation:** requestService()**Cross Reference:** Requesting Service (Success and Failure)**Preconditions:**

- Client must already be logged in
- Service type must exist
- Expert in that service type must exist

Post conditions:

- Display all service availabilities [Association formed]

Contract CO4: ClientBookServiceTime**Operation:** ClientBookServiceTime(Client, serviceId)**Cross Reference:** Requesting Service (Success and Failure)**Preconditions:**

- Client must already be logged in
- Service Type must already exist
- Expert in that service type must exist
- All service availabilities must be displayed
- Service times must coincide with what client needs

Post conditions:

1. If Expert confirms
 - Service is associated with client [Association formed]

Contract CO5: searchObject**Operation:** searchObject()**Cross Reference:** Object Selection and Viewing Sign up**Preconditions:**

- The client must be logged in
- The system (auction houses) contain object lists
- Object must exist

Post conditions:

- A search result list is generated [Association formed]

Contract CO6: selectObject

Operation: selectObject()

Cross Reference: Object Selection and Viewing Sign up

Preconditions:

- Client is logged in
- Client has performed a search by object type and received a list of objects
- Selected object must exist in the system

Postconditions:

- Object information and associated Auction and potential Viewing is displayed
[Association formed]

Contract CO7: viewingRegistration

Operation: viewingRegistration()

Cross Reference: Object Selection and Viewing Sign up

Preconditions:

- Client is logged in
- Auction house exists
- Normal auction must exist
- Viewing must exist
- Client must have selected Object
- Object information and associated Auction with Viewing is displayed

Post conditions:

- Client is registered for Viewing [Association Formed]

Contract CO8: SearchAuctions

Operation: searchAuctions()

Cross Reference: Expert sets availability for service (Success and Failure)

Preconditions:

- Expert is logged in
- Specialty must exist

Post conditions:

1. If Auctions with that specialty exists
 - All auction times for that specialty are displayed [association formed]

Contract CO9: createService

Operation: createService()

Cross Reference: Expert sets availability for service (Success)

Preconditions:

- Expert is logged in
- Specialty must exist
- Service must exist
- Auction with that specialty must exist

Post conditions:

- Availability for Expert is updated [Instance creation]
- Service times updated [Instance creation]

Contract C10: selectAuction

Operation: selectAuction()

Cross Reference: Auction Selection and Viewing Sign up

Preconditions:

- Client is logged in
- Client has performed a search by auction specialty and received a list of available auctions
- The selected auctionId must exist

Post conditions:

- System retrieves and displays the auction's details [Association Formed]
- If auction exists:
 - Auction a is returned to the client session [Association Formed]
- If auction does **not** exist:
 - A "not found" message is shown, no changes occur in the system state

