

Use Case Name: Login

Scope: Globo Gym Management System (GGMS)

Level: sub-function Primary Actor: User

Stakeholders and Interests:

- User: Wants to be quickly authenticated as a Manager/Trainer in GGMS
- Manager: Wants to be quickly authenticated in GGMS
- Trainer: Wants to be quickly authenticated in GGMS

Preconditions: User is registered as a Manager/Trainer in GGMS.

Success Guarantee (or Postconditions): Manager/Trainer was identified and authenticated in GGMS.

Main Success Scenario (or Basic Flow):

- 1. User arrives at GGMS with a username and password.
- 2. User enters username and password
- 3. User logs in.

Extensions (or Alternative Flows):

- *a. At any time, GGMS fails:
 - 1. User restarts GGMS, logs in, and requests recovery of prior state.
 - 2. GGMS reconstructs prior state.
 - 2a. GGMS detects anomalies preventing recovery:
 - 1. GGMS signals error to User, records error, and enters clean state.
- 1a. User arrives at GGMS without a username and password.
 - 1a. User enters unique username and password
 - 1a. Invalid username
 - 1. GGMS signals error and rejects data entered.
 - 2. User responds to error:
 - 2a. Error message indicates username is already found in GGMS:
 - 1. User enters username into GGMS.
 - 1b. Invalid password
 - 1. GGMS signals error and rejects data entered.
 - 2. User responds to error:
 - 2a. Error message indicates username is already found in GGMS:
 - 1. User enters username into GGMS.
- 1b. User enters unique username, password, and id (Trainer-specific)
 - 1a. Invalid username
 - 1. GGMS signals error and rejects data entered
 - 2. User responds to error:
 - 2a. Error message indicates username is already found in GGMS:
 - 1. User enters username into GGMS.
 - 1b. Invalid password
 - 1. GGMS signals error and rejects data entered.
 - 2. User responds to error
 - 2a. Error message indicates username is already found in GGMS:
 - 1. User enters username into GGMS.
 - 1c. Invalid ID

- 1. GGMS signals error and rejects data entered.
- 2. User responds to error
 - 2a. Error message indicates ID is invalid:
 - 1. User enters ID into GGMS.
- 2. User signs up.
- 3. GGMS presents confirmation that a new User was created.
 - 3a. GGMS does not display confirmation of User creation.
 - 1. GGMS signals error.
 - 2. User responds to error:
 - 1. Error message indicates that confirmation request could not be completed and asks if User would like to retry request.
 - 1a. User retries confirmation request.
 - 1. GGMS displays result of request retry.
 - 1b. User cancels retry of confirmation request.
- 2a. Invalid information
 - 1. GGMS signals error and rejects data entered.
 - 2. User responds to error:
 - 2a. Error message indicates username is not found:
 - 1. User enters username into GGMS.
- 3a. Invalid login
 - 1. GGMS signals error and rejects entrance into GGMS.
 - 2. User responds to error:
 - 2a. Error message indicates password is incorrect:
 - 1. User enters password into GGMS.
 - 2b. Error message indicates username is incorrect:
 - 1. User enters username and password into GGMS.
 - 2c. Error message indicates network connection is not working:
 - 1. GGMS displays 404 response page until connection is working.
- 3a. GGMS authenticates User as a Manager.
- 3b. GGMS authenticates User as a Trainer.

Technology and Data Variations List:

Frequency of Occurrence: Could be continuous.

Miscellaneous:

Use Case Name: Logout

Scope: Globo Gym Management System (GGMS)

Level: sub-function Primary Actor: User

Stakeholders and Interests:

- User: Wants to be logged out of GGMS and unauthenticated as a Manager/Trainer
- Manager: Wants to be quickly logged out of GGMS
- Trainer: Wants to be quickly logged out of GGMS

Preconditions: Manager/Trainer is identified and authenticated in GGMS.

Success Guarantee (or Postconditions): Manager/Trainer was logged out and unauthenticated in GGMS.

Main Success Scenario (or Basic Flow):

1. User logs out of GGMS

Extensions (or Alternative Flows):

- *a. At any time, GGMS fails:
 - 1. User restarts GGMS, logs in, and requests recovery of prior state.
 - 2. GGMS reconstructs prior state.
 - 2a. GGMS detects anomalies preventing recovery:
 - 1. GGMS signals error to User, records error, and enters clean state.
- 1a. GGMS displays confirmation that Manager/Trainer was logged out.
- 1b. GGMS does not display confirmation that Manager/Trainer was logged out.
 - 1. GGMS signals error.
 - 2. Manager/Trainer responds to error:
 - 1. Error message indicates that confirmation request could not be completed and asks if Manager/Trainer would like to retry request.
 - 1a. Manager/Trainer retries confirmation request.
 - 1. GGMS displays result of request retry.
 - 1b. Manager/Trainer cancels retry of confirmation request.

Special Requirements:

Technology and Data Variations List:

Frequency of Occurrence: Could be continuous.

Miscellaneous:

Use Case Name: Hire Trainer

Scope: GGMS **Level**: user-goal

Primary Actor: Manager Stakeholders and Interests:

- Manager: Wants to quickly enter a new Trainer into GGMS
- Trainer: Wants confirmation that their information is correctly entered into GGMS

Preconditions: Manager is identified and authenticated. **Success Guarantee**: Trainer was entered into GGMS.

Main Success Scenario:

- 1. Manager starts a Trainer form with new hire information.
- 2. Manager enters personal information which includes name, last name, address, phone, email, ID, and health insurance provider.
- 3. Manager enters work information which includes work schedule and qualifications.
- 4. Manager submits new Trainer form with personal and work information filled in.
- 5. GGMS presents confirmation that a new Trainer was added to it.

- *a. At any time, GGMS fails:
 - 1. Manager restarts GGMS, logs in, and requests recovery of prior state.
 - 2. GGMS reconstructs prior state.
 - 2a. GGMS detects anomalies preventing recovery:
 - 1. GGMS signals error to Manager, records error, and enters clean state.
 - 2. Manager starts a new Trainer form.
- 1a. Manager indicates to resume a suspended Trainer form
 - 1. Manager logs in and performs resume Trainer form operation.
 - 2. GGMS displays list of trainer forms in a suspended state.
 - 2a. Manager selects Trainer form to resume (sorted "lastName, Name").
 - 1. GGMS displays Trainer form with fields completed prior to suspending.
 - 2b. Manager removes Trainer form not to be resumed.
 - 1. GGMS displays message that selected new Trainer's form was removed.
- 2-3a. Invalid information
 - 1. GGMS signals error and rejects data entered.
 - 2. Manager responds to error:
 - 2a. Error message indicates address is invalid:
 - 1a. Manager enters street1 into GGMS.
 - 1b. Manager enters street2 into GGMS.
 - 1c. Manager enters city into GGMS.
 - 1d. Manager enters state into GGMS.
 - 1e. Manager enters zipCode into GGMS.
 - 2b. Error message indicates phone (10 digits) is invalid:
 - Manager enters phone into GGMS.
 - 2c. Error message indicates email is invalid:
 - 1. Manager enters email into GGMS.
 - 2d. Error message indicates ID is invalid:
 - 1. Manager enters ID into GGMS.
 - 2e. Error message indicates workSchedule is invalid:
 - 1a. Manager enters day into GGMS.
 - 1b. Manager enters startTime into GGMS.
 - 1c. Manager enters endTime into GGMS.
- 4a. Submission fails
 - 1a. GGMS signals error.
 - 1. Manager responds to error:
 - 1a. Error message indicates that there are empty field(s):
 - 1. Manager enters information into empty fields and submits form.
 - 1b. Error message indicates network connection is not working:
 - 1. GGMS displays 404 response page until connection is working.
 - 1b. Manager cancels form
 - 1. GGMS displays message asking Manager to confirm if cancelling and losing information in form is desired.
 - 1a. Manager continues cancel
 - 1. GGMS displays Manager home page.
 - 2a. Manager does not cancel

- 1. GGMS displays new trainer form with the fields completed prior to attempt at cancellation.
- 5a. GGMS does not display confirmation of Trainer creation.
 - 1. GGMS signals error.
 - 2. Manager responds to error:
 - 1. Error message indicates that confirmation request could not be completed and asks if Manager would like to retry request.
 - 1a. Manager retries confirmation request.
 - 1. GGMS displays result of request retry.
 - 1b. Manager cancels retry of confirmation request.

- Address confirmation response within 30 seconds 90% of the time

Technology and Data Variations List:

Frequency of Occurrence: Could be continuous at special times but will mainly occur once every 2-4 months.

Miscellaneous:

Use Case Name: Register Customer

Scope: GGMS **Level**: user-goal

Primary Actor: Manager Stakeholders and Interests:

- Manager: Wants to quickly enter a new Customer into GGMS
- Customer: Wants confirmation that their information is correctly entered into GGMS

Preconditions: Manager is identified and authenticated. **Success Guarantee**: Customer was entered into GGMS.

Main Success Scenario:

- 1. Manager starts a Customer form with information for new registration.
- 2. Manager enters personal information which includes name, last name, address, phone, email, ID, and health insurance provider.
- 3. Manager sets Customer membership status to active.
- 4. Manager submits new Customer form with information filled in.
- 5. GGMS presents confirmation that a new Customer was added to it.

- *a. At any time, GGMS fails:
 - 1. Manager restarts GGMS, logs in, and requests recovery of prior state.
 - 2. GGMS reconstructs prior state.
 - 2a. GGMS detects anomalies preventing recovery:
 - 1. GGMS signals error to Manager, records error, and enters clean state.
 - 2. Manager starts a new Customer form.
- 1a. Manager indicates to resume a suspended Customer form
 - 1. Manager logs in and performs resume Customer form operation.

- 2. GGMS displays list of Customer forms in a suspended state.
 - 2a. Manager selects Customer form to resume (sorted "lastName, Name").
 - 1. GGMS displays Customer form with fields completed prior to suspending.
 - 2b. Manager removes Customer form not to be resumed.
 - 1. GGMS displays message that selected new Customer's form was removed.
- 2a. Invalid information
 - 1. GGMS signals error and rejects data entered.
 - 2. Manager responds to error:
 - 2a. Error message indicates address is invalid:
 - 1a. Manager enters street1 into GGMS.
 - 1b. Manager enters street2 into GGMS.
 - 1c. Manager enters city into GGMS.
 - 1d. Manager enters state into GGMS.
 - 1e. Manager enters zipCode into GGMS.
 - 2b. Error message indicates phone number (10 digits) is invalid:
 - 1. Manager enters phone number into GGMS.
 - 2c. Error message indicates email is invalid:
 - 1. Manager enters email into GGMS.
 - 2d. Error message indicates ID is invalid:
 - 1. Manager enters ID into GGMS.
- 3a. Manager sets Customer membership status to inactive
 - 1. GGMS displays message asking Manager to confirm if inactive membership status is desired
 - 1a. Manager confirms inactive status is correct
 - 1. GGMS displays "Inactive" in membership status field.
 - 1b. Manager does not confirm
 - 1. GGMS displays "Active" in membership status field.
- 4a. Submission fails
 - 1a. GGMS signals error.
 - 1. Manager responds to error:
 - 1a. Error message indicates that there are empty field(s):
 - 1. Manager enters information into empty fields and submits form.
 - 1b. Error message indicates network connection is not working:
 - 1. GGMS displays 404 response page until connection is working.
 - 1b. Manager cancels form
 - 1. GGMS displays message asking Manager to confirm if cancelling and losing information in form is desired.
 - 1a. Manager continues cancel
 - 1. GGMS displays Manager home page.
 - 2a. Manager does not cancel
 - 1. GGMS displays new Customer form with the fields completed prior to attempt at cancellation.
- 5a. GGMS does not display confirmation of Customer creation.
 - 1. GGMS signals error.
 - 2. Manager responds to error:

- 1. Error message indicates that confirmation request could not be completed and asks if manager would like to retry request.
 - 1a. Manager retries confirmation request.
 - 1. GGMS displays result of request retry.
 - 1b. Manager cancels retry of confirmation request.

- Address confirmation response within 30 seconds 90% of the time

Technology and Data Variations List:

Frequency of Occurrence: Could be continuous at special times but will mainly occur once every 2-4 months.

Miscellaneous:

Use Case Name: Inventory Equipment

Scope: GGMS **Level**: user-goal

Primary Actor: Manager Stakeholders and Interests:

- Manager: Wants to quickly enter Equipment into GGMS Inventory

- Trainer: Wants all Equipment to be available in Inventory to plan workouts

Preconditions: Manager is identified and authenticated.

Success Guarantee: Equipment was added to GGMS Inventory.

Main Success Scenario:

- Manager starts an Equipment form with information to add equipment to GGMS Inventory.
- 2. Manager enters information which includes name, picture, and quantity.
- 3. Manager submits new Equipment form with information filled in.
- 4. GGMS presents confirmation that new Equipment was added to its Inventory.

Extensions:

- *a. At any time, GGMS fails:
 - 1. Manager restarts GGMS, logs in, and requests recovery of prior state.
 - 2. GGMS reconstructs prior state.
 - 2a. GGMS detects anomalies preventing recovery:
 - 1. GGMS signals error to Manager, records error, and enters clean state.
 - 2. Manager starts a new Equipment form.
- 1a. Manager indicates to resume a suspended Equipment form
 - 1. Manager logs in and performs resume Equipment form operation.
 - 2. GGMS displays list of Equipment forms in a suspended state.
 - 2a. Manager selects Equipment form to resume (sorted by "Name").
 - 1. GGMS displays form with fields completed prior to suspending.
 - 2b. Manager removes Equipment form not to be resumed.
 - 1. GGMS displays message that selected new Equipment's form was removed.

2a. Invalid information

- 1. GGMS signals error and rejects data entered.
- 2. Manager responds to error:
 - 2a. Error message indicates picture is invalid:
 - 1. Manager enters picture into GGMS.
- 3a. Submission fails
 - 1a. GGMS signals error.
 - 1. Manager responds to error:
 - 1a. Error message indicates that there are empty field(s):
 - 1. Manager enters information into empty fields and submits form.
 - 1b. Error message indicates network connection is not working:
 - 1. GGMS displays 404 response page until connection is working.
 - 1b. Manager cancels form
 - 1. GGMS displays message asking Manager to confirm if cancelling and losing information in form is desired.
 - 1a. Manager continues cancel
 - 1. GGMS displays Manager home page.
 - 2a. Manager does not cancel
 - 1. GGMS displays new Equipment form with the fields completed prior to attempt at cancellation.
- 4a. GGMS does not display confirmation of Equipment creation.
 - 1. GGMS signals error.
 - 2. Manager responds to error:
 - 1. Error message indicates that confirmation request could not be completed and asks if manager would like to retry request.
 - 1a. Manager retries confirmation request.
 - 1. GGMS displays result of request retry.
 - 1b. Manager cancels retry of confirmation request.

- Picture type confirmation response within 30 seconds 90% of the time

Technology and Data Variations List:

Frequency of Occurrence: Every 6 months – 1 year.

Miscellaneous:

Use Case Name: Modify Trainer

Scope: GGMS **Level**: user-goal

Primary Actor: Manager **Stakeholders and Interests**:

- Manager: Wants to quickly modify a Trainer in GGMS

- Trainer: Wants their information saved in GGMS to be current and correct

Preconditions: Manager is identified and authenticated. **Success Guarantee**: Trainer was modified in GGMS.

Main Success Scenario:

- 1. include(Search Trainer)
- Manager modifies personal or work information which can include name, last name, address, phone, email, ID, and health insurance provider or work hours and qualifications.
- 3. Manager submits Trainer form with modified information.
- 4. GGMS presents confirmation that a Trainer was successfully modified.

- *a. At any time, GGMS fails:
 - 1. Manager restarts GGMS, logs in, and requests recovery of prior state.
 - 2. GGMS reconstructs prior state.
 - 2a. GGMS detects anomalies preventing recovery:
 - 1. GGMS signals error to Manager, records error, and enters clean state.
- 1a. Manager indicates to return to home.
 - 1. GGMS displays GGMS home.
- 2a. Invalid information
 - 1. GGMS signals error and rejects data entered.
 - 2. Manager responds to error:
 - 2a. Error message indicates address is invalid:
 - 1a. Manager enters street1 into GGMS.
 - 1b. Manager enters street2 into GGMS.
 - 1c. Manager enters city into GGMS.
 - 1d. Manager enters state into GGMS.
 - 1e. Manager enters zipCode into GGMS.
 - 2b. Error message indicates phone number (10 digits) is invalid:
 - 1. Manager enters phone number into GGMS.
 - 2c. Error message indicates email is invalid:
 - 1. Manager enters email into GGMS
 - 2d. Error message indicates ID is invalid:
 - 1. Manager enters ID into GGMS.
 - 2e. Error message indicates workSchedule is invalid:
 - 1a. Manager enters day into GGMS.
 - 1b. Manager enters startTime into GGMS.
 - 1c. Manager enters endTime into GGMS.
- 3a. Submission fails
 - 1a. GGMS signals error.
 - 1. Manager responds to error:
 - 1a. Error message indicates that there are empty field(s):
 - 1. Manager enters information into empty fields and submits form.
 - 1b. Error message indicates network connection is not working:
 - 1. GGMS displays 404 response page until connection is working.
 - 1b. Manager cancels form
 - 1. GGMS displays message asking Manager to confirm if cancelling and losing information in form is desired.
 - 1a. Manager continues cancel

- 1. GGMS displays Manager home page.
- 2a. Manager does not cancel
 - 1. GGMS displays Trainer form with the fields completed prior to attempt at cancellation.
- 4a. GGMS does not display confirmation of Trainer modification.
 - 1. GGMS signals error.
 - 2. Manager responds to error:
 - 1. Error message indicates that confirmation request could not be completed and asks if manager would like to retry request.
 - 1a. Manager retries confirmation request.
 - 1. GGMS displays result of request retry.
 - 1b. Manager cancels retry of confirmation request.

- Address confirmation response within 30 seconds 90% of the time

Technology and Data Variations List:

Frequency of Occurrence: Could be continuous during the holidays (i.e., due to modification of work hours) but should not occur more than once a year.

Miscellaneous:

Use Case Name: Modify Customer

Scope: GGMS **Level**: user-goal

Primary Actor: Manager **Stakeholders and Interests**:

- Manager: Wants to quickly modify a Customer in GGMS

- Customer: Wants their information saved in GGMS to be current and correct

Preconditions: Manager is identified and authenticated. **Success Guarantee**: Customer was modified in GGMS.

Main Success Scenario:

- 1. include(Search Customer)
- 2. Manager modifies information which can include name, last name, address, phone, email, ID, and health insurance provider or membership status.
- 3. Manager submits Customer form with modified information.
- 4. GGMS presents confirmation that a Customer was successfully modified.

- *a. At any time, GGMS fails:
 - 1. Manager restarts GGMS, logs in, and requests recovery of prior state.
 - 2. GGMS reconstructs prior state.
 - 2a. GGMS detects anomalies preventing recovery:
 - 1. GGMS signals error to Manager, records error, and enters clean state.
- 1a. Manager indicates to resume a suspended Customer form
 - 1. Manager logs in and performs resume Customer form operation.

- 2. GGMS displays list of Customer forms in a suspended state.
 - 2a. Manager selects Customer form to resume (sorted by "lastName, Name").
 - 1. GGMS displays Customer form with fields completed prior to suspending.
 - 2b. Manager removes Customer form not to be resumed.
 - GGMS displays message that selected new Customer's form was removed.
- 1b. Manager indicates to return to home.
 - 1. GGMS displays GGMS home.
- 2a. Invalid information
 - 1. GGMS signals error and rejects data entered.
 - 2. Manager responds to error:
 - 2a. Error message indicates address is invalid:
 - 1a. Manager enters street1 into GGMS.
 - 1b. Manager enters street2 into GGMS.
 - 1c. Manager enters city into GGMS.
 - 1d. Manager enters state into GGMS.
 - 1e. Manager enters zipCode into GGMS.
 - 2b. Error message indicates phone number (10 digits) is invalid:
 - 1. Manager enters phone number into GGMS.
 - 2c. Error message indicates email is invalid:
 - 1. Manager enters email into GGMS
 - 2d. Error message indicates ID is invalid:
 - 1. Manager enters ID into GGMS.
- 3a. Submission fails
 - 1a. GGMS signals error.
 - 1. Manager responds to error:
 - 1a. Error message indicates that there are empty field(s):
 - 1. Manager enters information into empty fields and submits form.
 - 1b. Error message indicates network connection is not working:
 - 1. GGMS displays 404 response page until connection is working.
 - 1b. Manager cancels form
 - 1. GGMS displays message asking Manager to confirm if cancelling and losing information in form is desired.
 - 1a. Manager continues cancel
 - 1. GGMS displays Manager home page.
 - 2a. Manager does not cancel
 - 1. GGMS displays Customer form with the fields completed prior to attempt at cancellation.
- 4a. GGMS does not display confirmation of Customer modification.
 - 1. GGMS signals error.
 - 2. Manager responds to error:
 - 1. Error message indicates that confirmation request could not be completed and asks if manager would like to retry request.
 - 1a. Manager retries confirmation request.
 - 1. GGMS displays result of request retry.
 - 1b. Manager cancels retry of confirmation request.

- Address confirmation response within 30 seconds 90% of the time

Technology and Data Variations List:

Frequency of Occurrence: Should not occur more than once a year if at all.

Miscellaneous:

Use Case Name: Modify Equipment

Scope: GGMS **Level**: user-goal

Primary Actor: Manager Stakeholders and Interests:

- Manager: Wants to quickly modify Equipment in GGMS Inventory

- Trainer: Wants Equipment information to be current and correct in GGMS Inventory to plan workouts

Preconditions: Manager is identified and authenticated.

Success Guarantee: Equipment was modified in GGMS Inventory.

Main Success Scenario:

- 1. include(Search Equipment)
- 2. Manager modifies information which can include name, picture, and quantity.
- 3. Manager submits Equipment form with modified information.
- 4. GGMS presents confirmation that Equipment was successfully modified.

- *a. At any time, GGMS fails:
 - 1. Manager restarts GGMS, logs in, and requests recovery of prior state.
 - 2. GGMS reconstructs prior state.
 - 2a. GGMS detects anomalies preventing recovery:
 - 1. GGMS signals error to Manager, records error, and enters clean state.
- 1a. Manager indicates to resume a suspended Equipment form
 - 1. Manager logs in and performs resume Equipment form operation.
 - 2. GGMS displays list of Equipment forms in a suspended state.
 - 2a. Manager selects Equipment form to resume (sorted by "Name").
 - 1. GGMS displays Equipment form with fields completed prior to suspending.
 - 2b. Manager removes Equipment form not to be resumed.
 - 1. GGMS displays message that selected Equipment's form was removed.
- 1b. Manager indicates to return to home.
 - 1. GGMS displays GGMS home.
- 2a. Invalid information
 - 1. GGMS signals error and rejects data entered.
 - 2. Manager responds to error:
 - 2a. Error message indicates picture is invalid:
 - 1. Manager enters picture into GGMS.

- 3a. Submission fails
 - 1a. GGMS signals error.
 - 1. Manager responds to error:
 - 1a. Error message indicates that there are empty field(s):
 - 1. Manager enters information into empty fields and submits form.
 - 1b. Error message indicates network connection is not working:
 - 1. GGMS displays 404 response page until connection is working.
 - 1b. Manager cancels form
 - 1. GGMS displays message asking Manager to confirm if cancelling and losing information in form is desired.
 - 1a. Manager continues cancel
 - 1. GGMS displays Manager home page.
 - 2a. Manager does not cancel
 - 1. GGMS displays Equipment form with the fields completed prior to attempt at cancellation.
- 4a. GGMS does not display confirmation of Equipment modification.
 - 1. GGMS signals error.
 - 2. Manager responds to error:
 - 1. Error message indicates that confirmation request could not be completed and asks if manager would like to retry request.
 - 1a. Manager retries confirmation request.
 - 1. GGMS displays result of request retry.
 - 1b. Manager cancels retry of confirmation request.

- Picture type confirmation response within 30 seconds 90% of the time

Technology and Data Variations List:

Frequency of Occurrence: Every 6 months – 1 year.

Miscellaneous:

Use Case Name: Create Exercise

Scope: GGMS Level: user-goal

Primary Actor: Trainer

Stakeholders and Interests:

Trainer: Wants to quickly enter an Exercise into GGMSCustomer: Wants all Exercises to be available in GGMS

Preconditions: Trainer is identified and authenticated. **Success Guarantee**: Exercise was entered in GGMS.

Main Success Scenario:

- 1. Trainer starts an Exercise form.
- 2. Trainer enters information which includes a name and can include Equipment, duration (in time) or number of sets and repetitions per set

- 3. Trainer submits new Exercise form with information filled in.
- 4. GGMS presents confirmation that new Exercise was added to it.

Extensions:

- *a. At any time, GGMS fails:
 - 1. Trainer restarts GGMS, logs in, and requests recovery of prior state.
 - 2. GGMS reconstructs prior state.
 - 2a. GGMS detects anomalies preventing recovery:
 - 1. GGMS signals error to Trainer, records error, and enters clean state.
 - 2. Trainer starts a new Routine form.
- 1a. Trainer indicates to resume a suspended Exercise form
 - 1. Trainer logs in and performs resume Exercise form operation.
 - 2. GGMS displays list of Exercise forms in a suspended state.
 - 2a. Trainer selects Exercise form to resume (sorted by "Name").
 - 1. GGMS displays Exercise form with fields completed prior to suspending.
 - 2b. Trainer removes Exercise form not to be resumed.
 - 1. GGMS displays message that selected Exercise's form was removed.

2a. Invalid information

- 1. GGMS signals error and rejects data entered.
- 2. Trainer responds to error:
 - 2a. Error message indicates name is invalid:
 - 1. Trainer enters name (unique) into GGMS.
 - 2b. Error message indicates Equipment is invalid:
 - 1. Trainer enters Equipment into GGMS.
 - 2c. Error message indicates duration is invalid:
 - 1. Trainer enters duration into GGMS.
 - 2d. Error message indicates number of sets or repetitions per set is invalid:
 - 1. Trainer enters value for number of sets or repetitions per set into GGMS.

3a. Submission fails

- 1a. GGMS signals error.
 - 1. Trainer responds to error:
 - 1a. Error message indicates that there are empty field(s):
 - 1. Trainer enters information into empty fields and submits form.
 - 1b. Error message indicates network connection is not working:
 - 1. GGMS displays 404 response page until connection is working.
- 1b. Trainer cancels form
 - 1. GGMS displays message asking Trainer to confirm if cancelling and losing information in form is desired.
 - 1a. Trainer continues cancel
 - 1. GGMS displays Trainer home page.
 - 1b. Trainer does not cancel
 - 1. GGMS displays Exercise form with fields completed prior to attempt at cancellation.
- 4a. GGMS does not display confirmation of Exercise creation.
 - 1. GGMS signals error.
 - 2. Trainer responds to error:

- 1. Error message indicates that confirmation request could not be completed and asks if manager would like to retry request.
 - 1a. Trainer retries confirmation request.
 - 1. GGMS displays result of request retry.
 - 1b. Trainer cancels retry of confirmation request.

- Name uniqueness confirmation response within 30 seconds 90% of the time

Technology and Data Variations List:

Frequency of Occurrence: Could be continuous at special times (start of new year, wedding season, etc.) but will mainly occur every 1-2 weeks.

Miscellaneous:

Use Case Name: Create Routine

Scope: GGMS **Level**: user-goal

Primary Actor: Trainer

Stakeholders and Interests:

Trainer: Wants to quickly enter a Routine into GGMS
 Customer: Wants all Routines to be available in GGMS
 Preconditions: Trainer is identified and authenticated.
 Success Guarantee: Routine was entered in GGMS.

Main Success Scenario:

- 1. Trainer starts a Routine form.
- 2. Trainer enters information which includes a name and a list of Exercises
- 3. Trainer submits new Routine form with information filled in.
- 4. GGMS presents confirmation that new Routine was added to it.

Extensions:

- *a. At any time, GGMS fails:
 - 1. Trainer restarts GGMS, logs in, and requests recovery of prior state.
 - 2. GGMS reconstructs prior state.
 - 2a. GGMS detects anomalies preventing recovery:
 - 1. GGMS signals error to Trainer, records error, and enters clean state.
 - 2. Trainer starts a new Routine form.
- 1a. Trainer indicates to resume a suspended Routine form
 - 1. Trainer logs in and performs resume Routine form operation.
 - 2. GGMS displays list of Routine forms in a suspended state.
 - 2a. Trainer selects Routine form to resume (sorted by "Name").
 - 1. GGMS displays Routine form with fields completed prior to suspending.
 - 2b. Trainer removes Routine form not to be resumed.
 - 1. GGMS displays message that selected new Routine's form was removed.

2a. Invalid information

- 1. GGMS signals error and rejects data entered.
- 2. Trainer responds to error:
 - 2a. Error message indicates a name is invalid:
 - 1. Trainer enters name (unique) into GGMS.
 - 2b. Error message indicates an Exercise is invalid:
 - 1. Trainer enters Exercise into GGMS.
- 3a. Submission fails
 - 1a. GGMS signals error.
 - 1. Trainer responds to error:
 - 1a. Error message indicates that there are empty field(s):
 - 1. Trainer enters information into empty fields and submits form.
 - 1b. Error message indicates network connection is not working:
 - 1. GGMS displays 404 response page until connection is working.
 - 1b. Trainer cancels form
 - 1. GGMS displays message asking Trainer to confirm if cancelling and losing information in form is desired.
 - 1a. Trainer continues cancel
 - 1. GGMS displays Trainer home page.
 - 1b. Trainer does not cancel
 - 1. GGMS displays Routine form with fields completed prior to attempt at cancellation.
- 4a. GGMS does not display confirmation of Routine modification.
 - 1. GGMS signals error.
 - 2. Trainer responds to error:
 - 1. Error message indicates that confirmation request could not be completed and asks if manager would like to retry request.
 - 1a. Trainer retries confirmation request.
 - 1. GGMS displays result of request retry.
 - 1b. Trainer cancels retry of confirmation request.

- Name uniqueness confirmation response within 30 seconds 90% of the time

Technology and Data Variations List:

Frequency of Occurrence: Could be continuous at special times (start of new year, wedding season, etc.) but will mainly occur every 1-2 weeks.

Miscellaneous:

Use Case Name: Modify Exercise

Scope: GGMS **Level**: user-goal

Primary Actor: Trainer

Stakeholders and Interests:

- Trainer: Wants to quickly modify an Exercise in GGMS

- Customer: Wants all Exercises in GGMS to be current and correct

Preconditions: Trainer is identified and authenticated.

Success Guarantee: Exercise was modified in GGMS.

Main Success Scenario:

- 1. include(Search Exercise)
- 2. Trainer modifies information which includes a name and can include Equipment, duration (in time) or number of sets and repetitions per set.
- 3. Trainer submits Exercise form with modified information.
- 4. GGMS presents confirmation that an Exercise was successfully modified.

- *a. At any time, GGMS fails:
 - 1. Trainer restarts GGMS, logs in, and requests recovery of prior state.
 - 2. GGMS reconstructs prior state.
 - 2a. GGMS detects anomalies preventing recovery:
 - 1. GGMS signals error to Trainer, records error, and enters clean state.
- 1a. Trainer indicates to resume a suspended Exercise form
 - 1. Trainer logs in and performs resume Routine form operation.
 - 2. GGMS displays list of Exercise forms in a suspended state.
 - 2a. Trainer selects Exercise form to resume (sorted by "Name").
 - 1. GGMS displays Exercise form with fields completed prior to suspending.
 - 2b. Trainer removes Exercise form not to be resumed.
 - 1. GGMS displays message that selected Exercise's form was removed.
- 1b. Trainer indicates to return to home.
 - 1. GGMS displays GGMS home.
- 2a. Invalid information
 - 1. GGMS signals error and rejects data entered.
 - 2. Trainer responds to error:
 - 2a. Error message indicates name is invalid:
 - 1. Trainer enters name (unique) into GGMS.
 - 2b. Error message indicates Equipment is invalid:
 - 1. Trainer enters Equipment into GGMS.
 - 2c. Error message indicates duration is invalid:
 - Trainer enters duration into GGMS.
 - 2d. Error message indicates number of sets or repetitions per set is invalid:
 - 1. Trainer enters value for number of sets or repetitions per set into GGMS.
- 3a. Submission fails
 - 1a. GGMS signals error.
 - 1. Trainer responds to error:
 - 1a. Error message indicates that there are empty field(s):
 - 1. Trainer enters information into empty fields and submits form.
 - 1b. Error message indicates network connection is not working:
 - 1. GGMS displays 404 response page until connection is working.
 - 1b. Trainer cancels form
 - 1. GGMS displays message asking Trainer to confirm if cancelling and losing information in form is desired.
 - 1a. Trainer continues cancel

- 1. GGMS displays Trainer home page.
- 1b. Trainer does not cancel
 - 1. GGMS displays Exercise form with fields completed prior to attempt at cancellation.
- 4a. GGMS does not display confirmation of Exercise modification.
 - 1. GGMS signals error.
 - 2. Trainer responds to error:
 - 1. Error message indicates that confirmation request could not be completed and asks if manager would like to retry request.
 - 1a. Trainer retries confirmation request.
 - 1. GGMS displays result of request retry.
 - 1b. Trainer cancels retry of confirmation request.

- Name uniqueness confirmation response within 30 seconds 90% of the time

Technology and Data Variations List:

Frequency of Occurrence: Could be continuous at special times (start of new year, wedding season, etc.) but will mainly occur every 1-2 weeks.

Miscellaneous:

Use Case Name: Modify Routine

Scope: GGMS **Level**: user-goal

Primary Actor: Trainer
Stakeholders and Interests:

- Trainer: Wants to quickly modify a Routine in GGMS

- Customer: Wants all Routines in GGMS to be current and correct

Preconditions: Trainer is identified and authenticated. **Success Guarantee:** Routine was modified in GGMS.

Main Success Scenario:

- 1. include(Search Routine)
- 2. Trainer modifies information which includes a name and list of Exercises.
- 3. Trainer submits Routine form with modified information.
- 4. GGMS presents confirmation that a Routine was successfully modified.

- *a. At any time, GGMS fails:
 - 1. Trainer restarts GGMS, logs in, and requests recovery of prior state.
 - 2. GGMS reconstructs prior state.
 - 2a. GGMS detects anomalies preventing recovery:
 - 1. GGMS signals error to Trainer, records error, and enters clean state.
- 1a. Trainer indicates to resume a suspended Routine form
 - 1. Trainer logs in and performs resume Routine form operation.
 - 2. GGMS displays list of Routine forms in a suspended state.
 - 2a. Trainer selects Routine form to resume (sorted by "Name").

- 1. GGMS displays Routine form with fields completed prior to suspending.
- 2b. Trainer removes Routine form not to be resumed.
 - 1. GGMS displays message that selected new Routine's form was removed.
- 1b. Trainer indicates to return to home.
 - 1. GGMS displays GGMS home.
- 2a. Invalid information
 - 1. GGMS signals error and rejects data entered.
 - 2. Trainer responds to error:
 - 2a. Error message indicates name is invalid:
 - 1. Trainer enters name (unique) into GGMS.
 - 2b. Error message indicates an Exercise is invalid:
 - 1. Trainer enters Exercise into GGMS.
- 3a. Submission fails
 - 1a. GGMS signals error.
 - 1. Trainer responds to error:
 - 1a. Error message indicates that there are empty field(s):
 - 1. Trainer enters information into empty fields and submits form.
 - 1b. Error message indicates network connection is not working:
 - 1. GGMS displays 404 response page until connection is working.
 - 1b. Trainer cancels form
 - 1. GGMS displays message asking Trainer to confirm if cancelling and losing information in form is desired.
 - 1a. Trainer continues cancel
 - 1. GGMS displays Trainer home page.
 - 1b. Trainer does not cancel
 - 1. GGMS displays Routine form with fields completed prior to attempt at cancellation.
- 4a. GGMS does not display confirmation of Routine modification.
 - 1. GGMS signals error.
 - 2. Trainer responds to error:
 - 1. Error message indicates that confirmation request could not be completed and asks if manager would like to retry request.
 - 1a. Trainer retries confirmation request.
 - 1. GGMS displays result of request retry.
 - 1b. Trainer cancels retry of confirmation request.

- Name uniqueness confirmation response within 30 seconds 90% of the time

Technology and Data Variations List:

Frequency of Occurrence: Could be continuous at special times (start of new year, wedding season, etc.) but will mainly occur every 1-2 weeks.

Miscellaneous:

Use Case Name: Assign Routine

Scope: GGMS

Level: user-goal

Primary Actor: Trainer

Stakeholders and Interests:

- Trainer: Wants to quickly assign one or more Routine(s) to a Customer in GGMS

- Customer: Wants all assigned Routines in GGMS to be current and correct

Preconditions: Trainer is identified and authenticated.

Success Guarantee: Routine(s) was/were assigned to a Customer in GGMS.

Main Success Scenario:

- 1. include(Search Customer)
- 2. Trainer enters Routine information ("name") into Customer's list of Routines.
- 3. GGMS presents confirmation that Routine(s) is/are assigned to a Customer.

- *a. At any time, GGMS fails:
 - 1. Trainer restarts GGMS, logs in, and requests recovery of prior state.
 - 2. GGMS reconstructs prior state.
 - 2a. GGMS detects anomalies preventing recovery:
 - 1. GGMS signals error to Trainer, records error, and enters clean state.
- 1a. Trainer indicates to return to home.
 - 1. GGMS displays GGMS home.
- 2a. Invalid information
 - 1. GGMS signals error and rejects data entered.
 - 2. Trainer responds to error:
 - 2a. Error message indicates a Routine is invalid:
 - 1. Trainer enters Routine name (unique) into GGMS.
- 3a. Submission fails
 - 1a. GGMS signals error.
 - 1. Trainer responds to error:
 - 1a. Error message indicates that there are empty fields:
 - 1. Trainer enters information into empty fields and submits form.
 - 1b. Error message indicates network connection is not working:
 - 1. GGMS displays 404 response page until connection is working.
 - 1b. Trainer exits Customer form
 - 1. GGMS displays message asking Trainer to confirm if cancelling and losing information in form is desired.
 - 1a. Trainer continues cancel
 - 1. GGMS displays Trainer home page.
 - 1b. Trainer does not cancel
 - 1. GGMS displays Customer form with the fields completed prior to attempt at cancellation.
- 4a. GGMS does not display confirmation of Routine assignment.
 - 1. GGMS signals error.
 - 2. Trainer responds to error:
 - 1. Error message indicates that confirmation request could not be completed and asks if manager would like to retry request.

- 1a. Trainer retries confirmation request.
 - 1. GGMS displays result of request retry.
- 1b. Trainer cancels retry of confirmation request.

Technology and Data Variations List:

Frequency of Occurrence: Could be continuous at special times (start of new year, wedding season, etc.) but will mainly occur every 1-2 weeks.

Miscellaneous:

Use Case Name: Search

Scope: GGMS Level: user-goal Primary Actor: User

Stakeholders and Interests:

- Manager: Wants to quickly search GGMS for a Customer, Exercise, or Routine

- Trainer: Wants to quickly search GGMS for a Trainer, Customer or Equipment

- Customer: Wants their information in GGMS to be current and correct

Preconditions: Manager/Trainer is identified and authenticated.

Success Guarantee: Search was performed in GGMS against a list. A result was

returned.

Main Success Scenario:

- 1. User starts a new Search form.
- 2. User enters a name into the Search Term field.
- 3. User submits form with the Search Term field completed.
- 4. GGMS presents Search result by displaying a name with an option to View or Edit.

- *a. At any time, GGMS fails:
 - 1. Trainer restarts GGMS, logs in, and requests recovery of prior state.
 - 2. GGMS reconstructs prior state.
 - 2a. GGMS detects anomalies preventing recovery:
 - 1. GGMS signals error to Trainer, records error, and enters clean state.
- 1a. User indicates to resume a suspended Search form
 - 1. User logs in and performs resume Search form operation.
 - 2. GGMS displays list of Search forms in a suspended state.
 - 2a. User selects Search form to resume (sorted by "Search Term").
 - 1. GGMS displays Search form with fields completed prior to suspending.
 - 2b. User removes Search form not to be resumed.
 - 1. GGMS displays message that selected new Search form was removed.
- 2a. User enters Customer name
- 2b. User enters Trainer name
- 2c. User enters Equipment name
- 2d. User enters Exercise name
- 2e. User enters Routine name.

- 2f. Invalid information
 - 1. GGMS signals error and rejects data entered.
 - 2. User responds to error:
 - 2a. Error message indicates a name is invalid:
 - 1. User enters name (unique) into GGMS.
- 3a. Submission fails
 - 1a. GGMS signals error.
 - 1. User responds to the error:
 - 1a. The error message indicates that there is no Search Term filled in:
 - 1. User enters name in Search Term field and submits Search form.
 - 1b. The error message indicates network connection is not working:
 - 1. GGMS displays 404 response page until connection is working.
 - 1b. User cancels form
 - 1. GGMS displays message asking User to confirm if cancelling and losing information in form is desired.
 - 1a. User continues cancel
 - 1. GGMS displays Trainer home page.
 - 1b. User does not cancel
 - 1. GGMS displays Search form with the field completed prior to attempt at cancellation.
- 4a. GGMS displays result as Customer name
- 4b. GGMS displays result as Trainer name
- 4c. GGMS displays result as Equipment name
- 4d. GGMS displays result as Exercise name
- 4e. GGMS displays result as Routine name
- 4f. GGMS does not display Search results.
 - 1a. GGMS signals error.
 - 1. User responds to the error:
 - 2. Error message indicates that confirmation request could not be completed and asks if User would like to retry request.
 - 1a. User retries confirmation request.
 - 1. GGMS displays result of request retry.
 - 1b. User cancels retry of confirmation request.
 - 1b. GGMS signals no results.
 - 1. Error message indicates that the search returned no results and asks if User would like to retry request.
 - 1a. User starts a new Search form.
 - 1b. User cancels retry of confirmation request.

- Search confirmation response received within 30 seconds 90% of the time

Technology and Data Variations List:

Frequency of Occurrence: Could be continuous at special times (start of new year, wedding season, etc.) but will mainly occur every 1-2 weeks.

Miscellaneous: