# Gym Model: Use Case Document

Team: Singleton

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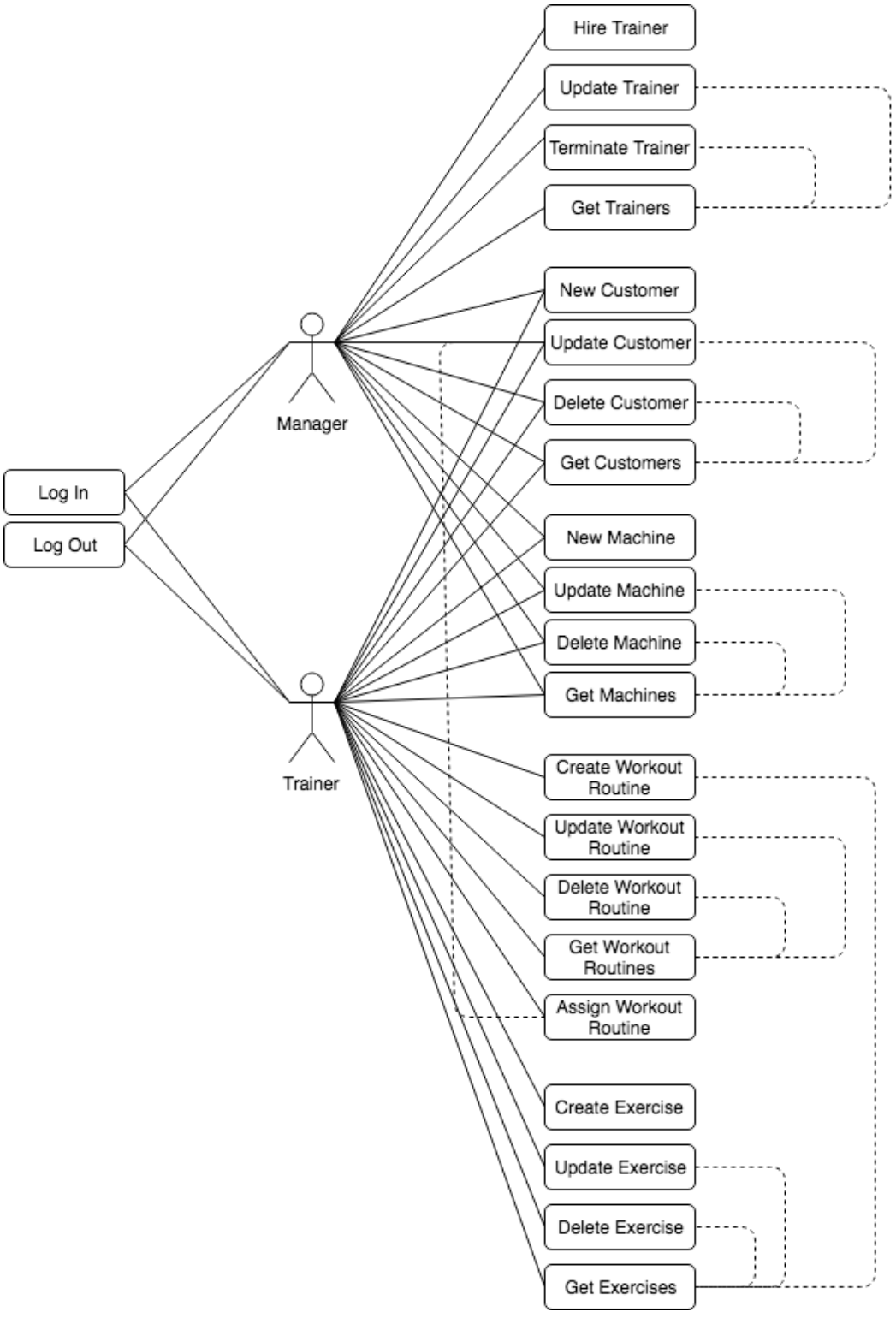
# Use case diagram



| ID | 1 |
|---|---|
| **Name of Use Case:** | Hire Trainer |
| **Description:** | When a new trainer is hired, his / her personal and work information is entered into the system.<br>Personal information includes name, last name, address, phone, email, ID, and health insurance provider.<br>Work information includes work hours and qualifications. |
| **Actors:** | Managers |
| **Preconditions:** | 1. The manager is logged into the system.<br>2. The manager has required personal and work information. |
| **Postconditions:** | The new trainer's information was successfully added to the system. |
| **Flow:** | 1. System presents the new trainer form with the required fields.<br>2. Manager enters the information in this form.<br>3. Manager submits the form.<br>4. System validates the information.<br>5. System saves the information and notifies the manager about the success of the operation. |
| **Alternative Flows:** | 4a. Invalid/incomplete information<br>4a1. System finds that the information is invalid/incomplete.<br>4a2. System notifies the manager about the error without saving any information.<br>4a3. Return to 2.<br>4b. Existing trainer<br>4b1. System finds that the trainer's information is already in the system.<br>4b2. System notifies the manager about the error without saving any information.<br>4b3. Return to 2.<br>3a. Cancel operation<br>3a1. Manager cancels the operation.<br>3a2. System asks the manager to confirm the cancelation.<br>3a3. Manager confirms.<br>3a4. System returns to main portal. |
| **Requirements:** | The following requirements must be met before execution of the use case:<br>a. The manager must have all necessary information.<br>b. The new trainer is to be hired. |

| **ID** | 2 |
|---|---|
| **Name of Use Case:** | Terminate Trainer |
| **Description:** | When a trainer is terminated, her personal and work information is removed from the system. |

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|---|---|
| **Actors:** | Managers |
| **Preconditions:** | 1. The manager is logged into the system.<br>2. The manager has the trainer's id and the trainer exists in the system. |
| **Postconditions:** | The trainer's information was successfully removed from the system. |
| **Flow:** | 1. Include (18: Get Trainers).<br>2. The manager selects a trainer to update.<br>3. The manager removes the information from the system.<br>4. System asks manager to confirm the termination.<br>5. System saves the information and notifies the actor about the success of the operation<br>6. System returns to main portal. |
| **Alternative Flows:** | 4a. Cancel Operation<br>4a1. The manager chooses to cancel the termination.<br>4a2. The manger is returned to the main portal. |
| **Requirements:** | The following requirements must be met before execution of the use case:<br>a. The trainer is terminated.<br>b. The manager must have the right information to use. |

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|---|---|
| **ID** | 3 |
| **Name of Use Case:** | Update Trainer information |
| **Description:** | When a trainer's information is updated, it is updated in the system. |
| **Actors:** | Managers |
| **Preconditions:** | 1. The manager is logged into the system.<br>2. The manager has the trainer's id. |
| **Postconditions:** | The trainer's information was successfully updated in the system. |
| **Flow:** | 1. Include (18: Get Trainers).<br>2. The manager selects a trainer to update.<br>3. The manager updates the information.<br>4. The system asks the manager to confirm the update.<br>5. System saves the information and notifies the actor about the success of the operation<br>6. The manager is returned to the main portal. |
| **Alternative Flows:** | 2a. Invalid/incomplete information<br>2a1. System finds that the information is invalid/incomplete.<br>2a2. System notifies the manager about the error without saving any information.<br>2a3. Return to 2.<br>4a. Cancel Operation<br>4a1. The manager chooses to cancel the termination.<br>4a2. The manger is returned to the main portal. |
| **Requirements:** | The following requirements must be met before execution of the use case:<br>a. The trainer has information to update.<br>b. The manager must have the right information to use. |

| ID | 4 |
|---|---|
| **Name of Use Case:** | Registration of new customer |
| **Description:** | When a customer starts a membership, her personal information is entered into the system.<br>Personal information includes name, last name, address, phone, email, ID, and health insurance provider, as well as workout routines.<br>The membership of a customer is either active or inactive. |
| **Actors:** | Trainers, Managers |
| **Preconditions:** | 1. The actor is logged into the system.<br>2. The actor has required personal information for the customer. |
| **Postconditions:** | The new customer's information was successfully added to the system and marked either active or inactive. |
| **Flow:** | 1. System presents a new customer form.<br>2. Actor enters the information in this form.<br>3. Actor submits the form.<br>4. System validates the information.<br>5. System saves the information and notifies the actor about the success of the operation.<br>6. System returns to main portal. |
| **Alternative Flows:** | 4a. Invalid/incomplete information<br>4a1. System finds that the information is invalid/incomplete.<br>4a2. System notifies the actor about the error without saving any information.<br>4a3. Return to 2.<br>4b. Existing customer<br>4b1. System finds that the customer's information is already in the system.<br>4b2. System notifies the actor about the error without saving any information.<br>4b3. Return to 2.<br>2a. Cancel operation<br>2a1. Actor cancels the operation.<br>2a2. System asks the actor to confirm the cancelation.<br>2a3. Actor confirms.<br>2a4. System returns to main portal. |
| **Requirements:** | The following requirements must be met before execution of the use case:<br>a. The customer must have all necessary information. |

| ID | 5 |
|---|---|
| **Name of Use Case:** | Update customer information |
| **Description:** | Update a customer's information, including the membership status (active or inactive). |

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| **Actors:** | Trainers, Managers |
| **Preconditions:** | 1. The actor is logged into the system.<br>2. The actor has the customer's id. |
| **Postconditions:** | The customer's information was updated. |
| **Flow:** | 1. Include (19: Get Customers).<br>2. The actor selects a customer.<br>3. The actor updates the information.<br>4. The system asks the actor to confirm the update.<br>5. System saves the information and notifies the actor about the success of the operation.<br>6. The actor is returned to the main portal. |
| **Alternative Flows:** | 3a. Invalid/incomplete information<br>3a1. System finds that the information is invalid/incomplete.<br>3a2. System notifies the actor about the error without saving any information.<br>3a3. Return to 2.<br>4a. Cancel Operation<br>4a1. The actor chooses to cancel the termination.<br>4a2. The actor is returned to the main portal. |
| **Requirements:** | The following requirements must be met before execution of the use case:<br>a. The actor must have valid information. |

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| **ID** | 6 |
| **Name of Use Case:** | Delete customer information |
| **Description:** | Delete a customer's information. |
| **Actors:** | Trainers, Managers |
| **Preconditions:** | 1. The actor is logged into the system.<br>2. The actor has the customer's id and the customer exists in the system. |
| **Postconditions:** | The customer's information was removed from the system. |
| **Flow:** | 1. Include (19: Get Customers).<br>2. The actor selects a customer.<br>3. The actor removes the information from the system.<br>4. System asks actor to confirm the termination.<br>5. System saves the information and notifies the actor about the success of the operation<br>6. System returns to main portal. |
| **Alternative Flows:** | 4a. Cancel Operation<br>4a1. The actor chooses to cancel the termination.<br>4a2. The actor is returned to the main portal. |
| **Requirements:** | The following requirements must be met before execution of the use case:<br>a. The customer wishes to be removed from the system.<br>b. The customer must exist in the system. |

| ID | 7 |
|---|---|
| **Name of Use Case:** | Add machine |
| **Description:** | Add machine and information into the system. The system records the name, a picture, and quantity. |
| **Actors:** | Trainers, Managers |
| **Preconditions:** | 1. The actor is logged into the system.<br>2. The actor has required information for the machine. |
| **Postconditions:** | The new machine was added to the system. |
| **Flow:** | 1. System presents a new machine form.<br>2. Actor enters the information in this form.<br>3. Actor submits the form.<br>4. System validates the information.<br>5. System saves the information and notifies the actor about the success of the operation.<br>6. System returns to main portal. |
| **Alternative Flows:** | 4a. Invalid/incomplete information<br>4a1. System finds that the information is invalid/incomplete.<br>4a2. System notifies the actor about the error without saving any information.<br>4a3. Return to 2.<br>4b. Existing machine<br>4b1. System finds that the machine's information is already in the system.<br>4b2. System notifies the actor about the error without saving any information.<br>4b3. Return to 2.<br>2a. Cancel operation<br>2a1. Actor cancels the operation.<br>2a2. System asks the actor to confirm the cancelation.<br>2a3. Actor confirms.<br>2a4. System returns to main portal. |
| **Requirements:** | The following requirements must be met before execution of the use case:<br>a. The actor must have all required information to enter into the system.<br>b. The machine does not already exist. |

| ID | 8 |
|---|---|
| **Name of Use Case:** | Update machine |
| **Description:** | Update machine information in the system. |
| **Actors:** | Trainers, Managers |
| **Preconditions:** | 1. The actor is logged into the system.<br>2. The actor has the machine name. |
| **Postconditions:** | The machine was updated in the system. |

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| **Flow:** | 1. Include (20: Get Machines).<br>2. The actor selects a machine.<br>3. The actor updates the information.<br>4. The system asks the actor to confirm the update.<br>5. System saves the information and notifies the actor about the success of the operation.<br>6. The actor is returned to the main portal. |
| **Alternative Flows:** | 3a. Invalid/incomplete information<br>3a1. System finds that the information is invalid/incomplete.<br>3a2. System notifies the actor about the error without saving any information.<br>3a3. Return to 2.<br>4a. Cancel Operation<br>4a1. The actor chooses to cancel the termination.<br>4a2. The actor is returned to the main portal. |
| **Requirements:** | The following requirements must be met before execution of the use case:<br>a. The machine exists in the system.<br>b. The machine has information to be updated. |

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| **ID** | 9 |
| **Name of Use Case:** | Delete machine |
| **Description:** | Delete machine information in the system. |
| **Actors:** | Trainers, Managers |
| **Preconditions:** | 1. The actor is logged into the system.<br>2. The actor has the machine name. |
| **Postconditions:** | The machine was deleted from the system. |
| **Flow:** | 1. Include (20: Get Machines).<br>2. The actor selects a machine.<br>3. The actor deletes the machine information from the system.<br>4. System asks actor to confirm the termination.<br>5. System saves the information and notifies the actor about the success of the operation<br>6. System returns to main portal. |
| **Alternative Flows:** | 4a. Cancel Operation<br>4a1. The actor chooses to cancel the deletion.<br>4a2. The actor is returned to the main portal. |
| **Requirements:** | The following requirements must be met before execution of the use case:<br>a. The machine exists in the system.<br>b. The machine is to be deleted. |

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| **ID** | 10 |
| **Name of Use Case:** | Creation of workout routine |
| **Description:** | Adds workout routine to the system. |

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| | Each routine consists of a name and series of exercises. An exercise is usually recorded with its common name, the machine that is necessary to perform it (optional), number of sets to perform, and the duration (in minutes) of each set or the number of repetitions per set. |
| **Actors:** | Trainers |
| **Preconditions:** | 1. The trainer is logged into the system.<br>2. The trainer has required information for the routine. |
| **Postconditions:** | A workout routine was added to the system. |
| **Flow:** | 1. System presents a new routine form.<br>2. Trainer enters the information in this form.<br>3. Include (15: Get Exercises)<br>4. The trainer chooses exercises to use in the routine.<br>5. Trainer submits the form.<br>6. System validates the information.<br>7. System saves the information and notifies the trainer about the success of the operation.<br>8. System returns to main portal. |
| **Alternative Flows:** | 6a. Invalid/incomplete information<br>6a1. System finds that the information is invalid/incomplete.<br>6a2. System notifies the trainer about the error without saving any information.<br>6a3. Return to 2.<br>5a. Existing machine<br>5a1. System finds that the routine already is in the system.<br>5a2. System notifies the trainer about the error without saving any information.<br>5a3. Return to 2.<br>2a. Cancel operation<br>2a1. Trainer cancels the operation.<br>2a2. System asks the trainer to confirm the cancelation.<br>2a3. Trainer confirms.<br>2a4. System returns to main portal. |
| **Requirements:** | The following requirements must be met before execution of the use case:<br>a. The trainer has all required information for the workout routine. |

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| **ID** | 11 |
| **Name of Use Case:** | Update of workout routine |
| **Description:** | Updates a workout routine in the system. |
| **Actors:** | Trainers |
| **Preconditions:** | 1. The trainer is logged into the system.<br>2. The trainer has the routine name. |
| **Postconditions:** | A workout routine was updated in the system. |
| **Flow:** | 1. Include (21: Get Workout Routines). |

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| | 2. The trainer selects a workout routine.<br>3. The trainer updates the information.<br>4. Include (15: Create Exercises)<br>5. The trainer chooses exercises to use in the workout routine.<br>6. The system asks the trainer to confirm the update.<br>7. System saves the information and notifies the trainer about the success of the operation.<br>8. The trainer is returned to the main portal. |
| **Alternative Flows:** | 3a. Invalid/incomplete information<br>3a1. System finds that the information is invalid/incomplete.<br>3a2. System notifies the trainer about the error without saving any information.<br>3a3. Return to 2.<br>6a. Cancel Operation<br>6a1. The trainer chooses to cancel the termination.<br>6a2. The trainer is returned to the main portal. |
| **Requirements:** | The following requirements must be met before execution of the use case:<br>a. The workout routine must exist in the system. |

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| **ID** | 12 |
| **Name of Use Case:** | Deletion of workout routine |
| **Description:** | Deletes a workout routine in the system. |
| **Actors:** | Trainers |
| **Preconditions:** | 1. The trainer is logged into the system.<br>2. The trainer has the routine name. |
| **Postconditions:** | A workout routine was deleted in the system. |
| **Flow:** | 1. Include (21: Get Workout Routines).<br>2. The trainer selects a workout routine.<br>3. The trainer deletes the information for the workout routine.<br>4. System asks actor to confirm the termination.<br>5. System saves the information and notifies the trainer about the success of the operation<br>6. System returns to main portal. |
| **Alternative Flows:** | 4a. Cancel Operation<br>4a1. The trainer chooses to cancel the deletion.<br>4a2. The trainer is returned to the main portal. |
| **Requirements:** | The following requirements must be met before execution of the use case:<br>a. The workout routine must exist in the system. |

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| **ID** | 13 |
| **Name of Use Case:** | Assign workout routine |
| **Description:** | Assigns a workout routine to a customer. |

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| **Actors:** | Trainers |
| **Preconditions:** | 1. The trainer is logged into the system.<br>2. The trainer has the routine name and a customer name. |
| **Postconditions:** | A workout routine was deleted in the system. |
| **Flow:** | 1. Include (14: Get Customers) for a customer.<br>2. The trainer selects a customer.<br>3. Include (20: Get Workout Routines) for a customer.<br>4. The trainer selects workout routines to add to the customer.<br>5. Include (5: Update Customer form). |
| **Alternative Flows:** | None outside of the given inclusions. |
| **Requirements:** | The following requirements must be met before execution of the use case:<br>a. The workout routine must exist in the system.<br>b. The customer must exist in the system. |

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| **ID** | 14 |
| **Name of Use Case:** | Get Customers |
| **Description:** | Gets a list of all existing customers in the system. |
| **Actors:** | Managers, Trainers |
| **Preconditions:** | 1. The actor is logged into the system.<br>2. There are customers in the system. |
| **Postconditions:** | The list of customers was presented to the actor. |
| **Flow:** | 1. The actor is presented with a lookup form.<br>2. The actor enters the information of the entity.<br>3. The system looks up the entity.<br>4. The system presents the entity information to the trainer. |
| **Alternative Flows:** | 2a. Non-existent entity<br>2a1. The actor enters a non-existent entity.<br>2a2. The system notifies that it was unable to find the entity<br>2a3. Return to 1. |
| **Requirements:** | The following requirements must be met before execution of the use case:<br>a. The entity must exist in the system. |

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| **ID** | 15 |
| **Name of Use Case:** | Create Exercise |
| **Description:** | An exercise is to be created.<br>An exercise is usually recorded with its common name, the machine that is necessary to perform it (optional), number of sets to perform, and the duration (in minutes) of each set or the number of repetitions per set. |
| **Actors:** | Trainers |
| **Preconditions:** | 1. The trainer is logged into the system. |
| **Postconditions:** | The exercise was added to the routine. |

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| **Flow:** | 1. The trainer enters the information for the exercise.<br>2. System validates the information.<br>3. The trainer saves the exercise into the workout routine. |
| **Alternative Flows:** | 2a. Invalid/incomplete information<br>2a1. System finds that the information is invalid/incomplete.<br>2a2. System notifies the trainer about the error without saving any information.<br>2a3. Return to 1. |
| **Requirements:** | The following requirements must be met before execution of the use case:<br>a. All required information is entered for the exercise. |

| **ID** | 16 |
|---|---|
| **Name of Use Case:** | Login |
| **Description:** | An actor logs in to the system. |
| **Actors:** | Managers, Trainers |
| **Preconditions:** | 1. The actor has an active account.<br>2. The actor wishes to log in to the system to perform an action. |
| **Postconditions:** | The actor logs into the system. |
| **Flow:** | 1. The actor is presented with a login form.<br>2. The actor enters their credentials into the form.<br>3. The actor is navigated to the main portal. |
| **Alternative Flows:** | 2a. Invalid Credentials<br>2a1. The actor enters invalid credentials into the form.<br>2a2. The system notifies the users that the credentials are invalid. |
| **Requirements:** | The following requirements must be met before execution of the use case:<br>a. The actor knows their credentials and account information. |

| **ID** | 17 |
|---|---|
| **Name of Use Case:** | Logout |
| **Description:** | An actor logs out of the system. |
| **Actors:** | Managers, Trainers |
| **Preconditions:** | 1. The actor has an active account.<br>2. The actor is logged in.<br>3. The actor wishes to log out of the system. |
| **Postconditions:** | The actor logs out of the system. |
| **Flow:** | 1. The actor clicks the logout button.<br>2. The actor is navigated to the main portal. |
| **Alternative Flows:** | None |
| **Requirements:** | The following requirements must be met before execution of the use case:<br>a. The actor is logged in, otherwise they cannot execute this use case. |

| ID | 18 |
|---|---|
| **Name of Use Case:** | Get Trainers |
| **Description:** | Gets a list of all existing trainers in the system. |
| **Actors:** | Managers |
| **Preconditions:** | 1. The manager is logged into the system.<br>2. There is at least 1 trainer in the system. |
| **Postconditions:** | The list of trainers was presented to the manager. |
| **Flow:** | 1. The manager clicks the “trainers” section from the main portal.<br>2. The system fetches all trainers from the system.<br>3. The system presents the trainers to the manager. |
| **Alternative Flows:** | 2a. Non-existent entity<br>2a1. The system notifies that it was unable to find any trainers.<br>2a2. Return to 1. |
| **Requirements:** | The following requirements must be met before execution of the use case:<br>a. There must be trainers in the system. |

| ID | 19 |
|---|---|
| **Name of Use Case:** | Get Customers |
| **Description:** | Gets a list of all customers in the system. |
| **Actors:** | Managers, Trainers |
| **Preconditions:** | 1. The actor is logged into the system.<br>2. There is at least 1 customer in the system. |
| **Postconditions:** | The list of customers was presented to the actor. |
| **Flow:** | 1. The actor clicks the “customers” section from the main portal.<br>2. The system fetches all customers from the system.<br>3. The system presents the customers to the actor. |
| **Alternative Flows:** | 2a. Non-existent entity<br>2a1. The system notifies that it was unable to find any customers.<br>2a2. Return to 1. |
| **Requirements:** | The following requirements must be met before execution of the use case:<br>a. There must be trainers in the system. |

| ID | 20 |
|---|---|
| **Name of Use Case:** | Get Machines |
| **Description:** | Gets a list of all existing machines in the system. |
| **Actors:** | Managers, Trainers |
| **Preconditions:** | 1. The actor is logged into the system. |

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| | 2. There are machines in the system. |
| **Postconditions:** | The list of machines was presented to the actor. |
| **Flow:** | 1. The actor clicks the “machines” section from the main portal.<br>2. The system fetches all machines from the system.<br>3. The system presents the machines to the actor. |
| **Alternative Flows:** | 2a. Non-existent entity<br>2a1. The system notifies that it was unable to find any machines.<br>2a2. Return to 1. |
| **Requirements:** | The following requirements must be met before execution of the use case:<br>a. The must be machines in the system. |

| **ID** | 21 |
|---|---|
| **Name of Use Case:** | Get Workout Routines |
| **Description:** | Gets a list of all existing workout routines in the system. |
| **Actors:** | Trainers |
| **Preconditions:** | 1. The trainer is logged into the system.<br>2. There are workout routines in the system. |
| **Postconditions:** | The list of workout routines was presented to the trainer. |
| **Flow:** | 1. The trainer clicks the “workout routines” section from the main portal.<br>2. The system fetches all workout routines from the system.<br>3. The system presents the workout routines to the trainer. |
| **Alternative Flows:** | 2a. Non-existent entity<br>2a1. The system notifies that it was unable to find any workout routines.<br>2a2. Return to 1. |
| **Requirements:** | The following requirements must be met before execution of the use case:<br>a. The must be workout routines in the system. |

| **ID** | 22 |
|---|---|
| **Name of Use Case:** | Get Exercises |
| **Description:** | Gets a list of all existing exercises in the system. |
| **Actors:** | Trainers |
| **Preconditions:** | 1. The trainer is logged into the system.<br>2. There are exercises in the system. |
| **Postconditions:** | The list of exercises was presented to the trainers. |
| **Flow:** | 1. The trainer clicks the “exercises” section from the main portal.<br>2. The system fetches all exercises from the system.<br>3. The system presents the exercises to the trainer. |
| **Alternative Flows:** | 2a. Non-existent entity<br>2a1. The system notifies that it was unable to find exercises. |

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| | 2a2. Return to 1. |
| **Requirements:** | The following requirements must be met before execution of the use case:<br>a. There must be exercises in the system. |

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| **ID** | 23 |
| **Name of Use Case:** | Update exercise |
| **Description:** | Updates an exercise in the system. |
| **Actors:** | Trainers |
| **Preconditions:** | 1. The trainer is logged into the system.<br>2. The trainer has the exercise name. |
| **Postconditions:** | An exercise was updated in the system. |
| **Flow:** | 1. Include (22: Get Exercises).<br>2. The trainer selects an exercise.<br>3. The trainer updates the information.<br>4. The system asks the trainer to confirm the update.<br>5. System saves the information and notifies the trainer about the success of the operation.<br>6. The trainer is returned to the main portal. |
| **Alternative Flows:** | 3a. Invalid/incomplete information<br>3a1. System finds that the information is invalid/incomplete.<br>3a2. System notifies the trainer about the error without saving any formation.<br>3a3. Return to 2.<br>4a. Cancel Operation<br>4a1. The trainer chooses to cancel the termination.<br>4a2. The trainer is returned to the main portal. |
| **Requirements:** | The following requirements must be met before execution of the use case:<br>a. The workout routine must exist in the system. |

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|---|---|
| **ID** | 24 |
| **Name of Use Case:** | Deletion of an exercise |
| **Description:** | Deletes an exercise in the system. |
| **Actors:** | Trainers |
| **Preconditions:** | 1. The trainer is logged into the system.<br>2. The trainer has the exercise name. |
| **Postconditions:** | An exercise was deleted in the system. |
| **Flow:** | 1. Include (21: Get Exercises).<br>2. The trainer selects an exercise.<br>3. The trainer deletes the information for the exercise.<br>4. System asks actor to confirm the termination. |

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| | 5. System saves the information and notifies the trainer about the success of the operation<br>6. System returns to main portal. |
| **Alternative Flows:** | 4a. Cancel Operation<br>4a1. The trainer chooses to cancel the deletion.<br>4a2. The trainer is returned to the main portal. |
| **Requirements:** | The following requirements must be met before execution of the use case:<br>b. The workout routine must exist in the system. |

REVISED 2. OCT 2018