Use Case Document

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# Use Case Descriptions

## UC1: Hire a Trainer

|  |  |  |
| --- | --- | --- |
| Use Case id: | 1 | |
| Use Case Name: | UC1: Hire a Trainer | |
| Overview: | Hiring a new trainer at the gym | |
| Type: | Primary | |
| Actors: | Manager | |
| Properties: | Performance: |  |
| Security: |  |
| Other: |  |
| Pre-Conditions: | * Manager is logged into the system. * Trainer is not already in the system. | |
| Flow: | Main Flow: | 1. Manager accesses a user interface to allows them to add a trainer 2. Manager enters the necessary information about the trainer 3. Manager attempts to save the information about the trainer in the system 4. Include UC7: Add System User |
| Sub Flow: |  |
| Alternate Flow: | 1. Trainer already exists within the system    1. Manager accesses a user interface to allows them to add a trainer    2. Manager enters the necessary information about the trainer    3. Manager attempts to save the information about the trainer in the system    4. System notifies the manager that the trainer already exists within the system and the information is not saved 2. At any time, system fails    1. Manager accesses a user interface to allows them to add a trainer    2. If the system fails while the manager is entering the necessary information, none of the information will be saved and manager is notified of failure.    3. Manager must log into the system again before re-entering all the information |
| Post-Conditions: | Trainer is added to the system with the provided information. | |
| Cross References: | Include UC7: Add System User | |

## UC2: Register a Customer

|  |  |  |
| --- | --- | --- |
| Use Case id: | 2 | |
| Use Case Name: | UC2: Register a Customer | |
| Overview: | Registering a new customer at the gym | |
| Type: | Primary | |
| Actors: | Manager, Trainer | |
| Properties: | Performance: |  |
| Security: |  |
| Other: |  |
| Pre-Conditions: | * User is logged into the system. * Customer is not already in the system. | |
| Flow: | Main Flow: | 1. User accesses a user interface that allows them to register a new customer 2. User enters the necessary information about the customer 3. User attempts to save the information in the system |
| Sub Flow: |  |
| Alternate Flow: | 1. Customer already exists within the system    1. User accesses a user interface to allows them to register a new customer    2. User enters the necessary information about the customer    3. User attempts to save the information about the customer in the system    4. System notifies the user that the customer already exists within the system and the information is not saved 2. At any time, system fails    1. User accesses a user interface to allows them to register a new customer    2. If the system fails while the user is entering the necessary information, none of the information will be saved and the user is notified of failure.    3. User must log into the system again before re-entering all the information. |
| Post-Conditions: | Customer is added to the system with provided information. | |
| Cross References: |  | |

## UC3: Add Inventory of Equipment

|  |  |  |
| --- | --- | --- |
| Use Case id: | 3 | |
| Use Case Name: | UC3: Add Inventory of Equipment | |
| Overview: | Add equipment to the inventory of the gym | |
| Type: | Primary | |
| Actors: | Manager, Trainer | |
| Properties: | Performance: |  |
| Security: |  |
| Other: |  |
| Pre-Conditions: | * User is logged into the system. * Equipment is not already in the system. | |
| Flow: | Main Flow: | 1. User accesses a user interface that allows them to add equipment to the inventory 2. User enters the necessary information about the equipment 3. User attempts to save the information about the equipment in the system |
| Sub Flow: |  |
| Alternate Flow: | 1. Trainer already exists within the system    1. User accesses a user interface to allows them to add equipment to the inventory    2. User enters the necessary information about the equipment    3. User attempts to save the information about the equipment in the system    4. System notifies the user that the equipment already exists within the system and the information is not saved 2. At any time, system fails    1. User accesses a user interface to allows them to add equipment    2. If the system fails while the user is entering the necessary information, none of the information will be saved and the user is notified of failure.    3. User must log into the system again before re-entering all the information |
| Post-Conditions: | Equipment is added to the inventory to the system with the provided information. | |
| Cross References: |  | |

## UC4: Modify Trainer Information

|  |  |  |
| --- | --- | --- |
| Use Case id: | 4 | |
| Use Case Name: | UC4: Modify Trainer Information | |
| Overview: | Modifying information about a trainer working at the gym | |
| Type: | Primary | |
| Actors: | Manager | |
| Properties: | Performance: |  |
| Security: |  |
| Other: |  |
| Pre-Conditions: | * Manager is logged into the system. * Trainer is already in the system. | |
| Flow: | Main Flow: | 1. Include UC8: Search for Trainer 2. Manager modifies information about the trainer 3. Manager saves the modified information in the system |
| Sub Flow: |  |
| Alternate Flow: | 1. At any time, system fails    1. Include UC8: Search for Trainer    2. If the system fails while the manager is modifying the information, none of the changed information will be saved and the manager is notified of failure.    3. Manager must log into the system again before re-entering all the information |
| Post-Conditions: | Trainer information is updated in the system. | |
| Cross References: | UC8: Search for Trainer | |

## UC5: Modify Customer Information

|  |  |  |
| --- | --- | --- |
| Use Case id: | 5 | |
| Use Case Name: | UC5: Modify Customer Information | |
| Overview: | Modifying information about a customer registered at the gym | |
| Type: | Primary | |
| Actors: | Manager, Trainer | |
| Properties: | Performance: |  |
| Security: |  |
| Other: |  |
| Pre-Conditions: | * User is logged into the system. * Customer is already in the system. | |
| Flow: | Main Flow: | 1. Include UC9: Search for Customer 2. User modifies information about the customer 3. User saves the modified information in the system |
| Sub Flow: |  |
| Alternate Flow: | 1. At any time, system fails    1. Include UC9: Search for Customer    2. If the system fails while the user is entering the necessary information, none of the information will be saved and the user is notified of failure    3. User must log into the system again before re-entering all the information |
| Post-Conditions: | Customer information is updated in the system. | |
| Cross References: | UC9: Search for Customer | |

## UC6: Modify Equipment Information

|  |  |  |
| --- | --- | --- |
| Use Case id: | 6 | |
| Use Case Name: | UC6: Modify Equipment Information | |
| Overview: | Modifying information about equipment inventoried at the gym | |
| Type: | Primary | |
| Actors: | Manager, Trainer | |
| Properties: | Performance: |  |
| Security: |  |
| Other: |  |
| Pre-Conditions: | * User is logged into the system. * Equipment is already in the system. | |
| Flow: | Main Flow: | 1. Include UC10: Search for Equipment 2. User modifies information about the equipment 3. User saves the modified information in the system |
| Sub Flow: |  |
| Alternate Flow: | 1. At any time, system fails    1. Include UC10: Search for Equipment    2. If the system fails while the user is entering the necessary information, none of the information will be saved and the user is notified of failure    3. User must log into the system again before re-entering all the information |
| Post-Conditions: | Equipment information is updated in the system. | |
| Cross References: | UC10: Search for Equipment | |

## UC7: Add System User

|  |  |  |
| --- | --- | --- |
| Use Case id: | 7 | |
| Use Case Name: | UC7: Add System User | |
| Overview: | Adding a user to the system as a manager or trainer | |
| Type: | Primary | |
| Actors: | Manager | |
| Properties: | Performance: |  |
| Security: |  |
| Other: |  |
| Pre-Conditions: | * Manager is logged into the system. | |
| Flow: | Main Flow: | 1. Manager enter credentials for the user to login to the system 2. Manager specifies the user as a manager or a trainer 3. Manager saves the user to the system 4. The user can now login to the system using the provided credentials. 5. Manager must log into the system again |
| Sub Flow: |  |
| Alternate Flow: | 1. At any time, system fails    1. If the system fails while the manager is entering the information, none of the information will be saved and user will not be added to the system.    2. The manager is notified of failure.    3. Manager must log into the system again before re-entering the information |
| Post-Conditions: | User is added to the system. | |
| Cross References: |  | |

## UC8: Search for Trainer

|  |  |  |
| --- | --- | --- |
| Use Case id: | 8 | |
| Use Case Name: | UC8: Search for Trainer | |
| Overview: | Searching for a trainer in the system | |
| Type: | Primary | |
| Actors: | Manager | |
| Properties: | Performance: |  |
| Security: |  |
| Other: |  |
| Pre-Conditions: | * Manager is logged into the system. | |
| Flow: | Main Flow: | 1. Manager specifies the trainer to be searched 2. Manager receives information about the trainer if the trainer is in the system |
| Sub Flow: |  |
| Alternate Flow: | 1. Extends U1: Hire a Trainer    1. If the trainer is not in the system, the user interface is provided to add a trainer to the system. 2. At any time, system fails    1. Manager must log into the system again |
| Post-Conditions: | Trainer information is provided. | |
| Cross References: | U1: Hire a Trainer | |

## UC9: Search for Customer

|  |  |  |
| --- | --- | --- |
| Use Case id: | 9 | |
| Use Case Name: | UC9: Search for Customer | |
| Overview: | Searching for a customer in the system | |
| Type: | Primary | |
| Actors: | Manager, Trainer | |
| Properties: | Performance: |  |
| Security: |  |
| Other: |  |
| Pre-Conditions: | * User is logged into the system. | |
| Flow: | Main Flow: | 1. User specifies the customer to be searched 2. User receives information about the customer if the customer is in the system |
| Sub Flow: |  |
| Alternate Flow: | 1. Extends U2: Register a new customer    1. If the customer is not in the system, the user interface is provided to add a customer to the system. 2. At any time, system fails    1. User must log into the system again |
| Post-Conditions: | Customer information is provided. | |
| Cross References: | U2: Register a new customer | |

## UC10: Search for Equipment

|  |  |  |
| --- | --- | --- |
| Use Case id: | 10 | |
| Use Case Name: | UC10: Search for Equipment | |
| Overview: | Searching for equipment in the system | |
| Type: | Primary | |
| Actors: | Manager, Trainer | |
| Properties: | Performance: |  |
| Security: |  |
| Other: |  |
| Pre-Conditions: | * User is logged into the system. | |
| Flow: | Main Flow: | 1. User specifies the equipment to be searched 2. User receives information about the equipment if the equipment is in the system |
| Sub Flow: |  |
| Alternate Flow: | 1. Extends UC3: Add inventory of equipment    1. If the equipment is not in the system, the user interface is provided to add equipment to the system. 2. At any time, system fails    1. Manager must log into the system again |
| Post-Conditions: | Equipment information is provided. | |
| Cross References: | UC3: Add inventory of equipment | |

## UC11: Login to System

|  |  |  |
| --- | --- | --- |
| Use Case id: | 11 | |
| Use Case Name: | UC11: Login to System | |
| Overview: | Login to system as a user | |
| Type: | Primary | |
| Actors: | Manager, Trainer | |
| Properties: | Performance: |  |
| Security: |  |
| Other: |  |
| Pre-Conditions: | * User must already exist in the system. | |
| Flow: | Main Flow: | 1. User interacts with user interface to login to system 2. User attempts to log in using credentials 3. System uses authentication service to verify the user’s credentials 4. User has access to system with privileges specified for the user type (manager or trainer) |
| Sub Flow: |  |
| Alternate Flow: | 1. User is not in the system    1. User interacts with user interface to login to system    2. User attempts to log in using credentials    3. System uses authentication service to verify the user’s credentials    4. System notifies the user that the credentials for incorrect 2. At any time, system fails    1. User must enter their credentials to log into the system again |
| Post-Conditions: | User is logged into to the system | |
| Cross References: |  | |

## UC12: Create a Workout Routine

|  |  |  |
| --- | --- | --- |
| Use Case id: | 12 | |
| Use Case Name: | UC12: Create a Workout Routine | |
| Overview: | Create a new workout routine for the use of trainers & customers. | |
| Type: | Primary | |
| Actors: | Trainer | |
| Properties: | Performance: |  |
| Security: |  |
| Other: |  |
| Pre-Conditions: | * Trainer is logged into the system * Workout routine is not already in the system | |
| Flow: | Main Flow: | 1. Trainer interacts with user interface to create a new workout routine. 2. Trainer enters in the required information for creating a new workout routine. 3. System attempts to save the workout in the system. |
| Sub Flow: |  |
| Alternate Flow: | 1. Workout routine already exists within the system    1. Trainer interacts with user interface to create a new workout routine.    2. Trainer enters in the required information for creating a new workout routine.    3. System attempts to save the workout in the system.    4. System notifies the trainer that the workout routine already exists within the system and the information is not saved. 2. At any time, system fails    1. Trainer interacts with user interface to create a new workout routine.    2. If the system fails while the trainer is entering the necessary information, none of the information will be saved and the trainer is notified of failure.    3. Trainer must log into the system again before re-entering all the information. |
| Post-Conditions: | The new workout routine has been created in the system. | |
| Cross References: |  | |

## UC13: Assign a Workout Routine

|  |  |  |
| --- | --- | --- |
| Use Case id: | 13 | |
| Use Case Name: | UC13: Assign a Workout Routine | |
| Overview: | Assign a workout routine to a customer | |
| Type: | Primary | |
| Actors: | Trainer | |
| Properties: | Performance: |  |
| Security: |  |
| Other: |  |
| Pre-Conditions: | * The system has a valid customer and a valid workout routine. * Trainer is logged into the system | |
| Flow: | Main Flow: | 1. Include UC9: Search for a Customer 2. Extends UC5: Modify Customer Information 3. Assigns a workout routine to the customer’s information. 4. Trainer saves the customer's updated information that includes the assigned workout routine. |
| Sub Flow: |  |
| Alternate Flow: | 1. If the system is unable to assign the routine to the customer’s record,    1. The customer’s information does not change and the system notifies the trainer of the failure. 2. If at any time the system fails    1. Trainer must log into the system again. |
| Post-Conditions: | Customer’s record contains the newly assigned workout routine. | |
| Cross References: | UC9: Search for a Customer  UC5: Modify Customer Information | |

## UC14: Search for a Workout Routine

|  |  |  |
| --- | --- | --- |
| Use Case id: | 14 | |
| Use Case Name: | UC14: Search for a Workout Routine | |
| Overview: | Searching for a workout routine in the system | |
| Type: | Primary | |
| Actors: | Trainer | |
| Properties: | Performance: |  |
| Security: |  |
| Other: |  |
| Pre-Conditions: | * Trainer is logged into the system | |
| Flow: | Main Flow: | 1. The trainer specifies the workout routine to be searched 2. The trainer receives information about workout routine if the routine exists in the system. |
| Sub Flow: |  |
| Alternate Flow: | 1. Extends UC12: Create a New Routine    1. If the workout routine does not exist in the system, the user interface is provided to create a new workout routine. 2. If at any time the system fails    1. Trainer must log into the system again. |
| Post-Conditions: | Workout routine information is provided. | |
| Cross References: | UC12: Create a New Routine | |

## UC15: Modify a Workout Routine

|  |  |  |
| --- | --- | --- |
| Use Case id: | 15 | |
| Use Case Name: | UC15: Modify a workout routine | |
| Overview: | Modify a workout routines information | |
| Type: | Primary | |
| Actors: | Trainer | |
| Properties: | Performance: |  |
| Security: |  |
| Other: |  |
| Pre-Conditions: | * Workout routine is already in system * Trainer is logged into the system | |
| Flow: | Main Flow: | 1. Include UC14: Search for Workout Routine 2. Trainer modifies the information about the routine 3. The trainer saves the modified information in the system |
| Sub Flow: |  |
| Alternate Flow: | 1. At any time, system fails    1. Include UC14: Search for Workout Routine    2. If the system fails while the trainer is entering the necessary information, none of the information will be saved and the trainer is notified of failure    3. Trainer must log into the system again before re-entering all the information |
| Post-Conditions: | Workout routine has been updated with the new information. | |
| Cross References: | UC14: Search for a Workout Routine | |

## UC16: Unassign a Workout Routine

|  |  |  |
| --- | --- | --- |
| Use Case id: | 16 | |
| Use Case Name: | UC16: Unassign a Workout Routine | |
| Overview: | Routine is unassigned from a customer | |
| Type: | Primary | |
| Actors: | Trainer | |
| Properties: | Performance: |  |
| Security: |  |
| Other: |  |
| Pre-Conditions: | * Customer and Workout routine are already in system * Trainer is logged into the system | |
| Flow: | Main Flow: | 1. Include UC9: Search for Customer 2. Extends UC5: Modify Customer Information 3. Removes a workout routine from the customer’s information. 4. Trainer saves the customer's updated information that does not include the unassigned workout routine. |
| Sub Flow: |  |
| Alternate Flow: | 1. If the system is unable to assign the routine to the customer’s record,    1. The customer’s information does not change and the system notifies the trainer of the failure. 2. If at any time the system fails    1. Trainer must log into the system again. |
| Post-Conditions: | Customer’s record no longer contains previously assigned workout routine. | |
| Cross References: | UC9: Search for a Customer  UC5: Modify Customer Information | |

## UC17: Hire a Manager

|  |  |  |
| --- | --- | --- |
| Use Case id: | 17 | |
| Use Case Name: | UC17: Hire a Manager | |
| Overview: | Hiring a new manager at the gym | |
| Type: | Primary | |
| Actors: | Manager | |
| Properties: | Performance: |  |
| Security: |  |
| Other: |  |
| Pre-Conditions: | * Manager is logged into the system. * New manager is not already in the system. | |
| Flow: | Main Flow: | 1. Manager accesses a user interface to allows them to add a new manager 2. Manager enters the necessary information about the new manager 3. Manager attempts to save the information about the new manager in the system 4. Include UC7: Add System User |
| Sub Flow: |  |
| Alternate Flow: | 1. Manager already exists within the system    1. Manager accesses a user interface to allows them to add a new manager    2. Manager enters the necessary information about the new manager    3. Manager attempts to save the information about the new manager in the system    4. System notifies the manager that the new manager already exists within the system and the information is not saved 2. At any time, system fails    1. Manager accesses a user interface to allows them to add a new manager    2. If the system fails while the manager is entering the necessary information, none of the information will be saved.    3. Manager must log into the system again before re-entering all the information |
| Post-Conditions: | New manager is added to the system with the provided information. | |
| Cross References: | Include UC7: Add System User | |

## UC18: Modify Manager Information

|  |  |  |
| --- | --- | --- |
| Use Case id: | 18 | |
| Use Case Name: | UC18: Modify Manager Information | |
| Overview: | Modifying information about a manager working at the gym | |
| Type: | Primary | |
| Actors: | Manager | |
| Properties: | Performance: |  |
| Security: |  |
| Other: |  |
| Pre-Conditions: | * Manager is logged into the system. * Manager to be searched is already in the system. | |
| Flow: | Main Flow: | 1. Include UC19: Search for Manager 2. Manager modifies information about the searched manager 3. Manager saves the modified information in the system |
| Sub Flow: |  |
| Alternate Flow: | 1. At any time, system fails    1. Include UC19: Search for Manager    2. If the system fails while the manager is modifying the information, none of the changed information will be saved    3. Manager must log into the system again before re-entering all the information |
| Post-Conditions: | Manager information is updated in the system. | |
| Cross References: | UC19: Search for Manager | |

## UC19: Search for Manager

|  |  |  |
| --- | --- | --- |
| Use Case id: | 19 | |
| Use Case Name: | UC19: Search for Manager | |
| Overview: | Searching for a manager in the system | |
| Type: | Primary | |
| Actors: | Manager | |
| Properties: | Performance: |  |
| Security: |  |
| Other: |  |
| Pre-Conditions: | * Manager is logged into the system. | |
| Flow: | Main Flow: | 1. Manager specifies the manager to be searched 2. Manager receives information about the manager if the manager is in the system |
| Sub Flow: |  |
| Alternate Flow: | 1. Extends UC17: Hire a Manager    1. If the manager is not in the system, the user interface is provided to add a manager to the system. 2. At any time, system fails    1. Manager must log into the system again |
| Post-Conditions: | Manager information is provided. | |
| Cross References: | UC17: Hire a Manager | |

# Use Case Diagrams



