Use Case Document

Team CtrlAltDefeat - Brittany Nall & Melissa Smith

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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 the add trainer section 2. System displays the add trainer form, which contains the fields: first name, last name, personal information 3. Manager fills in the fields with the trainer information and submits the form 4. System validates the information 5. Include UC7: Add System User |
| Sub Flow: |  |
| Alternate Flow: | 3a. Manager cancels the addition  3a1. System does not save any information  3a2. End use case  4a. Trainer already exists in the system  4a1. System notifies the manager that the trainer already exists in the system  4a2. Return to 2  4b. Any field is invalid  4b1. System points out the invalid fields in the form  4b2. Return to 2  \* At any time system fails  \*1 System does not save any information  \*2 System notifies the manager about the failure |
| 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 the register new customer section 2. System displays the new customer form, which contains the fields: first name, last name, personal information 3. User fills in the fields with the customer information and submits the form 4. System validates the information |
| Sub Flow: |  |
| Alternate Flow: | 3a. User cancels the addition  3a1. System does not save any information  3a2. End use case  4a. Customer already exists in the system  4a1. System notifies the user that the customer already exists in the system  4a2. Return to 2  4b. Any field is invalid  4b1. System points out the invalid fields in the form  4b2. Return to 2  \* At any time system fails  \*1 System does not save any information  \*2 System notifies the user about the failure |
| 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 the add equipment section 2. System displays the new equipment form, which contains the fields: name, quantity, picture 3. User fills in the fields with the equipment information and submits the form 4. System validates the information |
| Sub Flow: |  |
| Alternate Flow: | 3a. User cancels the addition  3a1. System does not save any information  3a2. End use case  4a. Equipment already exists in the system  4a1. System notifies the user that the equipment already exists in the system  4a2. Return to 2  4b. Any field is invalid  4b1. System points out the invalid fields in the form  4b2. Return to 2  \* At any time system fails  \*1 System does not save any information  \*2 System notifies the user about the failure |
| 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 the fields of the trainer information and submits the form 3. System validates the information 4. System notifies the Manager that the modified information was saved successfully |
| Sub Flow: |  |
| Alternate Flow: | 2a. Manager cancels the modification  2a1. System does not save any modified information  2a2. End use case  3a. Any field is invalid  3a1. System points out the invalid fields in the form  3a2. Return to 1  \* At any time system fails  \*1 System does not save any information  \*2 System notifies the manager about the failure |
| 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 the fields of the customer information and submits the form 3. System validates the information 4. System notifies the User that the modified information was saved successfully |
| Sub Flow: |  |
| Alternate Flow: | 2a. User cancels the modification  2a1. System does not save any modified information  2a2. End use case  3a. Any field is invalid  3a1. System points out the invalid fields in the form  3a2. Return to 1  \* At any time system fails  \*1 System does not save any information  \*2 System notifies the user about the failure |
| 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 the fields of the equipment information and submits the form 3. System validates the information 4. System notifies the User that the modified information was saved successfully |
| Sub Flow: |  |
| Alternate Flow: | 2a. User cancels the modification  2a1. System does not save any modified information  2a2. End use case  3a. Any field is invalid  3a1. System points out the invalid fields in the form  3a2. Return to 1  \* At any time system fails  \*1 System does not save any information  \*2 System notifies the user about the failure |
| 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. |
| Sub Flow: |  |
| Alternate Flow: | \* At any time system fails  \*1 System does not save any information  \*2 System notifies the manager about the failure |
| 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. System displays information about the Trainer |
| Sub Flow: |  |
| Alternate Flow: | 1a. Trainer does not exist in the system  1a1. Extends U1: Hire a Trainer  \* At any time system fails  \*1 System notifies the manager about the failure |
| 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. System displays information about the Customer |
| Sub Flow: |  |
| Alternate Flow: | 1a. Trainer does not exist in the system  1a1. Extends U2: Register a new customer  \* At any time system fails  \*1 System notifies the manager about the failure |
| 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. System displays information about the Equipment |
| Sub Flow: |  |
| Alternate Flow: | 1a. Trainer does not exist in the system  1a1. Extends UC3: Add inventory of equipment  \* At any time system fails  \*1 System notifies the manager about the failure |
| 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 accesses the login section 2. System displays login form, which contains the fields: username, password 3. User fills in the fields and attempts to log in using credentials 4. System uses authentication service to verify the user’s credentials 5. User has access to system with privileges specified for the user type (manager or trainer) |
| Sub Flow: |  |
| Alternate Flow: | 4a. Authentication service reports failure  3a1. System notifies the user that the credentials were unsuccessful  3a2. Return to 2  \* At any time system fails  \*1 System notifies the user about the failure |
| 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 accesses the create a workout routine section 2. System displays the new workout routine form, which contains the fields: exercise, duration, number of sets 3. User fills in the fields with the workout routine information and submits the form 4. System validates the information |
| Sub Flow: |  |
| Alternate Flow: | 3a. Trainer cancels the addition  3a1. System does not save any information  3a2. End use case  4a. Workout Routine already exists in the system  4a1. System notifies the trainer that the workout routine already exists in the system  4a2. Return to 2  4b. Any field is invalid  4b1. System points out the invalid fields in the form  4b2. Return to 2  \* At any time system fails  \*1 System does not save any information  \*2 System notifies the trainer about the failure |
| 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 and submits form. 4. System notifies the Trainer that the workout routine was assigned to the customer successfully |
| Sub Flow: |  |
| Alternate Flow: | 3a. Workout Routine does not exist in the system  3a1. Extends UC12: Create a New Routine  \* At any time system fails  \*1 System does not save any information  \*2 System notifies the manager about the failure |
| 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. Trainer specifies the workout routine to be searched 2. System displays information about the Workout Routine |
| Sub Flow: |  |
| Alternate Flow: | 1a. Trainer does not exist in the system  1a1. Extends UC12: Create a New Routine  \* At any time system fails  \*1 System notifies the manager about the failure |
| 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 fields of the workout routine information and submits the form 3. System validates the information 4. System notifies the Trainer that the modified information was saved successfully |
| Sub Flow: |  |
| Alternate Flow: | 2a. Trainer cancels the modification  2a1. System does not save any modified information  2a2. End use case  3a. Any field is invalid  3a1. System points out the invalid fields in the form  3a2. Return to 1  \* At any time system fails  \*1 System does not save any information  \*2 System notifies the Trainer about the failure |
| 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. Trainer removes a workout routine from the customer’s information and submits the form. 4. System notifies the Trainer that the workout routine was unassigned from the customer successfully |
| Sub Flow: |  |
| Alternate Flow: | 3a. Trainer cancels the unassignment  3a1. System does not remove the workout routine from the customer’s information  3a2. End use case  \* At any time system fails  \*1 System does not save any information  \*2 System notifies the Trainer about the failure |
| 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 the add manager section 2. System displays the new manager form, which contains the fields: first name, last name, personal information 3. Manager fills in the fields with the manager’s information and submits the form 4. System validates the information 5. Include UC7: Add System User |
| Sub Flow: |  |
| Alternate Flow: | 3a. Manager cancels the addition  3a1. System does not save any information  3a2. End use case  4a. Manager already exists in the system  4a1. System notifies the manager that the new manager already exists in the system  4a2. Return to 2  4b. Any field is invalid  4b1. System points out the invalid fields in the form  4b2. Return to 2  \* At any time system fails  \*1 System does not save any information  \*2 System notifies the manager about the failure |
| 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 the fields of the manager’s information and submits the form 3. System validates the information 4. System notifies the Manager that the modified information was saved successfully |
| Sub Flow: |  |
| Alternate Flow: | 2a. Manager cancels the modification  2a1. System does not save any modified information  2a2. End use case  3a. Any field is invalid  3a1. System points out the invalid fields in the form  3a2. Return to 1  \* At any time system fails  \*1 System does not save any information  \*2 System notifies the manager about the failure |
| 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. System displays information about the manager |
| Sub Flow: |  |
| Alternate Flow: | 1a. Manager does not exist in the system  1a1. Extends UC17: Hire a Manager  \* At any time system fails  \*1 System notifies the manager about the failure |
| Post-Conditions: | Manager information is provided. | |
| Cross References: | UC17: Hire a Manager | |

# Use Case Diagrams



