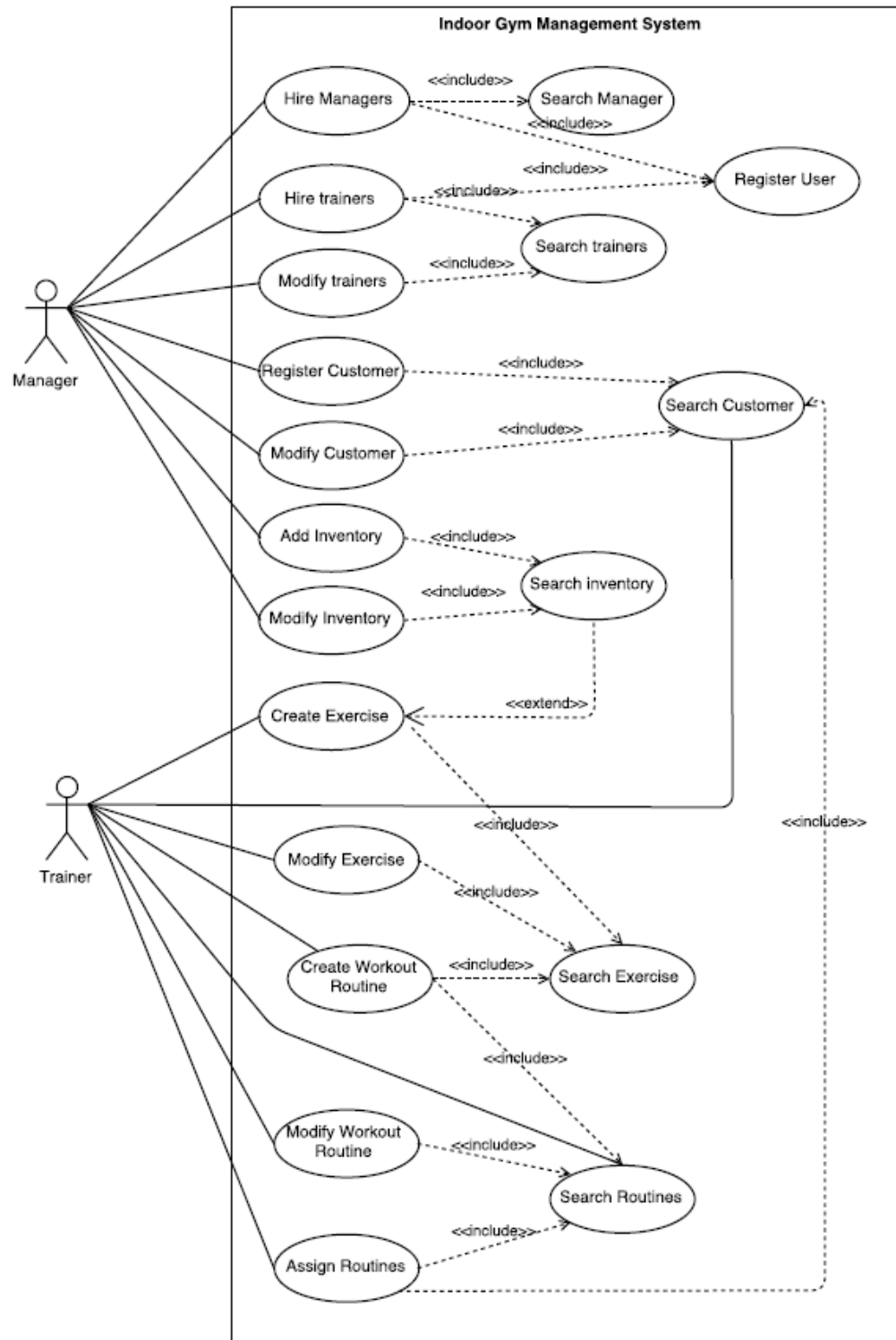


## USE CASE DOCUMENT

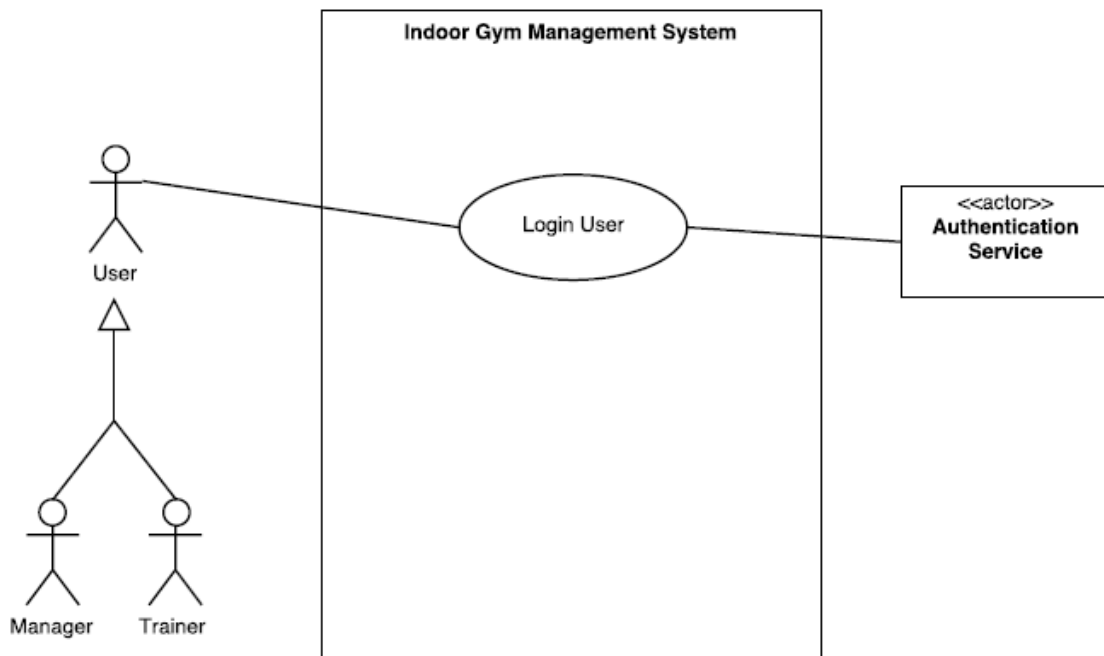
### Contents

Indoor Gym Management System Use Case Diagram .....	2
Indoor Gym Management System Authentication Diagram .....	3
Indoor Gym Management System Use Case Descriptions .....	3

## Indoor Gym Management System Use Case Diagram



## Indoor Gym Management System Authentication Diagram



## Indoor Gym Management System Use Case Descriptions

<b>Use Case Name</b>	UC1: Hire Trainers
<b>Scope</b>	Indoor Gym Management System
<b>Level</b>	User goal
<b>Primary Actor</b>	Manager
<b>Stakeholders and Interests</b>	Manager: Wants employees for the gym Trainer: Wants employment at the gym
<b>Preconditions</b>	User logged into gym system.
<b>Success Guarantee</b>	Trainer is employed at the gym.

<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. Include (UC5: Search Trainers)</li> <li>2. If trainer is not found, manager enters trainer into the system.</li> <li>3. Include(UC18: Register User)</li> </ol>
<b>Extensions</b>	None

<b>Use Case Name</b>	UC2: Register Customer
<b>Scope</b>	Indoor Gym Management System
<b>Level</b>	User goal
<b>Primary Actor</b>	Manager
<b>Stakeholders and Interests</b>	Manager: Wants customers for the gym. Trainers: Wants customers for the gym.
<b>Preconditions</b>	User logged into gym system.
<b>Success Guarantee</b>	Customer is added to gym system.
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. Include (UC7: Search Customers)</li> <li>2. If customer is not found, add in customer information into gym system.</li> </ol>
<b>Extensions</b>	None

<b>Use Case Name</b>	UC3: Add Inventory
<b>Scope</b>	Indoor Gym Management System
<b>Level</b>	User goal
<b>Primary Actor</b>	Manager
<b>Stakeholders and Interests</b>	Manager: Wants equipment inventory for the gym. Trainers: Wants equipment inventory for the gym.
<b>Preconditions</b>	User logged into gym system.

<b>Success Guarantee</b>	Equipment is added to inventory.
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. Include (UC9: Search Inventory)</li> <li>2. If equipment does not exist, add equipment into gym system.</li> </ol>
<b>Extensions</b>	None

<b>Use Case Name</b>	UC5: Search Trainers
<b>Scope</b>	Indoor Gym Management System
<b>Level</b>	User goal
<b>Primary Actor</b>	Manager
<b>Stakeholders and Interests</b>	Manager: Wants to get trainer information.
<b>Preconditions</b>	User logged into gym system.
<b>Success Guarantee</b>	Trainer information is returned.
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. Check gym system for a specific trainer.</li> <li>2. If trainer exists, return the trainer's information.</li> </ol>
<b>Extensions</b>	<ol style="list-style-type: none"> <li>1. Extends (UC1: Hire Trainers) <ol style="list-style-type: none"> <li>a. If trainer does not exist, provide the option to add the trainer.</li> </ol> </li> </ol>

<b>Use Case Name</b>	UC6: Modify Customers
<b>Scope</b>	Indoor Gym Management System
<b>Level</b>	User goal
<b>Primary Actor</b>	Manager
<b>Stakeholders and Interests</b>	Manager: Wants correct customer information. Trainers: Want correct customer information.

<b>Preconditions</b>	User logged into gym system. Customer must exist in gym system.
<b>Success Guarantee</b>	Customer information is updated.
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. Include (UC7: Search Customers)</li> <li>2. Update the customer information</li> <li>3. Put updated information back into the gym system.</li> </ol>
<b>Extensions</b>	None

<b>Use Case Name</b>	UC7: Search Customers
<b>Scope</b>	Indoor Gym Management System
<b>Level</b>	User goal
<b>Primary Actor</b>	Manager, Trainer
<b>Stakeholders and Interests</b>	Manager: Wants to get customer information. Trainers: Want to get customer information.
<b>Preconditions</b>	User logged into gym system.
<b>Success Guarantee</b>	Customer information is returned.
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. Check gym system for a specific customer.</li> <li>2. If customer exists, return the customer's information.</li> </ol>
<b>Extensions</b>	<ol style="list-style-type: none"> <li>1. Extends (UC2: Register Customer) <ol style="list-style-type: none"> <li>a. If the customer does not exist, provide the option to register customer.</li> </ol> </li> </ol>

<b>Use Case Name</b>	UC8: Modify Inventory
<b>Scope</b>	Indoor Gym Management System
<b>Level</b>	User goal
<b>Primary Actor</b>	Manager

<b>Stakeholders and Interests</b>	Manager: Wants correct inventory information. Trainer: Wants correct inventory information for exercises
<b>Preconditions</b>	User logged into gym system. Inventory must exist in gym system.
<b>Success Guarantee</b>	Inventory information is updated.
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. Include (UC9: Search Inventory)</li> <li>2. Update the inventory information</li> <li>3. Put updated information back into the gym system.</li> </ol>
<b>Extensions</b>	None

<b>Use Case Name</b>	UC9: Search Inventory
<b>Scope</b>	Indoor Gym Management System
<b>Level</b>	User goal
<b>Primary Actor</b>	Manager
<b>Stakeholders and Interests</b>	Manager: Wants to get inventory information. Trainers: Want to get inventory information.
<b>Preconditions</b>	User logged into gym system.
<b>Success Guarantee</b>	Inventory information is returned.
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. Check gym system for a specific inventory item.</li> <li>2. If inventory item exists, return the inventory item's information.</li> </ol>
<b>Extensions</b>	<ol style="list-style-type: none"> <li>1. Extends (UC3: Add Inventory) <ol style="list-style-type: none"> <li>a. If item does not exist in inventory, provide the option to add to inventory.</li> </ol> </li> </ol>

<b>Use Case Name</b>	UC17: Login User
<b>Scope</b>	Indoor Gym Management System
<b>Level</b>	User goal
<b>Primary Actor</b>	Users
<b>Supporting Actor</b>	Authentication Service
<b>Stakeholders and Interests</b>	Users: Want to access to the gym system.
<b>Preconditions</b>	User exists in system.
<b>Success Guarantee</b>	User is logged into the gym system
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. User enters credentials into the gym system.</li> <li>2. The gym system uses the authentication service to verify user's credentials.</li> <li>3. Authentication service returns success or failure.</li> <li>4. On success, user is logged into the gym system.</li> <li>5. If the user is a trainer, user is directed to the trainer portal.</li> <li>6. If the user is a manager, user is directed to the manager portal.</li> </ol>
<b>Extensions</b>	None

<b>Use Case Name</b>	UC18: Register User
<b>Scope</b>	Indoor Gym Management System
<b>Level</b>	User goal
<b>Primary Actor</b>	Manager
<b>Stakeholders and Interests</b>	Users: Want to be register with gym system.
<b>Preconditions</b>	At least one manager must exist in the system. User is logged into the gym system.
<b>Success Guarantee</b>	New user can log into the gym system.
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. Manager enters new user credentials into the gym</li> </ol>



	<p>system.</p> <p>2. The gym system registers the new credentials with the authentication system.</p>
<b>Extensions</b>	None

<b>Use Case Name</b>	UC19: Hire Managers
<b>Scope</b>	Indoor Gym Management System
<b>Level</b>	User goal
<b>Primary Actor</b>	Manager
<b>Stakeholders and Interests</b>	Manager: Wants managers to run the gym system.
<b>Preconditions</b>	<p>At least one manager must exist in system.</p> <p>User is logged into gym system.</p>
<b>Success Guarantee</b>	Manager is employed at the gym.
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. Include (UC20: Search Managers)</li> <li>2. If manager is not found, manager enters manager into the system.</li> <li>3. Include (UC18: Register User)</li> </ol>
<b>Extensions</b>	None

<b>Use Case Name</b>	UC20: Search Managers
<b>Scope</b>	Indoor Gym Management System
<b>Level</b>	User goal
<b>Primary Actor</b>	Manager
<b>Stakeholders and Interests</b>	Manager: Wants to get manager information.
<b>Preconditions</b>	User is logged into gym system.

<b>Success Guarantee</b>	Manager information is returned.
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. Check gym system for a specific manager.</li> <li>2. If manager exists, return the manager's information.</li> </ol>
<b>Extensions</b>	<ol style="list-style-type: none"> <li>1. Extends (UC19: Hire Managers) <ol style="list-style-type: none"> <li>a. If manager does not exist, provide the option to add the manager.</li> </ol> </li> </ol>

<b>Use Case Name</b>	UC10: Create Exercise
<b>Scope</b>	Indoor Gym Management System
<b>Level</b>	User goal
<b>Primary Actor</b>	Trainer
<b>Stakeholders and Interests</b>	Trainer: Wants to enter a new exercise into the system
<b>Preconditions</b>	User logged into gym system.
<b>Success Guarantee</b>	New exercise is created
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. Include: UC11 Search exercise</li> <li>2. If exercise is not found trainer starts an entry for a new exercise   Extension point: UC9 Search Inventory <ol style="list-style-type: none"> <li>a. Equipment details are displayed</li> <li>b. Trainer assigns equipment to exercise</li> </ol> </li> <li>3. Trainer enters exercise duration or number of sets and repetitions per set.</li> <li>4. Trainer saves new exercise</li> </ol>
<b>Extensions</b>	None

<b>Use Case Name</b>	UC11: Search Exercise
----------------------	-----------------------

<b>Scope</b>	Indoor Gym Management System
<b>Level</b>	User goal
<b>Primary Actor</b>	Trainer
<b>Stakeholders and Interests</b>	Trainer: Wants to search for an exercise in the system
<b>Preconditions</b>	User logged into gym system
<b>Success Guarantee</b>	The exercise is found
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. Trainer starts a search for an exercise</li> <li>2. Exercise is found</li> <li>3. Exercise details are displayed</li> </ol>
<b>Extensions</b>	<ol style="list-style-type: none"> <li>1. Exercise is not found</li> </ol> <p>Extension Point: UC10: Create Exercise</p>

<b>Use Case Name</b>	UC12: Modify Exercise
<b>Scope</b>	Indoor Gym Management System
<b>Level</b>	User goal
<b>Primary Actor</b>	Trainer
<b>Stakeholders and Interests</b>	Trainer: Wants to modify an exercise
<b>Preconditions</b>	<ol style="list-style-type: none"> <li>1. User logged into gym system.</li> <li>2. Exercise exists in the system</li> </ol>
<b>Success Guarantee</b>	Exercise is modified
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. Include: UC11 Search Exercise</li> <li>2. Exercise is found</li> <li>3. Trainer modifies the exercise</li> <li>4. Trainer saves modifications</li> </ol>
<b>Extensions</b>	None

<b>Use Case Name</b>	UC13: Create Workout Routine
<b>Scope</b>	Indoor Gym Management System
<b>Level</b>	User goal
<b>Primary Actor</b>	Trainer
<b>Stakeholders and Interests</b>	Trainer: Wants to create workout routine
<b>Preconditions</b>	<ol style="list-style-type: none"> <li>1. User logged into gym system.</li> <li>2. At least one exercise exists in the system</li> </ol>
<b>Success Guarantee</b>	Workout routine is created
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. Include UC14: Search Workout Routine</li> <li>2. If routine is not found trainer starts an entry for a new workout routine</li> <li>3. Include: UC11 Search Exercise</li> <li>4. Exercise details are displayed</li> <li>5. Trainer assigns exercise to workout routine</li> <li>6. Trainer repeats steps 3-5 till he adds all the desired exercises to the routine</li> <li>7. Trainer saves workout routine</li> </ol>
<b>Extensions</b>	None

<b>Use Case Name</b>	UC14: Search Workout Routine
<b>Scope</b>	Indoor Gym Management System
<b>Level</b>	User goal
<b>Primary Actor</b>	Trainer
<b>Stakeholders and Interests</b>	Trainer: Wants to search workout routines
<b>Preconditions</b>	User logged into gym system
<b>Success Guarantee</b>	Workout routine is found

<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. Trainer starts a search for workout routine</li> <li>2. Workout routine is found</li> <li>3. Workout routine details are displayed</li> </ol>
<b>Extensions</b>	<ol style="list-style-type: none"> <li>1. Workout routine is not found Extension Point UC13: Create workout routine</li> </ol>

<b>Use Case Name</b>	UC15: Modify Workout Routines
<b>Scope</b>	Indoor Gym Management System
<b>Level</b>	User goal
<b>Primary Actor</b>	Trainer
<b>Stakeholders and Interests</b>	Trainer: Wants to modify workout routines
<b>Preconditions</b>	<ol style="list-style-type: none"> <li>1. User logged into gym system.</li> <li>2. Workout routine exists in the system</li> </ol>
<b>Success Guarantee</b>	Workout is modified successfully
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. Include: UC14 Search Workout Routine</li> <li>2. Workout routine results are displayed</li> <li>3. Trainer modifies workout routine</li> <li>4. Trainer saves the modifications</li> </ol>
<b>Extensions</b>	None

<b>Use Case Name</b>	UC16: Assign Workout Routines
<b>Scope</b>	Indoor Gym Management System
<b>Level</b>	User goal
<b>Primary Actor</b>	Trainer
<b>Stakeholders and Interests</b>	Trainer: Wants to assign workout routine(s) to a customer

<b>Preconditions</b>	<ol style="list-style-type: none"> <li>1. User logged into gym system.</li> <li>2. At least one workout routine exists in the system</li> <li>3. At least one customer exists in the system</li> </ol>
<b>Success Guarantee</b>	Workout routine(s) are assigned successfully
<b>Main Success Scenario</b>	<ol style="list-style-type: none"> <li>1. Include UC7: Search Customers</li> <li>2. Customer details are displayed</li> <li>3. Include UC 14: Search Workout Routine</li> <li>4. Workout routine details are displayed</li> <li>5. Trainer assigns workout routine to customer.</li> <li>6. Trainer repeats steps 4-5 till all the desired workout routines are assigned to the customer.</li> </ol>
<b>Extensions</b>	None