

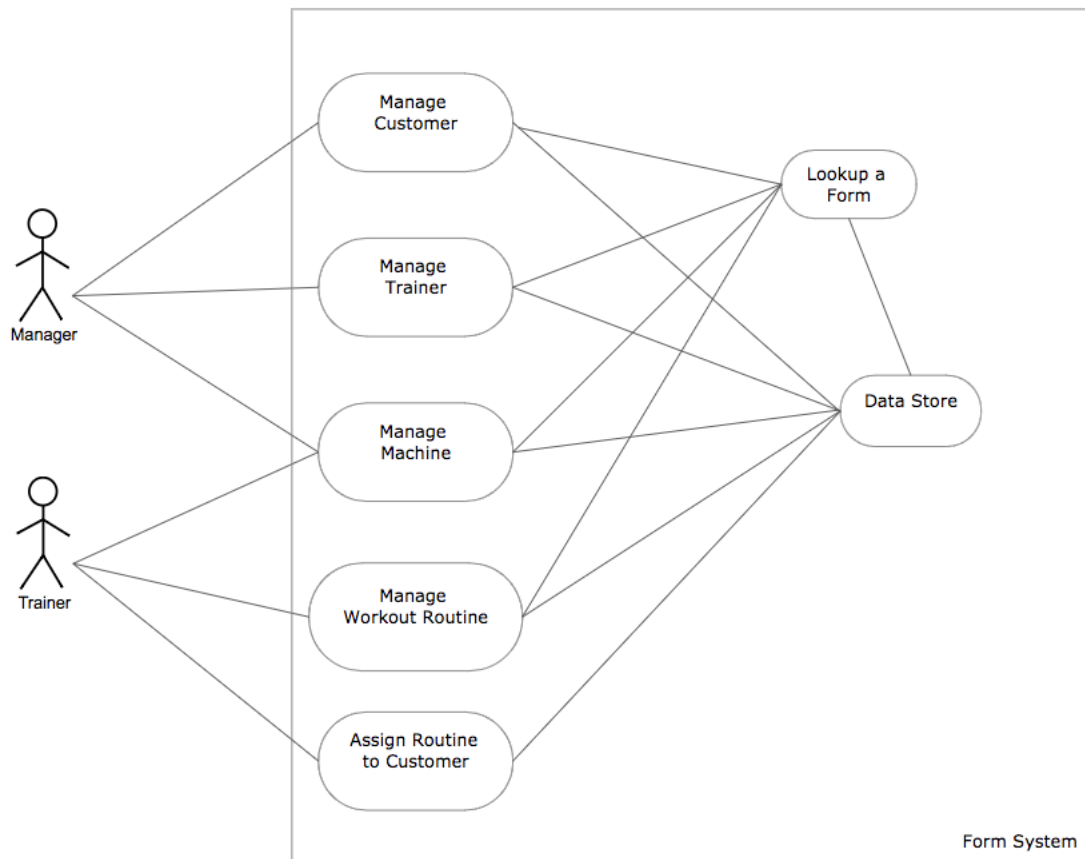
# Gym Model: Use Case Document

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# Use case diagram



|                           |  |
|---------------------------|--|
| <b>ID</b>                 | 1  |
| <b>Name of Use Case:</b>  | <a href="#">Hire Trainer</a>   |
| <b>Description:</b>       | 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. |
| <b>Actors:</b>            | Managers   |
| <b>Preconditions:</b>     | 1. The new trainer was hired.<br>2. The new trainer has required personal and work information.  |
| <b>Postconditions:</b>    | The new trainer's information was successfully added to the system.  |
| <b>Flow:</b>              | 1. The Manager obtains the new trainer's information from outside of the system.<br>2. The Manager is presented with a new trainer form.<br>3. Manager enter the information into the form.<br>4. Manager saves the information into the system.                         |
| <b>Alternative Flows:</b> | In step 3 of the normal flow, if the manager does not have all required information, the manager will be unable to save the form. The manager must obtain the information from outside the system to proceed.  |
| <b>Requirements:</b>      | 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.  |

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| <b>ID</b>                 | 2   |
| <b>Name of Use Case:</b>  | <a href="#">Terminate Trainer</a>   |
| <b>Description:</b>       | When a trainer is terminated, her personal and work information is removed from the system.   |
| <b>Actors:</b>            | Managers  |
| <b>Preconditions:</b>     | The trainer was terminated.   |
| <b>Postconditions:</b>    | The trainer's information was successfully removed from the system.   |
| <b>Flow:</b>              | 1. Include ( <a href="#">14: Lookup Form in the system</a> ) for a trainer.<br>2. The manager removes the information from the system.                              |
| <b>Alternative Flows:</b> | None outside of inclusion.  |
| <b>Requirements:</b>      | 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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| <b>ID</b>                | 3   |
| <b>Name of Use Case:</b> | <a href="#">Update Trainer information</a>                            |
| <b>Description:</b>      | When a trainer's information is updated, it is updated in the system. |
| <b>Actors:</b>           | Managers  |

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| <b>Preconditions:</b>     | The trainer has information to update.  |
| <b>Postconditions:</b>    | The trainer's information was successfully updated in the system.   |
| <b>Flow:</b>              | <ol style="list-style-type: none"> <li>1. Include (14: <a href="#">Lookup Form in the system</a>) for a trainer.</li> <li>2. The manager updates the information.</li> <li>3. The manager saves the form into the system.</li> </ol>        |
| <b>Alternative Flows:</b> | In step 2 of the normal flow, if the manager enters information that is invalid, or deletes required information, the manager will be unable to save the form. The actor must not invalidate the existing data to proceed to step 3.        |
| <b>Requirements:</b>      | <p>The following requirements must be met before execution of the use case:</p> <ol style="list-style-type: none"> <li>a. The trainer has information to update.</li> <li>b. The manager must have the right information to use.</li> </ol> |

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| <b>ID</b>                 | 4   |
| <b>Name of Use Case:</b>  | <a href="#">Registration of new customer</a>  |
| <b>Description:</b>       | <p>When a customer starts a membership, her personal information is entered into the system.</p> <p>Personal information includes name, last name, address, phone, email, ID, and health insurance provider, as well as workout routines.</p> <p>The membership of a customer is either active or inactive.</p> |
| <b>Actors:</b>            | Trainers, Managers  |
| <b>Preconditions:</b>     | The new customer has required personal information.   |
| <b>Postconditions:</b>    | The new customer's information was successfully added to the system and marked either active or inactive.   |
| <b>Flow:</b>              | <ol style="list-style-type: none"> <li>1. A new customer form is presented to the actor.</li> <li>2. The actor enters his / her information into the form.</li> <li>3. The actor saves the information into the system.</li> </ol>  |
| <b>Alternative Flows:</b> | In step 2 of the normal flow, if the actor does not have all required information (ex. health insurance) they will not be able to save the form. The actor must enter all required information in order to proceed to step 3.   |
| <b>Requirements:</b>      | <p>The following requirements must be met before execution of the use case:</p> <ol style="list-style-type: none"> <li>a. The actor must have all necessary information.</li> </ol>   |

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| <b>ID</b>                | 5   |
| <b>Name of Use Case:</b> | <a href="#">Update customer information</a>   |
| <b>Description:</b>      | Update a customer's information, including the membership status (active or inactive).  |
| <b>Actors:</b>           | Trainers, Managers  |
| <b>Preconditions:</b>    | The customer has information to update.   |
| <b>Postconditions:</b>   | The customer's information is updated.  |
| <b>Flow:</b>             | <ol style="list-style-type: none"> <li>1. Include (14: <a href="#">Lookup Form in the system</a>) for a customer.</li> <li>2. The actor updates the information.</li> </ol> |

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|                           | 3. The actor saves the information into the system.   |
| <b>Alternative Flows:</b> | In step 2, if the actor invalidates the data in some way, they will not be able to save the form. The actor must update the form without invalidating the data in order to proceed to step 3. |
| <b>Requirements:</b>      | The following requirements must be met before execution of the use case:<br>a. The actor must have valid information.   |

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| <b>ID</b>                 | 6  |
| <b>Name of Use Case:</b>  | Delete customer information  |
| <b>Description:</b>       | Delete a customer's information.   |
| <b>Actors:</b>            | Trainers, Managers   |
| <b>Preconditions:</b>     | The customer no longer wishes to be a customer.  |
| <b>Postconditions:</b>    | The customer's information is removed from the system.   |
| <b>Flow:</b>              | 1. Include (14: Lookup Form in the system) for a customer.<br>2. The actor removes the information from the system.  |
| <b>Alternative Flows:</b> | None outside of inclusion.   |
| <b>Requirements:</b>      | 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. |

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| <b>ID</b>                 | 7  |
| <b>Name of Use Case:</b>  | Add machine  |
| <b>Description:</b>       | Add machine and information into the system. The system records the name, a picture, and quantity.   |
| <b>Actors:</b>            | Trainers, Managers   |
| <b>Preconditions:</b>     | A new machine is to be added into the system.  |
| <b>Postconditions:</b>    | The new machine is added to the system.  |
| <b>Flow:</b>              | 1. The actor is presented with a new machine form.<br>2. The actor enters the information of the machine.<br>3. The actor saves the information into the system.     |
| <b>Alternative Flows:</b> | In step 2, if the actor does not enter all the required information, the actor cannot save the form. All required information must be entered to continue to step 3. |
| <b>Requirements:</b>      | 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.                |

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| <b>ID</b>                | 8   |
| <b>Name of Use Case:</b> | Update machine                              |
| <b>Description:</b>      | Update machine information in the system.   |
| <b>Actors:</b>           | Trainers, Managers                          |
| <b>Preconditions:</b>    | A machine is to be updated into the system. |

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| <b>Postconditions:</b>    | The machine is updated in the system.   |
| <b>Flow:</b>              | <ol style="list-style-type: none"> <li>1. Include (14: <a href="#">Lookup Form in the system</a>) for a machine.</li> <li>2. The actor updates the machine information.</li> <li>3. The actor saves the information into the system.</li> </ol> |
| <b>Alternative Flows:</b> | 1. In step 2, the actor must not invalidate the existing data in the form and must have updated at least one field. If the actor has not done this, they cannot proceed to step 3.  |
| <b>Requirements:</b>      | <p>The following requirements must be met before execution of the use case:</p> <ol style="list-style-type: none"> <li>a. The machine exists in the system.</li> <li>b. The machine has information to be updated.</li> </ol>                   |

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| <b>ID</b>                 | 9  |
| <b>Name of Use Case:</b>  | <a href="#">Delete machine</a>   |
| <b>Description:</b>       | Delete machine information in the system.  |
| <b>Actors:</b>            | Trainers, Managers   |
| <b>Preconditions:</b>     | A machine is to be deleted into the system.  |
| <b>Postconditions:</b>    | The machine is deleted from the system.  |
| <b>Flow:</b>              | <ol style="list-style-type: none"> <li>1. Include (14: <a href="#">Lookup Form in the system</a>) for a machine.</li> <li>2. The actor deletes the machine information from the system.</li> </ol>               |
| <b>Alternative Flows:</b> | None outside of inclusion.   |
| <b>Requirements:</b>      | <p>The following requirements must be met before execution of the use case:</p> <ol style="list-style-type: none"> <li>a. The machine exists in the system.</li> <li>b. The machine is to be deleted.</li> </ol> |

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| <b>ID</b>                 | 10  |
| <b>Name of Use Case:</b>  | <a href="#">Creation of workout routine</a>   |
| <b>Description:</b>       | <p>Adds workout routine to the system.</p> <p>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.</p> |
| <b>Actors:</b>            | Trainers  |
| <b>Preconditions:</b>     | A workout routine is to be created.   |
| <b>Postconditions:</b>    | A workout routine is added to the system.   |
| <b>Flow:</b>              | <ol style="list-style-type: none"> <li>1. The system presents the trainer with a workout routine form.</li> <li>2. The trainer enters the information for the workout routine.</li> <li>3. The trainer saves the workout routine into the system.</li> </ol>  |
| <b>Alternative Flows:</b> | In step 2, the trainer must add all required information for the work routine. If there is invalid or missing data, the trainer cannot proceed to step 3.   |
| <b>Requirements:</b>      | <p>The following requirements must be met before execution of the use case:</p> <ol style="list-style-type: none"> <li>a. The trainer has all required information for the workout routine.</li> </ol>  |

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| <b>ID</b>                 | 11  |
| <b>Name of Use Case:</b>  | <a href="#">Update of workout routine</a>   |
| <b>Description:</b>       | Updates a workout routine in the system.  |
| <b>Actors:</b>            | Trainers  |
| <b>Preconditions:</b>     | A workout routine is to be updated.   |
| <b>Postconditions:</b>    | A workout routine is updated in the system.   |
| <b>Flow:</b>              | <ol style="list-style-type: none"> <li>1. Include (<a href="#">14: Lookup Form in the system</a>) for a workout routine.</li> <li>2. The trainer updates the information for the workout routine.</li> <li>3. The trainer saves the information into the system.</li> </ol> |
| <b>Alternative Flows:</b> | In step 2, if the trainer invalidates the existing data or removes a required field, they cannot proceed step 3.  |
| <b>Requirements:</b>      | <p>The following requirements must be met before execution of the use case:</p> <ol style="list-style-type: none"> <li>a. The workout routine must exist in the system.</li> </ol>  |

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| <b>ID</b>                 | 12   |
| <b>Name of Use Case:</b>  | <a href="#">Deletion of workout routine</a>  |
| <b>Description:</b>       | Deletes a workout routine in the system.   |
| <b>Actors:</b>            | Trainers   |
| <b>Preconditions:</b>     | A workout routine is to be deleted.  |
| <b>Postconditions:</b>    | A workout routine is deleted in the system.  |
| <b>Flow:</b>              | <ol style="list-style-type: none"> <li>1. Include (<a href="#">14: Lookup Form in the system</a>) for a workout routine.</li> <li>2. The trainer deletes the information for the workout routine.</li> </ol> |
| <b>Alternative Flows:</b> | None outside of inclusion.   |
| <b>Requirements:</b>      | <p>The following requirements must be met before execution of the use case:</p> <ol style="list-style-type: none"> <li>a. The workout routine must exist in the system.</li> </ol>                           |

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| <b>ID</b>                 | 13  |
| <b>Name of Use Case:</b>  | <a href="#">Assign workout routine</a>  |
| <b>Description:</b>       | Assigns a workout routine to a customer.  |
| <b>Actors:</b>            | Trainers  |
| <b>Preconditions:</b>     | A workout routine is to be deleted.   |
| <b>Postconditions:</b>    | A workout routine is deleted in the system.   |
| <b>Flow:</b>              | <ol style="list-style-type: none"> <li>1. Include (<a href="#">14: Lookup Form in the system</a>) for a customer.</li> <li>2. Include (<a href="#">5: Update Customer form</a>).</li> </ol>   |
| <b>Alternative Flows:</b> | None outside of the given inclusions.   |
| <b>Requirements:</b>      | <p>The following requirements must be met before execution of the use case:</p> <ol style="list-style-type: none"> <li>a. The workout routine must exist in the system.</li> <li>b. The customer must exist in the system.</li> </ol> |

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| <b>ID</b>                | 14   |
| <b>Name of Use Case:</b> | <a href="#">Look up Form in the system</a> |



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| <b>Description:</b>       | Looks up a particular form in the system. This could include machines, customers, trainers, or workout routines.  |
| <b>Actors:</b>            | Managers, Trainers  |
| <b>Preconditions:</b>     | The actor wishes to look up a form in the system.   |
| <b>Postconditions:</b>    | The form is presented to the user.  |
| <b>Flow:</b>              | <ol style="list-style-type: none"> <li>1. The actor is presented with a lookup form.</li> <li>2. The actor enters the information of the workout routine.</li> <li>3. The system looks up the workout routine.</li> <li>4. The system presents the workout routine to the trainer.</li> </ol> |
| <b>Alternative Flows:</b> | In step 2, if the workout routine is non-existent, the actor is notified that the information cannot be found and will be returned to step 1.   |
| <b>Requirements:</b>      | <p>The following requirements must be met before execution of the use case:</p> <ol style="list-style-type: none"> <li>a. The form must exist in the system.</li> </ol>   |