

# Brian Crane - CS 414

## Summary of Gym Test Cases

Test Name	Test Summary
Trainer-1-sanity	Normal case of adding a new trainer
Trainer-2-error	Issue with data entry upon adding trainer
Trainer-3-error	Issue with data entry upon adding trainer
Trainer-4-error	Issue with data entry upon adding trainer
Member-1-sanity	Normal case of adding a new member
Member-2-error	Issue with data entry upon adding member
Member-3-error	Issue with data entry upon adding member
Equipment-1-sanity	Normal case of adding new equipment
Equipment-2-error	Issue with data entry upon adding equipment
Workout-1-sanity	Normal case of adding a new Workout
Workout-2-error	Issue with data entry upon adding Workout
Workout-3-error	Workout references a machine that does not exist.
WorkoutAssignment-1-sanity	Normal case of adding a new WorkoutAssignment
WorkoutAssignment-2-error	Issue with data entry upon adding WorkoutAssignment
WorkoutAssignment-3-error	WorkoutAssignmentreferences a Member that does not exist.

Future Bonus Features that will need testing as well:

- Search function
- Modification of Customers, Trainers, WOrkout Assignments, Equipment, and Workouts
- More detailed customer profile that defines the customer's workout preference, their tolerance, their upper and lower body strength limit, and their available hours. This will either preclude or include them for certain workout routines and Training sessions.
- A program that involves a cluster of workouts that will need to be done together, and possibly under the supervision of a specific Trainer.
- Trainer specialties, available hours, and Training preferences.

<b>Use Case Id</b>	Trainer-1-sanity
<b>Use Case Name</b>	<b>New Trainer Hire - Sanity Case</b>
<b>Overview</b>	A New Trainer is hired by a Manager User, we need their Personal Information in full, and they need to be added into the Trainer Database.
<b>Type</b>	Primary
<b>Primary Actors</b>	<ul style="list-style-type: none"> <li>• Manager ["initiator"]</li> <li>• Trainer</li> </ul>
<b>Secondary Actors</b>	None
<b>Pre-Conditions</b>	<ul style="list-style-type: none"> <li>• Trainer does not already exist in Trainer Database</li> <li>• Current user is a Manager, not Trainer or Member.</li> </ul>
<b>Main Flow</b>	<ol style="list-style-type: none"> <li>1. Trainer submits the fully completed Personal Information form.</li> <li>2. Trainer submits the fully completed Work Information form</li> <li>3. Check that the data entered is valid (i.e. no Numbers for names) and that this is a new Trainer.</li> <li>4. Add Trainer to Trainer Database</li> </ol>
<b>Post-conditions</b>	Trainer has been added to Trainer Database
<b>Alternative Flows</b>	<p>Trainer does not enter valid information or has missing data in their Information Form.</p> <ul style="list-style-type: none"> <li>• See Trainer-2-error, and Trainer-3-error</li> </ul>

<b>Use Case Id</b>	Trainer-2-error
<b>Use Case Name</b>	<b>New Trainer Hire - INCOMPLETE Work Information</b>
<b>Overview</b>	A New Trainer is hired by a Manager User, we need their Personal Information in full, and they need to be added into the Trainer Database. However, they enter invalid or missing data in either their Personal Information or Work Information form.
<b>Type</b>	Primary
<b>Primary Actors</b>	<ul style="list-style-type: none"> <li>• Manager ["initiator"]</li> <li>• Trainer</li> </ul>
<b>Secondary Actors</b>	None
<b>Pre-Conditions</b>	<ul style="list-style-type: none"> <li>• Trainer does not already exist in Trainer Database</li> <li>• Current user is a Manager, not Trainer or Member.</li> </ul>
<b>Main Flow</b>	<ol style="list-style-type: none"> <li>1. Trainer submits the Personal Information form.</li> <li>2. Trainer submits the Work Information form</li> <li>3. Check that the data entered is valid (i.e. no Numbers for names) and that this is a new Trainer. <ol style="list-style-type: none"> <li>a. INVALID or MISSING data has been spotted in one of these Information Forms.</li> <li>b. We need to prompt the new Trainer to re-enter their information again, and let them know what the issue was with last entry.</li> </ol> </li> </ol>
<b>Post-conditions</b>	Trainer has NOT been added to Trainer Database Trainer will be prompted to re-enter their information
<b>Alternative Flows</b>	None

<b>Use Case Id</b>	Trainer-3-error
<b>Use Case Name</b>	<b>New Trainer Hire - Trainer Already Exists in TrainerDB</b>
<b>Overview</b>	A New Trainer is hired by a Manager User, we need their Personal Information in full, and they need to be added into the Trainer Database. However, once they submit their Personal Information, we realize they already are enrolled as a Trainer in the Gym's TrainerDB
<b>Type</b>	Primary
<b>Primary Actors</b>	<ul style="list-style-type: none"> <li>• Manager ["initiator"]</li> <li>• Trainer</li> </ul>
<b>Secondary Actors</b>	None
<b>Pre-Conditions</b>	<ul style="list-style-type: none"> <li>• Trainer <b>does</b> already exist in Trainer Database</li> <li>• Current user is a Manager, not Trainer or Member.</li> </ul>
<b>Main Flow</b>	<ol style="list-style-type: none"> <li>1. Trainer submits the Personal Information form.</li> <li>2. Trainer submits the Work Information form</li> <li>3. Check that the data entered is valid (i.e. no Numbers for names) and that this is a new Trainer. <ol style="list-style-type: none"> <li>a. This trainer is already registered with this gym. <ol style="list-style-type: none"> <li>i. Prompt the Trainer that he/she is already registered. Give them a chance to re-enter information in case they entered name wrong.</li> <li>ii. If denies to re-enter data, exit Trainer Registration process.</li> </ol> </li> </ol> </li> </ol>
<b>Post-conditions</b>	Trainer has NOT been added to Trainer Database Trainer will be prompted to re-enter their information, or Trainer will be asked to end Trainer Registration.
<b>Alternative Flows</b>	None

<b>Use Case Id</b>	Trainer-4-error
<b>Use Case Name</b>	<b>New Trainer Hire - Trainer or Member tries to hire a Trainer</b>
<b>Overview</b>	Only a Manager level user can hire a Trainer or Member, do not execute this method and return an error to end-user, informing them they must be a manager to complete the New Trainer Hire task.
<b>Type</b>	Primary
<b>Primary Actors</b>	<ul style="list-style-type: none"> <li>• Manager ["initiator"]</li> <li>• Trainer</li> </ul>
<b>Secondary Actors</b>	None
<b>Pre-Conditions</b>	<ul style="list-style-type: none"> <li>• Trainer <b>does</b> already exist in Trainer Database</li> <li>• Current user is a Manager, not Trainer or Member.</li> </ul>
<b>Main Flow</b>	<ol style="list-style-type: none"> <li>4. Trainer submits the Personal Information form.</li> <li>5. Trainer submits the Work Information form</li> <li>6. Check that the data entered is valid (i.e. no Numbers for names) and that this is a new Trainer. <ol style="list-style-type: none"> <li>a. This trainer is already registered with this gym. <ol style="list-style-type: none"> <li>i. Prompt the Trainer that he/she is already registered. Give them a chance to re-enter information in case they entered name wrong.</li> <li>ii. If denies to re-enter data, exit Trainer Registration process.</li> </ol> </li> </ol> </li> </ol>
<b>Post-conditions</b>	Trainer has NOT been added to Trainer Database and end-user has been informed they do not have the permissions to perform this Action.
<b>Alternative Flows</b>	None

<b>Use Case Id</b>	Member-1-sanity
<b>Use Case Name</b>	<b>New Member Registration - Sanity Case</b>
<b>Overview</b>	<p>A new Member wants to Register with our Gym. We need to know if this Member satisfies all of the below requirements.</p> <ul style="list-style-type: none"> <li>• Not already in our MemberDB</li> <li>• Personal Information provided in Full</li> <li>• Member denotes is he/she is active/inactive</li> </ul>
<b>Type</b>	Primary
<b>Primary Actors</b>	Member ["initiator"]
<b>Secondary Actors</b>	None
<b>Pre-Conditions</b>	Employee does NOT already exist in MemberDB
<b>Main Flow</b>	<ol style="list-style-type: none"> <li>1. A New member wants to register, who is not already registered.</li> <li>2. They fill out the Personal Information form in full with no errors.</li> <li>3. They denote if they are Active or Inactive</li> <li>4. Add this new member to the MemberDB</li> </ol>
<b>Post-conditions</b>	New Member HAS been added.
<b>Alternative Flows</b>	<p>Member can violate one of the 3 pre-conditions described in Overview, resulting in not being added to MemberDB.</p> <ul style="list-style-type: none"> <li>• See Member-2-error, Member-3-error, and Member-4-error</li> </ul>

<b>Use Case Id</b>	Member-2-error
<b>Use Case Name</b>	<b>New Member Registration - Member Already Exists in MemberDB</b>
<b>Overview</b>	<p>A new Member wants to Register with our Gym. We need to know if this Member satisfies all of the below requirements.</p> <ul style="list-style-type: none"> <li>• Not already in our MemberDB</li> <li>• Personal Information provided in Full</li> <li>• Member denotes is he/she is active/inactive</li> </ul>
<b>Type</b>	Primary
<b>Primary Actors</b>	Member ["initiator"]
<b>Secondary Actors</b>	None
<b>Pre-Conditions</b>	Employee <b>already exists</b> in MemberDB!
<b>Main Flow</b>	<ol style="list-style-type: none"> <li>1. A New member wants to register <ol style="list-style-type: none"> <li>a. Member is <b>already registered</b>. Full stop. <ol style="list-style-type: none"> <li>i. Ask the Member if they want to re-enter the information</li> </ol> </li> </ol> </li> </ol>
<b>Post-conditions</b>	New Member has <b>NOT</b> been added
<b>Alternative Flows</b>	Member re-enters proper information and the system re-evaluates. Good data at this stage leads to a case similar to Member-1-Sanity.

<b>Use Case Id</b>	Member-3-error
<b>Use Case Name</b>	<b>New Member Registration - Member enters invalid or missing Personal Information</b>
<b>Overview</b>	<p>A new Member wants to Register with our Gym. We need to know if this Member satisfies all of the below requirements.</p> <ul style="list-style-type: none"> <li>• Not already in our MemberDB</li> <li>• Personal Information provided in Full</li> <li>• Member denotes is he/she is active/inactive</li> </ul>
<b>Type</b>	Primary
<b>Primary Actors</b>	Member ["initiator"]
<b>Secondary Actors</b>	None
<b>Pre-Conditions</b>	Employee does NOT already exist in MemberDB
<b>Main Flow</b>	<ol style="list-style-type: none"> <li>1. A New member wants to register, who is not already registered.</li> <li>2. They fill out the Personal Information form, but WITH errors or missing information. <ol style="list-style-type: none"> <li>a. Alert the user of the Member Registration issues, give user an option to re-enter data in case it was a mistake. <ol style="list-style-type: none"> <li>i. If it was not a mistake, decline this Member's Registration form.</li> </ol> </li> </ol> </li> </ol>
<b>Post-conditions</b>	New Member has <b>NOT</b> been added
<b>Alternative Flows</b>	Member re-enters proper information and the system re-evaluates. Good data at this stage leads to a case similar to Member-1-Sanity.



<b>Use Case Id</b>	Equipment-1-Sanity
<b>Use Case Name</b>	<b>New Equipment Registration - Sanity Case</b>
<b>Overview</b>	A Manager (or a Trainer with Manager Approval) can order new exercise equipment, as needed by a pending Workout Routine, or as requested by a Trainer or Customer (these are bonus features). We need a Name, Picture, and Quantity of the current Workout machines. Extra features could be: "Ready, Repair Requested, In Repair." Also statuses such as In Use or Free or Reserved could be used.
<b>Type</b>	Primary
<b>Primary Actors</b>	Manger ["initiator"], or Trainer with Manager Approval
<b>Secondary Actors</b>	None
<b>Pre-Conditions</b>	Equipment does not already exist in EquipmentDB.
<b>Main Flow</b>	<ol style="list-style-type: none"> <li>1. Equipment is being registered, after arriving at the gym. Manager or Trainer with Approval will note the Name and quantity of the machines, and take a picture.</li> </ol>
<b>Post-conditions</b>	Equipment was added to EquipmentDb
<b>Alternative Flows</b>	None

<b>Use Case Id</b>	Equipment-2-error
<b>Use Case Name</b>	<b>New Equipment Registration - Missing Name, Image, or Quantity</b>
<b>Overview</b>	A Manager (or a Trainer with Manager Approval) can order new exercise equipment, as needed by a pending Workout Routine, or as requested by a Trainer or Customer (these are bonus features). We need a Name, Picture, and Quantity of the current Workout machines. However, upon processing the system realizes one of these fields are missing.
<b>Type</b>	Secondary
<b>Primary Actors</b>	Manger ["initiator"], or Trainer with Manager Approval
<b>Secondary Actors</b>	None
<b>Pre-Conditions</b>	Equipment does not already exist in EquipmentDB.
<b>Main Flow</b>	<ol style="list-style-type: none"> <li>1. Equipment is being registered, after arriving at the gym. Manager or Trainer with Approval will note the Name and quantity of the machines, and take a picture. <ol style="list-style-type: none"> <li>a. An error is detected as there are missing data fields. Re-prompt the user for data or exit the equipment management scheme.</li> </ol> </li> </ol>
<b>Post-conditions</b>	Equipment was NOT added to EquipmentDb
<b>Alternative Flows</b>	If data is re-entered successfully, we see a scenario like Equipment-1-Sanity

<b>Use Case Id</b>	Workout-1-Sanity
<b>Use Case Name</b>	<b>New Workout Registration - Sanity Case</b>
<b>Overview</b>	A Manager or Trainer can create a new workout routine, which uses a Name, the needed Equipment (optional), number of sets to perform, and duration of each set (in minutes) (or number of repetitions per set)
<b>Type</b>	Primary
<b>Primary Actors</b>	Manger ["initiator"], or Trainer with Manager Approval
<b>Secondary Actors</b>	None
<b>Pre-Conditions</b>	Workout does not already exist in WorkoutDB.
<b>Main Flow</b>	1. Workout is being registered, and Manager or Trainer enters the Name, Equipment, Set Number, and Duration.
<b>Post-conditions</b>	Workout was added to WorkoutDB
<b>Alternative Flows</b>	None

<b>Use Case Id</b>	Workout-2-error
<b>Use Case Name</b>	<b>New Workout Registration - Missing Name, Equipment, Set Number, or Duration</b>
<b>Overview</b>	A Manager or Trainer can create a new workout routine, which uses a Name, the needed Equipment (optional), number of sets to perform, and duration of each set (in minutes) (or number of repetitions per set). However, they make a mistake or enter invalid or missing data.
<b>Type</b>	Primary
<b>Primary Actors</b>	Manger ["initiator"], or Trainer
<b>Secondary Actors</b>	None
<b>Pre-Conditions</b>	Workout does not already exist in WorkoutDB.
<b>Main Flow</b>	<ol style="list-style-type: none"> <li>1. Workout is being registered, and Manager or Trainer enters the Name, Equipment, Set Number, and Duration. <ol style="list-style-type: none"> <li>a. An error is detected as there are missing data fields. Re-prompt the user for data or exit the workout management scheme.</li> </ol> </li> </ol>
<b>Post-conditions</b>	Workout was NOT added to WorkoutDB
<b>Alternative Flows</b>	If data is re-entered successfully, we see a scenario like Workout-1-Sanity

<b>Use Case Id</b>	Workout-3-error
<b>Use Case Name</b>	<b>New Workout Registration - Workout Equipment Requested DOES NOT EXIST</b>
<b>Overview</b>	A Manager or Trainer can create a new workout routine, which uses a Name, the needed Equipment (optional), number of sets to perform, and duration of each set (in minutes) (or number of repetitions per set). However, they make a mistake and reference a Workout machine that does not exist. ERROR!
<b>Type</b>	Primary
<b>Primary Actors</b>	Manger ["initiator"], or Trainer
<b>Secondary Actors</b>	None
<b>Pre-Conditions</b>	Workout does not already exist in WorkoutDB.
<b>Main Flow</b>	<ol style="list-style-type: none"> <li>2. Workout is being registered, and Manager or Trainer enters the Name, Equipment, Set Number, and Duration. <ol style="list-style-type: none"> <li>a. An error is detected as there are missing data fields. Re-prompt the user for data or exit the workout management scheme.</li> </ol> </li> </ol>
<b>Post-conditions</b>	Workout was NOT added to WorkoutDB
<b>Alternative Flows</b>	If data is re-entered successfully, we see a scenario like Workout-1-Sanity

<b>Use Case Id</b>	WorkoutAssignment-1-Sanity
<b>Use Case Name</b>	<b>New Workout Assignment Registration - Sanity Case</b>
<b>Overview</b>	A Trainer can create a new Workout Assignment, which will be assigned to a customers record.
<b>Type</b>	Primary
<b>Primary Actors</b>	Trainer
<b>Secondary Actors</b>	None
<b>Pre-Conditions</b>	Workout Assignment does not already exist in WorkoutAssignmentDB.
<b>Main Flow</b>	1. Workout Assignment is being registered by Trainer and they enter the workout into the Customers record.
<b>Post-conditions</b>	Workout Assignment was added to WorkoutAssignmentDB
<b>Alternative Flows</b>	None

<b>Use Case Id</b>	WorkoutAssignment-2-error
<b>Use Case Name</b>	<b>New Workout Assignment Registration - Empty form or missing customer name</b>
<b>Overview</b>	A Trainer can create a new Workout Assignment, which will be assigned to a customers record. They make some mistake though and just enter bad data.
<b>Type</b>	Primary
<b>Primary Actors</b>	Manger ["initiator"], or Trainer
<b>Secondary Actors</b>	None
<b>Pre-Conditions</b>	Workout Assignment does not already exist in WorkoutAssignmentDB.
<b>Main Flow</b>	<ol style="list-style-type: none"> <li>1. Workout is being registered and Manager or Trainer enter the Name, Equipment, Set Number, and Duration. <ol style="list-style-type: none"> <li>a. An error is detected as there are missing data fields. Re-prompt the user for data or exit the workout management scheme.</li> </ol> </li> </ol>
<b>Post-conditions</b>	Workout Assignment was NOT added to WorkoutAssignmentDB
<b>Alternative Flows</b>	If data is re-entered successfully, we see a scenario like WorkoutAssignment-1-Sanity

<b>Use Case Id</b>	WorkoutAssignment-3-error
<b>Use Case Name</b>	<b>New Workout Assignment Registration - Customer does not exist or active!</b>
<b>Overview</b>	A Trainer can create a new Workout Assignment, which will be assigned to a customers record. They make some mistake though and reference a customer who does not exist, or who is not active.
<b>Type</b>	Primary
<b>Primary Actors</b>	Manger ["initiator"], or Trainer
<b>Secondary Actors</b>	None
<b>Pre-Conditions</b>	Workout Assignment does not already exist in WorkoutAssignmentDB.
<b>Main Flow</b>	<ol style="list-style-type: none"> <li>2. Workout is being registered and Manager or Trainer enter the Name, Equipment, Set Number, and Duration. <ol style="list-style-type: none"> <li>a. An error is detected as the customer referenced does not exist or is not active.</li> </ol> </li> </ol>
<b>Post-conditions</b>	Workout Assignment was NOT added to WorkoutAssignmentDB
<b>Alternative Flows</b>	If data is re-entered successfully, we see a scenario like WorkoutAssignment-1-Sanity



