Test Report

Test Case 1: Create and Update Employee

Test Case ID: TC_AMS_001
Test Case Title: Create and Update Employee in the AMS Application
Test Scenario:

- Create a new employee.
- Update the employee details.
- Verify that the employee is correctly created and updated.

Preconditions:

- The AMS application should be running.
- The necessary services and repositories are initialized.

Test Data:

- Employee ID: "E001"
- Initial Employee Name: "John Doe"
- Updated Employee Name: "John Smith"

Test Steps:

1. Create a new employee with the initial data.
2. Verify creation with correct details.
3. Update the employee name.
4. Verify the update.

Expected Output:

- Employee created with the name "John Doe".
- Employee updated to "John Smith".

Iteration 1: Fail Case
Iteration Summary: An error in the creation process where the employee name is misspelled.
Test Input:

- Employee ID: "E001"
- Employee Name: "Jon Doe" (Intentional typo)

Expected Output:

- Employee creation proceeds with the incorrect name "Jon Doe".
- Update will fail or proceed incorrectly.

Actual Output:

- Employee created with the name "Jon Doe".
- Update fails due to incorrect initial name.

Test Result: FAIL
Remarks: The system did not validate the employee name during creation.

Iteration 2: Pass Case
Iteration Summary: The issue from the first iteration is resolved, and the employee is created and updated correctly.
Test Input:

- Employee ID: "E001"
- Employee Name: "John Doe"

Expected Output:

- Employee created with the name "John Doe".
- Employee updated to "John Smith".

Actual Output:

- Employee created successfully with the name "John Doe".
- Employee updated successfully to "John Smith".

Test Result: PASS
Remarks: The issue from the first iteration was resolved, and the process works as expected.

Test Case 2: Remove Employee

Test Case ID: TC_AMS_002
Test Case Title: Remove Employee from the AMS Application
Test Scenario:

- Remove an existing employee.
- Verify that the employee is removed.

Preconditions:

- The AMS application should be running.
- The necessary services and repositories are initialized.

- Employee exists in the system.

Test Data:

- Employee ID: "E002"

Test Steps:

1. Remove the employee with the specified ID.
2. Verify that the employee is no longer in the system.

Expected Output:

- Employee with ID "E002" is successfully removed.

Iteration 1: Fail Case
Iteration Summary: Attempt to remove an employee that does not exist.
Test Input:

- Employee ID: "E999" (Non-existent)

Expected Output:

- Removal should fail with an appropriate error message.

Actual Output:

- Removal operation fails as expected with an error message "Employee not found".

Test Result: PASS
Remarks: The system correctly handled the removal of a non-existent employee.

Iteration 2: Pass Case
Iteration Summary: Successfully remove an existing employee.
Test Input:

- Employee ID: "E002"

Expected Output:

- Employee with ID "E002" is successfully removed.

Actual Output:

- Employee removed successfully.

Test Result: PASS
Remarks: The employee removal functionality works as expected.

Test Case 3: Create and Update Hardware Asset

Test Case ID: TC_AMS_003
Test Case Title: Create and Update Hardware Asset in the AMS Application
Test Scenario:

- Create a new hardware asset.
- Update the hardware asset details.
- Verify that the hardware asset is correctly created and updated.

Preconditions:

- The AMS application should be running.
- The necessary services and repositories are initialized.

Test Data:

- Hardware Asset ID: "H001"
- Initial Asset Name: "Laptop"
- Updated Asset Name: "Gaming Laptop"

Test Steps:

1. Create a new hardware asset with the initial data.
2. Verify creation with correct details.
3. Update the asset name.
4. Verify the update.

Expected Output:

- Hardware asset created with the name "Laptop".
- Asset updated to "Gaming Laptop".

Iteration 1: Fail Case
Iteration Summary: Error in creating the hardware asset with an invalid name.
Test Input:

- Hardware Asset ID: "H001"
- Asset Name: "Laptp" (Intentional typo)

Expected Output:

- Creation may proceed with incorrect name.
- Update will fail or proceed incorrectly.

Actual Output:

- Hardware asset created with the name "Laptp".
- Update fails due to the incorrect initial asset name.

Test Result: FAIL
Remarks: The system allowed invalid data for hardware asset creation.

Iteration 2: Pass Case
Iteration Summary: Successful creation and update of hardware asset.
Test Input:

- Hardware Asset ID: "H001"
- Asset Name: "Laptop"

Expected Output:

- Hardware asset created with the name "Laptop".
- Asset updated to "Gaming Laptop".

Actual Output:

- Hardware asset created successfully with the name "Laptop".
- Asset updated successfully to "Gaming Laptop".

Test Result: PASS
Remarks: The process works as intended with correct data.

Test Case 4: Assign Hardware to Employee

Test Case ID: TC_AMS_004
Test Case Title: Assign Hardware to an Employee
Test Scenario:

- Assign a hardware asset to an employee.
- Verify the assignment.

Preconditions:

- The AMS application should be running.
- The necessary services and repositories are initialized.
- Both employee and hardware asset exist in the system.

Test Data:

- Employee ID: "E003"
- Hardware Asset ID: "H002"

Test Steps:

1. Assign the hardware asset to the employee.
2. Verify that the assignment is recorded.

Expected Output:

- Hardware asset "H002" is successfully assigned to employee "E003".

Iteration 1: Fail Case
Iteration Summary: Attempt to assign a hardware asset to a non-existent employee.
Test Input:

- Employee ID: "E999" (Non-existent)
- Hardware Asset ID: "H002"

Expected Output:

- Assignment should fail with an appropriate error message.

Actual Output:

- Assignment fails as expected with an error message "Employee not found".

Test Result: PASS
Remarks: The system correctly handled the assignment to a non-existent employee.

Iteration 2: Pass Case
Test Input:

- Employee ID: "E003"
- Hardware Asset ID: "H002"

Expected Output:

- Hardware asset "H002" is successfully assigned to employee "E003".

Actual Output:

- Hardware asset assigned successfully.

Test Result: PASS
Remarks: The hardware assignment functionality works as expected.

Test Case 5: Retrieve Employee Details

Test Case ID: TC_AMS_005
Test Case Title: Retrieve Employee Details from the AMS Application
Test Scenario:

- Retrieve and display the details of an employee.

Preconditions:

- The AMS application should be running.
- The necessary services and repositories are initialized.
- Employee exists in the system.

Test Data:

- Employee ID: "E004"

Test Steps:

1. Retrieve the employee details using the specified ID.
2. Verify that the details are correct and complete.

Expected Output:

- Employee details are correctly retrieved and displayed.

Iteration 1: Fail Case
Iteration Summary: Attempt to retrieve details for a non-existent employee.
Test Input:

- Employee ID: "E999" (Non-existent)

Expected Output:

- Retrieval should fail with an appropriate error message.

Actual Output:

- Retrieval fails as expected with an error message "Employee not found".

Test Result: PASS
Remarks: The system correctly handled the retrieval of non-existent employee details.

Iteration 2: Pass Case
Test Input:

- Employee ID: "E004"

Expected Output:

- Employee details are correctly retrieved and displayed.

Actual Output:

- Employee details retrieved and displayed correctly.

Test Result: PASS
Remarks: The retrieval functionality works as expected.

Test Case 6: List All Hardware Assets

Test Case ID: TC_AMS_006
Test Case Title: List All Hardware Assets in the AMS Application
Test Scenario:

- List and display all hardware assets available in the system.

Preconditions:

- The AMS application should be running.
- The necessary services and repositories are initialized.

Test Data:

- None (all hardware assets should be listed)

Test Steps:

1. Retrieve and list all hardware assets.
2. Verify that all assets are listed and details are correct.

Expected Output:

- All hardware assets are listed with correct details.

Iteration 1: Fail Case
Iteration Summary: System fails to list some hardware assets.
Test Input:

- None

Expected Output:

- All hardware assets should be listed correctly.

Actual Output:

- Some hardware assets are missing from the list.

Test Result: FAIL
Remarks: The system failed to list all hardware assets correctly.

Iteration 2: Pass Case
Test Input:

- None

Expected Output:

- All hardware assets are listed with correct details.

Actual Output:

- All hardware assets listed correctly.

Test Result: PASS
Remarks: The listing functionality works as expected with all assets correctly displayed.