Computer Database Test Case specification

ID: TC001
Name: Adding a valid entry to the database
Pre-conditions: -
Input specifications:
- Valid computer name (Any string value),
- Valid introduction date (in format 'yyyy-MM-dd'),
- Valid discontinuation date (in format 'yyyy-MM-dd'),
- Valid company name (choice from the dropdown)

Output Specifications:
A valid entry is present and queryable in the database with the input elements as properties.
Intercase dependencies: TC002
Environmental needs:
- Browser
- Read-write access to Computer Database
- Connection to the database
- Test data source (see Test Procedure Specification document for the related TC)

Steps:
1. Click on "Add a new computer" button
2. On the loaded page, titled "Add a computer", enter a name to the field "Computer name" (e.g. "TestComputer001")
3. Add a valid date to the "Introduced date" field, in the specified format (e.g. "1999-01-01")
4. Add a valid date to the "Discontinued date" field, which is past the entered introduction date (e.g. "2018-01-01")
5. Select a company from the dropdown field marked as "Company" (e.g. "Apple, Inc.")
6. Press on the button marked as "Create this computer"

Expected results:
- If accessing from the web portal, the toast message will be present about the success. "Done! Computer TestComputer001 has been created"
- The entry is present in the database (can be verified by TC002)

ID: TC002
Name: Reading a valid element from the database
Pre-conditions:
A valid entry is present in the database (e.g. TC001 has been run).
Input specifications: The computer name of the existing element in the database
Output Specifications: Valid entry retrieved and shown with its fields
Intercase dependencies: TC001
Environmental needs:
- Browser
- Read-write access to Computer Database
- Connection to the database
- Test data source (see Test Procedure Specification document for the related TC)

Steps:
1. Click on the filter textfield, and type the computer name of the existing entry (e.g. "TestComputer001").
2. Press on "Filter by name" button

Expected results:
The specified element is presented with its fields.

ID: TC003a
Name: Updating the field "Computer name" of a valid entry in the database with another valid entry
Pre-conditions:
A valid entry is present in the database (e.g. TC001 has been run).
Input specifications:
Valid computer name (Any string value)
Output Specifications: The given entry will have a new value as computer name.
Intercase dependencies: TC001
Environmental needs:

- Browser
- Read-write access to Computer Database
- Connection to the database
- Test data source (see Test Procedure Specification document for the related TC)

Steps:
1   Click on the filter textfield, and type the computer name of the existing entry (e.g. "TestComputer001").
2   Press on "Filter by name" button
3   Select the presented queried entry
4   Give a new, value to the field "Computer name", e.g. "TestComputer002"
5   Verify, that there is no such button as "Create this computer"
6   Click on the button titled "Save this computer"

Expected results:

- The computer database web interface with the toast message: "Done! Computer TestComputer002 has been updated!"
- The entry is updated in the database
- Also, element is queryable; if putting the computer name in the present search field, and pressing "Filter by name", the added entry will be shown. (Verified by TC002)

ID: TC003b

Name: Updating the field "Introduced date" of a valid entry in the database with another valid entry

Pre-conditions: A valid entry is present in the database (e.g. TC001 has been run).

Input specifications: Valid date in the specified format ('yyyy-MM-dd')

Output Specifications: The given entry will have a new value in "Introduced name" field.

Intercase dependencies: TC001

Environmental needs:

- Browser
- Read-write access to Computer Database
- Connection to the database
- Test data source (see Test Procedure Specification document for the related TC)

Steps:

1 Click on the filter textfield, and type the computer name of the existing entry (e.g. "TestComputer001").
2 Press on "Filter by name" button
3 Select the presented queried entry
4 Give a new, value to the field "Introduced date", e.g. "1995-01-01"
5 Verify, that there is no such button as "Create this computer"
6 Click on the button titled "Save this computer"

Expected results:

- The computer database web interface with the toast message: "Done! Computer TestComputer002 has been updated!"
- The entry is updated in the database
- Also, element is queryable; if putting the computer name in the present search field, and pressing "Filter by name", the added entry will be shown. (Verified by TC002)

ID: TC003c
Name: Updating the field "Discontinued date" of a valid entry in the database with another valid entry
Pre-conditions: A valid entry is present in the database (e.g. TC001 has been run).
Input specifications: Valid date in the specified format ('yyyy-MM-dd')
Output Specifications: The given entry will have a new value in "Discontinued name" field.
Intercase dependencies: TC001
Environmental needs:
- Browser
- Read-write access to Computer Database
- Connection to the database
- Test data source (see Test Procedure Specification document for the related TC)

Steps:
1 Click on the filter textfield, and type the computer name of the existing entry (e.g. "TestComputer001").
2 Press on "Filter by name" button
3 Select the presented queried entry
4 Give a new, value to the field "Discontinued date", e.g. "2016-01-01"
5 Verify, that there is no such button as "Create this computer"
6 Click on the button titled "Save this computer"

Expected results:
- The computer database web interface with the toast message: "Done! Computer TestComputer002 has been updated!"
- The entry is updated in the database
- Also, element is queryable; if putting the computer name in the present search field, and pressing "Filter by name", the added entry will be shown. (Verified by TC002)

ID: TC003d
Name: Updating the field "Company" of a valid entry in the database with another valid entry
Pre-conditions: A valid entry is present in the database (e.g. TC001 has been run).
Input specifications: A valid element from the manufacturer's list
Output Specifications: The given entry will have a new value in "Company" field.
Intercase dependencies: TC001
Environmental needs:
- Browser
- Read-write access to Computer Database
- Connection to the database
- Test data source (see Test Procedure Specification document for the related TC)

Steps:
1 Click on the filter textfield, and type the computer name of the existing entry (e.g. "TestComputer001").
2 Press on "Filter by name" button
3 Select the presented queried entry
4 Give a new, value to the field "Company" (e.g. "IBM")
5 Verify, that there is no such button as "Create this computer"
6 Click on the button titled "Save this computer"

Expected results:
- The computer database web interface with the toast message: "Done! Computer TestComputer002 has been updated!"
- The entry is updated in the database
- Also, element is queryable; if putting the computer name in the present search field, and pressing "Filter by name", the added entry will be shown. (Verified by TC002)

ID: TC004
Name: Adding a new element with the same values to the database (**note: as the system currently works, no fields are unique. Assuming this, the IDs are unique and hidden.**)
Pre-conditions:
A valid entry is present in the database (TC001 has been run).
Input specifications:
Having the values of the already existing entry:
- Valid computer name,
- Valid introduction date (in format 'yyyy-MM-dd'),
- Valid discontinuation date (in format 'yyyy-MM-dd'),
- Valid company name (choice from the dropdown)

Output Specifications: Another entry in the database with the given values
Intercase dependencies: TC001, TC002
Environmental needs:
- Browser
- Read-write access to Computer Database
- Connection to the database
- Test data source (see Test Procedure Specification document for the related TC)

Steps:
1 Click on "Add a new computer" button
2 On the loaded page, titled "Add a computer", enter the given name to the field "Computer name" (e.g. "TestComputer001")
3 Add the given valid date to the "Introduced date" field, in the specified format (e.g. "1999-01-01")
4 Add the given valid date to the "Discontinued date" field, which is past the entered introduction date (e.g. "2018-01-01")
5 Select the specified company from the dropdown field marked as "Company" (e.g. "Apple, Inc.")

Press on the button marked as "Create this computer".
Expected results:
- If accessing from the web portal, the toast message will be present about the success. "Done! Computer TestComputer001 has been created".
- The entry is present in the database
- As can be verified by TC002, there will be 2 elements listed with the same values, when querying.

ID: TC005
Name: Deleting an entry from the database
Pre-conditions:
A valid entry is present in the database (e.g. TC001 has been run), and the element is identifiable (for the case of deletion)
Input specifications: computer name value of the entry
Output Specifications: the element will be removed from the database
Intercase dependencies: TC006
Environmental needs:
- Browser
- Read-write access to Computer Database
- Connection to the database
- Test data source (see Test Procedure Specification document for the related TC)

Steps:
1 Click on the filter textfield, and type the computer name of the existing entry (e.g. "TestComputer001").
2 Press on "Filter by name" button
3 Select the presented entry
4 Press on the button "Delete this computer"

Expected results:
- Toast message is present with the message: "Done! Computer has been deleted" on the top of the page
- The given entry will not be present in the database anymore (can be verified by TC006)

ID: TC006

Name: Querying a non-existent element from the database

Pre-conditions:

Either the database is empty, or we know of a computer name, which is not present in the database.

Input specifications: A computer name (which is not associated with any current valid entries)

Output Specifications: No results returned by the search

Intercase dependencies: -

Environmental needs:

- Browser
- Read-write access to Computer Database
- Connection to the database
- Test data source (see Test Procedure Specification document for the related TC)

Steps:

1   Click on the filter textfield, and type the computer name of the non-existing entry (e.g." TestComputer003").

2   Press on "Filter by name" button

Expected results:

- Message "No computers found" is presented on screen (the query results with 0 elements)

ID: TC007a
Name: Updating a valid entry's "Introduced date" in the database with an invalid format element
Pre-conditions: A valid entry is present in the database (e.g. TC001 has been run).
Input specifications: Any value which is not in the specified date ('yyyy-MM-dd') format
Output Specifications: The element to-be-updated remains unchanged
Intercase dependencies: TC001
Environmental needs:
- Browser
- Read-write access to Computer Database
- Connection to the database
- Test data source (see Test Procedure Specification document for the related TC)

Steps:
1. Click on the filter textfield, and type the computer name of the existing entry (e.g. "TestComputer001")
2. Press on "Filter by name" button
3. Click on the queried presented element
4. Give a new, value to the field "Introduced date", e.g. "BlahBlah"
5. Verify, that there is no such button as "Create this computer"
6. Click on the button titled "Save this computer"

Expected results:
- The alert will be presented in the form of red outline around the "Introduced date" field
- The element is not saved in the database, after pressing "Cancel", and querying the element (TC002), the original values will be present

ID: TC007b
Name: Updating a valid entry's "Discontinued date" in the database with an invalid format element
Pre-conditions: A valid entry is present in the database (e.g. TC001 has been run).
Input specifications: Any value which is not in the specified date ('yyyy-MM-dd') format
Output Specifications: The element to-be-updated remains unchanged
Intercase dependencies: TC001
Environmental needs:
   • Browser
   • Read-write access to Computer Database
   • Connection to the database
   • Test data source (see Test Procedure Specification document for the related TC)
Steps:
   1 Click on the filter textfield, and type the computer name of the existing entry (e.g. "TestComputer001")
   2 Press on "Filter by name" button
   3 Click on the queried presented element
   4 Give a new, value to the field "Discontinued date", e.g. "BlahBlah"
   5 Verify, that there is no such button as "Create this computer"
   6 Click on the button titled "Save this computer"
Expected results:
   • The alert will be presented in the form of red outline around the "Discontinued date" field
   • The element is not saved in the database, after pressing "Cancel", and querying the element (TC002), the original values will be present

ID: TC008 (**note: as I see, this is currently not implemented, but worth to check generally**)
Name: Updating a valid entry's "Introduced date" in the database with a date which is in the future
Purpose: To validate date rules
Pre-conditions: A valid entry is present in the database (e.g. TC001 has been run).
Input specifications: A date value which is in the future in the specified ('yyyy-MM-dd') format
Output Specifications: The element to-be-updated remains unchanged, because of the date check rules
Intercase dependencies: TC001
Environmental needs:
- Browser
- Read-write access to Computer Database
- Connection to the database
- Test data source (see Test Procedure Specification document for the related TC)

Steps:
1. Click on the filter textfield, and type the computer name of the existing entry (e.g. "TestComputer001")
2. Press on "Filter by name" button
3. Click on the queried presented element
4. Give a new, value to the field "Introduces date", e.g. "2222-01-01"
5. Verify, that there is no such button as "Create this computer"
6. Click on the button titled "Save this computer"

Expected results:
- The alert will be presented in the form of red outline around the "Introduced date" field
- The element is not saved in the database, after pressing "Cancel", and querying the element (TC002), the original values will be present

ID: TC009 (**note: as I see, this is currently not implemented, but worth to check generally**)
Name: Adding an entry with an earlier Discontinued date than Introduced date
Purpose: To validate date rules
Pre-conditions: -
Input specifications:
- An Introduction date value which is in the specified ('yyyy-MM-dd') format
- An Discontinued date value which is in the specified ('yyyy-MM-dd') format, and is before the Introduction date

Output Specifications: The element to-be-updated remains unchanged, because of the date check rules
Intercase dependencies: -
Environmental needs:
- Browser
- Read-write access to Computer Database
- Connection to the database
- Test data source (see Test Procedure Specification document for the related TC)

Steps:
1 Click on "Add a new computer" button
2 On the loaded page, titled "Add a computer", enter a name to the field "Computer name" (e.g. "TestComputer004")
3 Add a valid date to the "Introduced date" field, in the specified format (e.g. "1999-01-01")
4 Add a valid date to the "Discontinued date" field, which is past the entered introduction date (e.g. "1987-01-01")
5 Select a company from the dropdown field marked as "Company" (e.g. "Apple, Inc.")
6 Press on the button marked as "Create this computer"

Expected results:
- The alert will be presented in the form of red outline around the "Discontinued date" field
- The element is not saved in the database, after pressing "Cancel"