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First batch of test cases will be to review the “Filter by name” search functionality

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| **TC 1** | |
| This test case is used to understand the capabilities of the search function, what is the result when we search for 1 character | |
| Test Steps | Expected outcome |
| Populate ‘searchbox’ with “A” | As step |
| Click ‘Filter by name’ button | Confirm Search result grid is populated with computer details which are presumed to start with “A” |
| Outcome | |
| Presently records that are being returned on the first few pages all start with the letter “A” | |

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| **TC 2** | |
| This test case will follow on from the first test case, it is to determine if the search functionality is searching for letters that start with the nominated character or is part of the sub string | |
| Test Steps | Expected outcome |
| Populate ‘searchbox’ with “C” | This is the character taken from the “ACE 2022” computer name |
| Click ‘Filter by name’ button | It is unknow if the search results will return data that begins with “C” or return results that contain the letter “C” |
| Outcome | |
| It has been confirmed that the search is returning results that contain the letter “C” | |

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| **TC 3** | |
| Here we will look at searching for a larger substring and confirm this will return computers that match | |
| Test Steps | Expected outcome |
| Populate ‘searchbox’ with “ACE” | As step |
| Click ‘Filter by name’ button | Results returned should have the text “ACE” as a substring  This will also confirm if the search functionality is working on title case search parameters |
| Outcome | |
| 6 results have come back, both a mix of upper and lower case, this proves the search functionality is not working on title case bases. All the results returned have the substring “ACE” in them. | |

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| **TC 4** | |
| Searching for specific computer name to ensure only a valid name comes back | |
| Test Steps | Expected outcome |
| Populate ‘searchbox’ with “ACE 2022” | As step |
| Click ‘Filter by name’ button | Expect only one computer to be returned |
| Outcome | |
| It has been confirmed that only one computer named “ACE 2022” has been returned. | |

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| **TC 5** | |
| Clear the search results. There is no clear button, so it is assumed that after performing a search, if you clear the ‘searchbox’ and ‘filter by name’ will this reset the grid | |
| Test Steps | Expected outcome |
| Populate ‘searchbox’ with “ACE” | As step |
| Click ‘Filter by name’ button | In line with previous test I am expecting 6 results to come back unless more have been added in the meantime |
| Populate ‘searchbox’ with “” | As step |
| Click ‘Filter by name’ button | Unknown but expect the grid to be reset to its default setting |
| Outcome | |
| This has reset the data and all the records have now been returned. | |

Exploratory

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| **TC 6** | |
| Try a number of special keys such as @ to confirm if any added functionality is at play | |
| Test Steps | Expected outcome |
| Populate ‘searchbox’ with random special key | As step |
| Click ‘Filter by name’ button | Unknown |
| Outcome | |
| Presently have found that the % is returning results however yet to determine what it is achieving. | |

**Screen Navigation**

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| **TC 1** | |
| This test is to confirm the forward navigation functionality is working and each page is showing 10 computers. | |
| Test Steps | Expected outcome |
| Navigate to the main screen | “Play sample application – Computer database” screen to be displayed  Confirm the grid is populated with the default data |
| Confirm navigation text | This should be set to “Displaying 1 – 10 of ###” |
| Click ‘Next ->’ | As step |
| Confirm navigation text | This should be set to “Displaying 11 – 20 of ###” |
| Confirm the number of computers displayed on page are 10 | As step |
| Repeat the steps a few times confirming this is incremental by a count of 10 | As step |
| Outcome | |
| I can confirm the navigation text is incremental by 10, I can also confirm that each page is displaying 10 records. | |

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| **TC 2** | |
| This test is to confirm the previous navigation functionality is working and each page is showing 10 computers. | |
| Test Steps | Expected outcome |
| Navigate to the main screen | “Play sample application – Computer database” screen to be displayed  Confirm the grid is populated with the default data |
| Navigate forward until the navigation text is displaying “Displaying 31 – 40 of ###” |  |
| Click ‘<- Previous’ | As step |
| Confirm navigation text | This should be set to “Displaying 21 – 30 of ###” |
| Confirm the number of computers displayed on page are 10 | As step |
| Repeat the steps a few times confirming this is decreasing by a count of 10 | As step |
| Outcome | |
| I can confirm the navigation text is decreasing by 10, I can also confirm that each page is displaying 10 records. | |

**Add new computer**

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| **TC 1** | |
| Confirm a new computer which does not exist in the database can be added without issue | |
| Test Steps | Expected outcome |
| Navigate to the main screen | “Play sample application – Computer database” screen to be displayed |
| Populate ‘searchbox’ with “HappyPath2019” | As step |
| Click ‘Filter by name’ button | Confirm no results are returned |
| Click ‘Add a new computer’ | “Add a computer” screen to be displayed |
| Populate ‘Computer name’ with “HappyPath2019” | As step |
| Populate ‘Introduced date’ with “2019-09-12” | As step |
| Populate ‘Discontinued date’ with “2020-09-12” | As step |
| Select “Apple Inc.” from ‘Company’ | As step |
| Click ‘Create this computer’ | Confirm a confirmation message has been displayed by the system. |
| Navigate to the main screen | As step |
| Populate ‘searchbox’ with “HappyPath2019” | As step |
| Click ‘Filter by name’ button | Confirm 1 row is returned with the expected data |
| Review column ‘Computer name’ | Confirm this is set to “HappyPath2019” |
| Review column ‘Introduced’ | Confirm this is set to “2019-09-12” |
| Review column ‘Discontinued’ | Confirm this is set to “2020-09-12” |
| Review column ‘Company’ | Confirm this has been set to “Apple Inc.” |
| Outcome | |
| New computer has been added without issue. The correct details are displayed when searched for.  Additional steps to this would be to search the database for instance  Select \* from computers where computername = “HappyPath2019” | |

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| **TC 2** | |
| Confirm mandatory fields are required for adding a new computer | |
| Test Steps | Expected outcome |
| Navigate to the main screen | “Play sample application – Computer database” screen to be displayed |
| Click ‘Add a new computer’ | “Add a computer” screen to be displayed |
| Click ‘Create this computer’ | Confirm the mandatory fields that are required for data entry are highlighted. In this case we are expecting “Computer name” to be highlighted |
| Populate ‘Computer name’ with “HappyPath2020” | As step |
| Click ‘Create this computer’ | Confirm a confirmation message has been displayed by the system. |
| Review column ‘Computer name’ | Confirm this is set to “HappyPath2020” |
| Review column ‘Introduced’ | Confirm this is set to “” |
| Review column ‘Discontinued’ | Confirm this is set to “” |
| Review column ‘Company’ | Confirm this has been set to “” |
| Outcome | |
| The system is forcing the basic mandatory field for adding a computer | |

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| **TC 3** | |
| Confirm duplicate computers can not be added to the system | |
| Test Steps | Expected outcome |
| Navigate to the main screen | “Play sample application – Computer database” screen to be displayed |
| Click ‘Add a new computer’ | “Add a computer” screen to be displayed |
| Populate ‘Computer name’ with “HappyPath2020” | As step |
| Click ‘Create this computer’ | Confirm a confirmation message should state that there is a computer on the system and this one cannot be added |
| Outcome | |
| In this instance a duplicate computer has been allowed by the system. In this instance I would check with the developer, business analyst or project owner if this is intended functionality. If not then a defect will be raised surrounding the issue. | |

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| **TC 4** | |
| When adding a new computer the date fields indicate which format this has to be entered. This test is to confirm that this is being enforced. Whilst not a mandatory field, I would expect if a data has been added to a field then id expect some validation to be applied | |
| Test Steps | Expected outcome |
| Navigate to the main screen | “Play sample application – Computer database” screen to be displayed |
| Click ‘Add a new computer’ | “Add a computer” screen to be displayed |
| Populate ‘Computer name’ with “HappyPath2021” | As step |
| Populate ‘Introduced date’ with “12-09-2019” | As step |
| Populate ‘Discontinued date’ with “12-09-2020” | As step |
| Click ‘Create this computer’ | I’m expecting some sort of validation message on each of the fields noting that the date format is incorrect |
| Outcome | |
| I can confirm that there is indeed field validation against these fields | |

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| **TC 5** | |
| When adding a new computer to the system, it has been confirmed that data has to be entered, we need to check if only special keys can be used. It is to determine what type of restrictions have been applied to this field since we are stringent on the date format, I’d expect some sort of additional compliance to be had with the data entry field | |
| Test Steps | Expected outcome |
| Navigate to the main screen | “Play sample application – Computer database” screen to be displayed |
| Click ‘Add a new computer’ | “Add a computer” screen to be displayed |
| Populate ‘Computer name’ with “%” | As step |
| Populate ‘Introduced date’ with “2019-09-12” | As step |
| Populate ‘Discontinued date’ with “2020-09-12” | As step |
| Click ‘Create this computer’ | I’m expecting some sort of validation message stopping the user from creating a computer with a single character, especially a special key |
| Outcome | |
| The computer has been allowed by the system. In this instance I would check with the developer, business analyst or project owner if this is intended functionality. If not, then a defect will be raised surrounding the issue. | |

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| **TC 6** | |
| When attempting to add a new computer, rather than creating we will click cancel to confirm if the user is navigated back to the main screen | |
| Test Steps | Expected outcome |
| Navigate to the main screen | “Play sample application – Computer database” screen to be displayed |
| Click ‘Add a new computer’ | “Add a computer” screen to be displayed |
| Populate ‘Computer name’ with “HappyPath22” | As step |
| Populate ‘Introduced date’ with “2019-09-12” | As step |
| Populate ‘Discontinued date’ with “2020-09-12” | As step |
| Click ‘Cancel’ | User should be navigated back to the main screen |
| Populate ‘searchbox’ with “HappyPath2021” | As step |
| Click ‘Filter by name’ button | Confirm no rows are returned |
| Outcome | |
| It has been confirmed that the data has been cancelled and not added to the system. | |

**Non-Functional Requirements**

If the screen is using an API then I would use SOAP UI to provide additional testing against the screen. Since this is not a feature rich screen, I would attempt to provide each test case with the same supplemental test case in SOAPUI.

Reasoning for this is that we can identify what layer the fault lays with. If this is an API fault or a web front end fault.

Depending on the screens usage I would also suggest maybe performing a load test on the search functionality first and adding computer second. LOADUI will use the SOAPUI scripts and allow us to ramp up the user count until we see API degradation.