Software Engineering Group 11

SE\_11\_TS\_03

System Test Specification

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SY23 3DB

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# Introduction

## Purpose of Document

The purpose of this document is to provide a comprehensive guide to the tests we will carry out on the entire system once we reach the testing stage.

## Scope

This document aims to be a brief but detailed document listing our test specifications for the entire system.

## Objectives

This document covers:

* The Website Test Specification
* The Database Test Specification
* The Android Test Specification

## Documents Included

This Test Specification has been derived from the following documents

* SE.QA.RS – Requirement Specification[1]
* SE\_11\_PP – Project Plan[2]
* SE\_11\_TS\_01 – Android Test Specification[3]
* SE\_11\_TS\_02 – Database Test Specification[4]
* SE\_11\_TS\_04 – Website Test Specification[5]

# Android Test Specification

## Recordings and Species Module testing

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test ref** | **Req. being tested** | **Test content** | **Input** | **Output** | **Pass criteria** |
|  | FR2 | Test a valid phone number for a recorder. | 01234564854 | Phone number is accepted when sent to the database. | No errors or warnings are produced. |
|  | FR2 | Test a phone number that contains characters. | 01a23d65845 | Phone number is rejected when the user attempts to submit the data. | An error is displayed to the user alerting them that the phone number is invalid due to characters. |
|  | FR2 | Test a phone number that contains special characters. | 215!254@\*90 | Phone number is rejected when the user attempts to submit the data. | An error is displayed to the user alerting them that the phone number is invalid due to special characters. |
|  | FR2 | Test a valid date. | 06/11/2014 | The date is accepted and sent to the database. | No warnings or errors are produced. |
|  | FR2 | Test a historic date. | 06/11/1900 | The date is rejected when the user attempts to submit the data. | An error is displayed to the user alerting them that the date is too far in the past. |
|  | FR2 | Test a date in the future. | A date further in the future of the current date | The date is rejected when the user attempts to submit the data. | An error is displayed to the user alerting them that the date cannot be in the future. |
|  | FR3 | Test a valid species from the list. | Search for a valid species that exists within the database. | The species is accepted when the user submits the data. | No warnings or errors are produced. |
|  | FR3 | Search for a species that does not exist. | Search for ‘$FS465bth’ | No results will be returned. | A message will alert the user that no matching results were obtained. A prompt to add a new species will appear. |
|  | FR3 | Test a valid unique species can be added. | Attempt to add a new valid species. | The new species will be added to the database when submitted. | No warning or error message will be displayed to the user as the data is valid. |
|  | FR3 | Test that a repeat of a species cannot be entered. | Attempt to add a new valid species that already exists in the database. | The new species will not be added to the database. | An error will be displayed to the user alerting them to the fact a duplicate of this species already exists. |
|  | FR4 | Test a valid abundance character. | ‘A’ | The character is accepted as valid on submission and sent to the database. | No error message or warning is produced for the valid character. |
|  | FR4 | Test an invalid abundance character. | ‘Z’ | The character will be rejected when the user attempts to submit data. | An error is displayed to the user alerting them that the abundance character is invalid. |
|  | FR4 | Test multiple characters in the abundance field. | ‘FA’ | The character will be rejected when the user attempts to submit the data. | An error is displayed to the user alerting them that only one character can be entered into the abundance field. |
|  | FR4 | Test no entry in the free text comment area. | Enter no data to the free text area. | On submission the data will be sent to the database. | No warning or error messages will be displayed for the valid entry. |
|  | FR4 | Test a valid entry in the free text comment area. | Enter more than 0 and less than 256 characters. | On submission the data will be sent to the database. | No warning or error message will be displayed for the valid entry. |
|  | FR4 | Test a comment that is more than the maximum number of valid characters in the free text comment field. | Enter more than 256 characters in the free text comment field. | The data will be rejected when the user attempts to submit the data. | An error message will alert the user to the fact that the free comment box is only able to take a comment of 256 characters or less. |
|  | FR4 | Testing the camera is loaded when the scene camera icon is pressed. | Press the scene camera icon. | The screen is switched to camera output. | The user can take a picture with the camera which is then saved. |
|  | FR4 | Testing the camera is loaded when the plant camera icon is pressed. | Press the plant camera icon. | The screen is switched to camera output. | The user can take a picture with the camera which is then saved. |
|  | FR5 | Testing a recording can be deleted. | Select a recording and press delete. | The recording will no longer be displayed in the list. | The database will no longer contain the recording that was deleted. |
|  | FR5 | Test a whole species can be deleted. | Select a pre-existing species and press delete. | The recording will no longer be displayed in the list. | The database will no longer contain the recording that was deleted. |
|  | FR5 | Change the abundance of a species. | Select a pre-existing species and change the abundance to a valid abundance. | The species will now be updated with the new abundance. | The database will be updated to match the new information given on submission. |
|  | FR5 | Change the abundance of a species to a non-valid abundance. | Select a pre-existing species and change the abundance to a non-valid abundance. | When the user submits the change the change is rejected. | An error message is produced alerting the user that the input for abundance is not valid. |
|  | FR5 | Change the typical location for a species. | Select a pre-existing species and change the pre-existing location to a new valid location. | The species record will be updated with the new value for typical location. | No errors or warning messages are produced as the data is valid. |
|  | FR5 | Change the image of a species (plant). | Select a pre-existing species and change the plant image to a valid image. | The species plant image will be updated with the new image. | The database will be updated to match the new information given on submission. |
|  | FR5 | Change the image of a species (scene). | Select a pre-existing species and change the scene input to a valid image. | The species scene image will be updated with the new image. | The database will be updated to match the new information given on submission. |

## 

## Functionality

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test ref** | **Req. being tested** | **Test content** | **Input** | **Output** | **Pass criteria** |
|  | FR3 | Search for a certain plant in the database | Enter a plant name that is in the database | A drop down list containing plant searched for | If plant appears in drop down list |
|  | FR3 | Search for a plant alphabetically | Enter the first letter or couple of letters | A drop down list populated with plants that match letter(s) going from common to rare | If first letter(s) match those of first letter(s) of plants in drop down list |
|  | FR3 | Search for a plant not in the database | Enter a plant name that is not in the database | A drop down list with option to add new plant | If add new plant option appears in drop down |
|  | FR5 | Display entries according to date | Test database of entries. Two with same day & month, two with same month & year, two with same day & year and two completely same dates | Display entries going from closest date then progressing back to oldest recorded record | If entries are grouped by year and month |
|  | PR1 | GPS is turned off when app is closed/goes inactive (If GPS is only to be active when app is) | App is closed/goes inactive | Phone GPS is deactivated | If phone settings show GPS is off after app use |
|  | FR4 | Search for a certain reserve in the database | Enter a reserve name that is in the database | A drop down list containing reserve searched for | If reserve appears in drop down list |
|  | FR4 | Search for a reserve alphabetically | Enter the first letter or couple of letters | A drop down list populated with reserves that match letter(s) | If first letter(s) match those of first letter(s) of reserves in drop down list |
|  | FR4 | Search for a reserve not in the database | Enter a reserve that is not in the database | A drop down list stating unable to locate reserve | If unable to find reserve appears for the user |
|  | FR4 | When a picture is taken that the GPS coordinates are recorded | Take a picture | GPS coordinates are entered into field to be sent | If record contains GPS coordinates |
|  | FR2, FR8, FR9 | Test logon id validation with one in user database | Enter e-mail of member on system | Proceed to password validation | Logon id is confirmed to be a user in database |
|  | FR2, FR8, FR9 | Test logon id validation with one not in user database | Enter e-mail of a non-member | Display ‘unable to recognize logon/ password’ | Logon id is confirmed as not in user database |
|  | FR2, FR8, FR9 | Test if correct password is entered | Enter correct password for logon id | Proceed to next screen | Password matches password linked to Logon id |
|  | FR2, FR8, FR9 | Test if an incorrect password is detected | Enter incorrect password for logon id | Display ‘unable to recognize logon/ password’ | If password is confirmed as not matching password linked to Logon id |
|  | FR2, FR8, FR9 | Test access level which is valid | Member’s access level | Proceed to next screen | If access level is recognized as being greater than or equal to required level |
|  | FR2, FR8, FR9 | Test access level which is not valid | Member’s access level | Display ‘Access denied’ | If access level is recognized as being less than required level |
|  | FR5 | Test if any entries are on your phone | Request list of previous entries with no entries | Display ‘Not previous entries currently stored’ | If displays message for user as no entries to display |
|  | PR1 | Test if user notified they can upload with WiFi connection made (only if that is their upload option) | Phone connects to WiFi while app is active | Upload icon lights up | If Icon changes and setting is for WiFi |
|  | PR1 | Test if user notified they can upload with signal at a good strength to ensure transition (only if that is their upload option) | Phone signal is at or above a certain strength while app is active | Upload icon lights up | If Icon changes and setting is for using phone’s signal |
|  | PR1 | Test if user notified they can upload with WiFi when no connection is made (only for WiFi upload option) | Phone signal is at or above a certain strength while app is active | Upload icon does not light up | If Icon does not change and setting is for WiFi |

## 2.3 UI

| Test Ref | Req. being tested | Test content | Input | Output | Pass criteria |
| --- | --- | --- | --- | --- | --- |
| SE-F-045 | EIR1 | Main Menu - The upload viewers change based on the record state | The record is in the local Database | Button should be red | Has to be red, |
| SE-F-044 | EIR1 | Main Menu -The upload viewers change based on the record state | The record is being uploaded | Button should change to orange | Needs to change to orange. |
| SE-F-045 | EIR1 | Main Menu -The upload viewers change based on the record state | The record has uploaded, stays for 5 minutes | The button changed to green, and disappears after 5 minutes | Needs to change and disappear in that time provided. |
| SE-F-046 | EIR1 | Record screen - Image select screen | Swipe right on the image select | Image swipe option correctly switches between image modes | The state is switched. |
| SE-F-047 | EIR1 | Record Screen - Reset button works correctly | The button is pressed | The data entry forms are cleared | They are cleared correctly |
| SE-F-048 | EIR1, PR2 | Main menu -Scaling to different screen sizes works correctly | Application is tested on larger screen | The buttons and icons scale correctly and the positions are relative to screen size | The buttons looks correctly scaled. |
| SE-F-049 | EIR1, PR2 | Main menu -Scaled to tablet size | Opened on tablet | All controls are scaled up for tablets and works correctly | Application must have all controls scale up appropriately |
| SE-F-050 | EIR1, PR2 | Record Screen -Scaled to tablet size | Opened on a tablet | The buttons and image size are scaled correctly | Needs to be scaled correctly without any errors with resolution or position |
| SE-F-051 | EIR1 | Main menu - Rotate to landscape | Rotated the device to landscape. | The elements rotate and resize to fit the screen more appropriately | Needs to resize and reposition elements correctly |
| SE-F-052 | EIR1 | Record Screen -Rotate to landscape | Rotated the device to landscape. | The elements of the screen rotate and resize to fit the screen, this includes the image selector. | Needs to resize correctly and the image has to resize |
| SE-F-053 | EIR1 | Main Menu - four navigation buttons must be in the correct location | Opened the application | The buttons are spaced evenly and are the same size | Have to be spaced evenly and are the same size |
| SE-F-054 | EIR1 | Main menu -Upload button checks | Opened the application | The upload buttons are spaced and positioned evenly | They’re spaced evenly and are the same size |
| SE-F-055 | EIR1 | Main menu -Added recording to upload button | Added a recording to be displayed on the button display | The recording button is added to the end of the stack | Has to be added correctly to the display |
| SE-F-056 | EIR1 | Record Screen - GPS Screen disability | Turn off GPS | The GPS automatic entry should be disabled | Has to disable the controls once GPS is turned off |

# Database Test Specification

### Recordings Table

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Ref** | **Req being tested** | **Test Content** | **Input** | **Output** | **Pass Criteria** |
| SE-F-001 | FR2,FR8 | Check if the database can store a valid reserve\_id | A valid reserve id such as 7 or 75 which has a corresponding reserve record | The reserve id is successfully stored in the relevant row | Data is stored correctly without errors or warnings |
| SE-F-002 | FR2,FR8 | Check if the database can store an invalid reserve\_id | An invalid reserve id such as “reserve 51” | The reserve id is not successfully stored and an error is given | Data is not stored and an error is given |
| SE-F-003 | FR2,FR8 | Check if the database can store a valid user\_id | A valid user id such as 3 or 22 which has a corresponding user record | The user id is successfully stored in the relevant row | Data is stored correctly without errors or warnings |
| SE-F-004 | FR2,FR8 | Check if the database can store an invalid user\_id | An invalid user id such as “user 98” | The user id is not successfully stored and an error is given | Data is not stored and an error is given |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test ref** | **Req. being tested** | **Test content** | **Input** | **Output** | **Pass criteria** |
| SE-F-005 | FR7 | Check if database can store common reserve name | Name of the nature reserve | The database should store the newly entered reserve | Data is stored correctly without any problems |
| SE-F-006 | FR7 | Check if database can store common reserve name past the varchar limit | Enter a name of length greater than 50 | The data entry should fail | Data should not appear in the database |
| SE-F-007 | FR8 | Enter an OS grid reference that corresponds to the location of the reserve | A grid reference of correct length and format | The database should store the reference | Data is stored correctly without any problems |
| SE-F-008 | FR8 | Enter an OS grid reference that corresponds to the location of the reserve | A grid reference of correct length but incorrect format | The data entry should be re-formatted and stored in the database | Data is stored correctly without any problems |
| SE-F-009 | FR8 | Enter an OS grid reference that corresponds to the location of the reserve | A grid reference of incorrect length and incorrect format | The data entry should fail | Data is not stored in the database |
| SE-F-010 | FR8 | Enter a textual description of the reserve | Text of length greater than 0 | The database should store the description | Data is stored correctly without any problems |
| SE-F-011 | FR8 | Enter an empty description of the reserve | An empty string | The data entry should fail | Data is not stored in the database |

### Reserves Table

### Species Table

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Ref** | **Req being Tested** | **Test Content** | **Input** | **Output** | **Pass Criteria** |
| SE-F-012 | FR7 | Check if database can store common name. | Enter the common name of the Species e.g. European Silver-fir | The database should store the newly entered species. | Data is stored correctly without any problems |
| SE-F-013 | FR7 | Check if database can store a common name past the varchar (50) limit. | Enter a common name of the species which is beyond the 50 character limit. | The data entered into the database should fail. | Data should not appear in the database |
| SE-F-014 | FR7 | Check if database can store Latin name. | Enter the Latin name of the Species e.g. Abies alba Mill | The database should store the newly entered species. | Data is stored correctly without any problems |
| SE-F-015 | FR7 | Check if database can store a Latin name past the varchar (100) limit. | Enter a Latin name of the species which is beyond the 100 character limit. | The data entered into the database should fail. | Data should not appear in the database |
| SE-F-016 | FR7 | Check if database adds a timestamp every time a new row gets created or updated | Add a new species to the database | A time stamp should be automatically created in the database. | Timestamp should be created with the right time. |

### Species Occurrence Table

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Ref** | **Req being tested** | **Test Content** | **Input** | **Output** | **Pass Criteria** |
| SE-F-017 | FR7 | Check if the database can store a valid species\_id | A valid species id such as 2 or 24 which has a corresponding species record | The species id is successfully stored in the relevant row | Data is stored correctly without errors or warnings |
| SE-F-018 | FR7 | Check if the database can store an invalid species\_id | An invalid species id such as “species 123” | The species id is not successfully stored and an error is given | Data is not stored and an error is given |
| SE-F-019 | FR7 | Check if the database can store a valid recording\_id | A valid recording id such as 5 or 47 which has a corresponding recording record | The recording id is successfully stored in the relevant row | Data is stored correctly without errors or warnings |
| SE-F-020 | FR7 | Check if the database can store an invalid recording\_id | An invalid recording id such as “recording 34” | The recording id is not successfully stored and an error is given | Data is not stored and an error is given |
| SE-F-021 | FR7 | Check if the database can store a valid longitude | A valid longitude such as 52° 24' 55.0908" | The longitude is successfully stored in the relevant row | Data is stored correctly without errors or warnings |
| SE-F-022 | FR7 | Check if the database can store an invalid longitude | An invalid longitude which exceeds the 20 character limit | The longitude stored but is truncated | Data is only partly stored and a warning is given regarding truncation |
| SE-F-023 | FR7 | Check if the database can store a valid latitude | A valid latitude such as -4° 4' 58.5114" | The latitude is successfully stored in the relevant row | Data is stored correctly without errors or warnings |
| SE-F-024 | FR7 | Check if the database can store an invalid latitude | An invalid latitude which exceeds the 20 character limit | The latitude is stored but is truncated | Data is only partly stored and a warning is given regarding truncation |
| SE-F-025 | FR7 | Check if the database can store a valid abundance | A valid abundance which is either ‘D’, ‘A’, ‘F’, ‘O’ or ‘R’ | The abundance is successfully stored in the relevant row | Data is stored correctly without errors or warnings |
| SE-F-026 | FR7 | Check if the database can store an invalid abundance | An invalid abundance such which is not in the enum such as “lots” | The abundance is not successfully stored and an error is given | Data is not stored and an error is given |
| SE-F-027 | FR7 | Check if the database can store a valid comment | A valid comment such as “plenty of this species in this area” | The comment is successfully stored in the relevant row | Data is stored correctly without errors or warnings |
| SE-F-028 | FR7 | Check if the database can store an invalid comment | An invalid comment which exceeds the limit of the text type. (***L*** + 2 bytes, where ***L*** < 216) [1] | The comment is stored but is truncated | Data is only partly stored and a warning is given regarding truncation |
| SE-F-029 | FR7 | Check if the database can store a valid general photo | A valid general photo such as “img0029.jpg” | The general photo is successfully stored in the relevant row | Data is stored correctly without errors or warnings |
| SE-F-030 | FR7 | Check if the database can store an invalid general photo | An invalid general photo which exceeds the 255 character limit | The general photo is stored but is truncated | Data is only partly stored and a warning is given regarding truncation |
| SE-F-031 | FR7 | Check if the database can store a valid specimen photo | An valid specimen photo such as “img0103.jpeg” | The specimen photo is successfully stored in the relevant row | Data is stored correctly without errors or warnings |
| SE-F-032 | FR7 | Check if the database can store an invalid specimen photo | An invalid specimen photo which exceeds the 255 character limit | The specimen photo is stored but is truncated | Data is only partly stored and a warning is given regarding truncation |

### Users Table

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Ref** | **Req being tested** | **Test Content** | **Input** | **Output** | **Pass Criteria** |
| SE-F-033 | FR7 | Check if the database can store a valid email | A valid email such as “kid10@aber.ac.uk” | The email is successfully stored in the relevant row | Data is stored correctly without errors or warnings |
| SE-F-034 | FR7 | Check if the database can store an invalid email | An invalid email which exceeds the 254 character limit | The email is stored but is truncated | Data is only partly stored and a warning is given regarding truncation |
| SE-F-035 | FR7 | Check if the database can store a valid password | A valid password such as an encrypted version of “pass1234” | The password is successfully stored in the relevant row | Data is stored correctly without errors or warnings |
| SE-F-036 | FR7 | Check if the database can store an invalid password | An invalid password which exceeds the 255 character limit | The password is stored but is truncated | Data is only partly stored and a warning is given regarding truncation |
| SE-F-037 | FR7 | Check if the database can store a valid name | A valid name such as “Joe Bloggs” | The name is successfully stored in the relevant row | Data is stored correctly without errors or warnings |
| SE-F-038 | FR7 | Check if the database can store an invalid name | An invalid name which exceeds the 50 character limit | The name is stored but is truncated | Data is only partly stored and a warning is given regarding truncation |
| SE-F-039 | FR7 | Check if the database can store a valid phone number | A valid phone number such as 0123456789 | The phone number is successfully stored in the relevant row | Data is stored correctly without errors or warnings |
| SE-F-040 | FR7 | Check if the database can store an invalid phone number | An invalid phone number which exceeds the 25 character limit | The phone number is stored but is truncated | Data is only partly stored and a warning is given regarding truncation |

# Web Test Specification

## FR7 – Server Receives Recording

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test ref | Req being tested | Test content | Input | Output | Pass criteria |
| SE-F-001 | FR7 | Server receives transmissions of recordings and stores them in the database. | A record is transmitted to the server and stored in the database. | Server receives the input and then stores it in the database correctly. | New recording is in the database. |
| SE-F-002 | FR7 | User X is authenticated | User name and password. | User name will display in the ‘You’ page. The server knows the user is in session. | Correct user name is displayed. Correct user data is displayed. |
| SE-F-003 | FR7 | User is authorised to access the website. | User name and password. | User is logged into the site. | User X has access to the web app. |

## 

## FR8 – Addition and Maintenance of Reserves

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SE-F-004 | FR8 | Create/Update  Reserve Name with a valid name | Aber | Name is accepted and saved into the database | Aber is displayed with no errors or warnings |
| SE-F-005 | FR8 | Create/Update  Reserve Name with numbers | 1476 | Name is rejected and not saved | An error appears alerting the user that numbers are not allowed |
| SE-F-006 | FR8 | Create/Update  Reserve Name with 50 characters (Upper Boundary) | Aberystwyth reserve of nature and plants and trees | Name is accepted and saved into the database | Aberystwyth reserve of nature and plants and trees Is displayed with no errors or warnings |
| SE-F-007 | FR8 | Create/Update  Reserve Name with 50 characters | Aberystwyth reserve of nature plants biology study | Name is rejected and not saved | An error appears alerting the user that they have gone over the character limit |
| SE-F-008 | FR8 | Create/Update  Reserve Name with 4 characters (Lower Boundary) | Aber | Name is accepted and saved into the database | Aber is displayed with no errors or warnings |
| SE-F-009 | FR8 | Create/Update  Reserve Name with 3 characters | abe | Name is rejected and not saved | An error appears alerting the user that they have not entered enough characters |
| SE-F-010 | FR8 | Delete  Reserve | Press Delete | The Reserve Is deleted | The record of the reserve is no longer on the database |
| SE-F-011 | FR8 | Check if there are duplicate names or if name is saved | User inputs a name and make sure there are no duplicates. | The name is displayed and stored in the database | Name is displayed without any duplicates |
| SE-F-012 | FR8 | Create/Update Reserve Location that is valid | 20.534, 50.435 | Location is accepted and saved into the database | 20.534, 50.435 is displayed with no errors or warnings |
| SE-F-013 | FR8 | Create/Update Reserve Location with characters | 3kfm , 34jdd | Location is rejected and not saved | An error appears alerting the user that they can’t use Alphabetical characters |
| SE-F-014 | FR8 | Create/Update Reserve Location with 20 Characters (Upper Boundary) | 304.22581, 250.14858 | Location is accepted and saved into the database | 304.22581, 250.14858 Is displayed with no errors or warnings |
| SE-F-015 | FR8 | Create/Update Reserve Location with 21 characters | 254.21687, 145.257894 | Location is rejected and not saved | An error appears alerting the user that they have gone over the character limit |
| SE-F-016 | FR8 | Create/Update Reserve Location with 3 characters  (Lower Boundary) | 3,6 | Location is accepted and saved into the database | 3,6 Is displayed with no errors or warnings |
| SE-F-017 | FR8 | Create/Update Reserve Location with 2 characters | 3, | Location is rejected and not saved | An error appears alerting the user that they have not entered enough characters |
| SE-F-018 | FR8 | Textual description | Description can be edited and updated | Description will appear for the species. | Data is appeared correctly |

## 

## FR9 – Browsing Species Records

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SE-F-019 | FR9 | Check if species found at a particular reserve can be displayed | Name of reserve e.g.  Coed Rhiedol National Nature Reserve | Species that have been found at that reserve | All species that are found at the nature reserve are displayed |
| SE-F-020 | FR9 | Check if species found at a reserve that does not exist can be displayed | Name of a reserve that does not exist e.g. abc | An error message should be shown | No records should be shown |
| SE-F-021 | FR9 | Check if data can be displayed in alphabetical order of Latin name | A list of unsorted data | List of results ordered by their Latin name | Species are ordered A-Z |
| SE-F-022 | FR9 | Check if data can be displayed in reverse alphabetical order of Latin name | A list of unsorted data | List of results ordered by their Latin name | Species are ordered Z-A |
| SE-F-023 | FR9 | Check if a record with a particular date can be displayed | A record recorded on the current date | The record is displayed | The record from the date is displayed |
| SE-F-024 | FR9 | Check if the earliest recording can be displayed | A record recorded on 1st January 1990 | The record is displayed | The earliest recording is displayed |
| SE-F-025 | FR9 | Check if a recording dated before the earliest entry date can be displayed | A record recorded before 1st January 1990 | The record is not displayed | The recording taken before 1st January 1990 is not shown |
| SE-F-026 | FR9 | Check if the latest recording can be displayed | A record recorded on 31st December 2050 | The record is displayed | The latest recording is displayed |
| SE-F-027 | FR9 | Check if a recording dated after the latest entry date can be displayed | A record recorded after 31st December 2050 | The record is not displayed | The recording taken after 31st December 2050 is not shown |
| SE-F-028 | FR9 | Check if records can be ordered by date | A list of unsorted data | Full list of sorted results | List is ordered by date (newest to oldest) |
| SE-F-029 | FR9 | Check if records can be reverse-ordered by date | A list of unsorted data | Full list of sorted results | List is ordered by date (oldest to newest) |

## EIR – External Interface Requirements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SE-F-030 | EIR1 | Check if user is able to navigate the application with minimal training | A new user using the web application for the first time | Feedback from the user about their experience | Positive feedback from the user |

## PR – Performance Requirements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SE-F-032 | PR1 | Check if user input is responded to within a second by the application | Input from the user | Changes to data displayed | Changes are shown within a certain amount of time |
| SE-F-032 | PR2 | Check if software runs as expected on supported systems | Application used on web browsers used by the university | Application displays information requested by the user | Application and its components work correctly |

# REFERENCES

[1] – SE.QA.RS – Requirement Specification – N.W.Hardy

[2] – SE\_11\_PP – Project Plan – Group 11

[3] – SE\_11\_TS\_01 – Android Test Specification – Group 11

[4] – SE\_11\_TS\_02 – Database Test Specification – Group 11

[5] – SE\_11\_TS\_04 – Website Test Specification – Group 11

# DOCUMENT HISTORY

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Version | CCF No. | Date | Changes made to document | Changed by |
| 1.0 | N/A | 13/11/14 | Document Created and Structured | Tcg2 & Add20 |