

Testing Specification

GROUP PROJECT

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Introduction

1.0 Purpose of this document

The purpose of this document is to define each of the tests required for the implementation of the system. These tests have all be created to the requirement specification standard [DC2] and are to be executed as part of the group project.

1.1 Scope

The scope of these tests covers a list of tests with pass and fail criteria for each test. The tests have been created to the requirements specification, keeping the functionality requirements in mind, This series of tests do not, however, cover module tests as that has been left to the implementation team as they create the application and discover issues.

1.2 Objectives

The objective of this specification is to ensure that all the functionality requirements stated in the requirements specification are met by the created system. This specification will also aim to ensure that all areas of the system are testing to the proper standard, such as Graphic interfaces and database systems, this will make sure that all the parts of the system developed meet the requirements.

2. Testing

2.1 UI testing

2.1.1 Web and Database

Test Ref.	Req. being tested	Test Content	Input	Output	Pass Criteria
UI-W-001	FR8	Information about the visit is added to the server correctly.	Submit valid record.	Data uploaded should be stored correctly (e.g. in the expected table)	Data is stored on to the database with no corruptions to the rest of the program.
UI-W-002	FR8	Species recordings are added to the server correctly.	Submit valid record.	Data uploaded should be stored correctly (e.g. in the expected table)	Data is stored on to the database with no corruptions to the rest of the program.
UI-W-003	FR8	Additions of new recordings don't cause crashes.	Submit valid record.	New recordings shouldn't cause any issues with the database	New data does not interfere with other parts of the program or cause the program to fail.
UI-W-004	FR8	Test server database size restraints.	Submit valid record.	The data will be added to the database with no issues.	Data is stored on to the database with no corruptions to the rest of the program.
UI-W-005	FR8	Test server database size restraints.	Submit record that is slightly too large, and one that is beneath usual size.	An error message will be displayed	The record is not added, and a suitable error message is displayed

UI-W-006	FR8	The user is able to upload new reserve records to the website.	Submit valid record and check the website for it's arrival.	The data will be added to the website (and visible)	The new data will have been added to the database with no faults in the rest of the database.
UI-W-007	FR8	The user can delete reserve records without causing issues.	Delete the newly added record from test 6	The record will be successfully deleted	The record is no longer in the database.
UI-W-008	FR8	Enter a correctly formatted OS grip map reference	Make a new record, and enter the grid reference "SN 59732 82286"	The record will be added successfully	The record is in the database.
UI-W-009	FR8	Enter an incorrectly formatted OS grid map reference	Make a new record, and enter the grid reference "12346578910"	An error message will be displayed	The record is not added, and a suitable error message is displayed
UI-W-010	FR8	Character limits of textual descriptions of reserves.	Enter valid data that is the exact length allowed.	The data will be added to the database with no issues.	The data has been added to the database successfully.
UI-W-011	FR8	Character limits of textual descriptions of reserves.	Enter data that is one character too long, and then several over the size restraint for comparison.	An error message will be displayed.	The record is not added, and a suitable error message is displayed.
UI-W-012	FR9	Users can view a reserve including all species recordings at that reserve.	Search for a known existing reserve, "ParcNaturPenglais"	The website will display all species recordings at that reserve	The website successfully displays all species recordings at the given reserve.
UI-W-013	FR9	List is actually in alphabetical order (of latin names).	Refresh the webpage.	Check if the list is in correct order	The list is in correct alphabetical order.

UI-W-014	FR9	Option to order by date.	Refresh the webpage.	Check if option given to order by date	The option to sort by date is there.
UI-W-015	FR9	List is actually in date order.	Select the option to sort by date.	The list is now sorted by date	The list is in correct date order.

Test Ref.	Req. Tested	Test Content	Input	Output	Pass Criteria
UI-A-001	FR1/FR6	Check that when the user clicks the "add" button the record will be saved in the database.	Species: "Sunflower" DAFOR scale abundance: "O" Species Coordinates: "SN585815" Typical location: "Crop field" Additional information: "A tall, yellow plant"	The user will be taken to the record page with the newly filled out record on display.	The data collected will be stored into the database.
UI-A-002	FR1/FR4	Check that when the user clicks the "add" button the button will add multiple records to the database	Species: "Ivy" DAFOR scale abundance: "R" Species Coordinates: "SN585815" Typical location: "Growing up tree" Additional information: ""	The user will be taken to the record page with the newly filled out record on display.	Adds multiple records to the database.
UI-A-003	FR2	Allowing the user to input data about the site they are currently in.	Species: "Ivy" DAFOR scale abundance: "R" Species Coordinates: "SN585815" Typical location: "growing up tree" Additional information: ""	The input data will be written into text boxes within the page	The data will appear in the correct text boxes.
UI-A-004	FR2	On the user data page the user will be able to prompted to enter their logon details	Name: "John Heynes" Email: "john.h_1991@hotmail.co.uk" Phone Number: "07599129221"	The "Blank Record Page" will appear on the screen.	If the logon is correct then pressing "Start" will bring up the "Blank Record Page"
UI-A-005	FR3	Being able to select a species from a list	Species: "Ivy" Attained from drop-down menu	The dropdown menu will appear and be able to click on an element.	On click, the desired element will appear in the box and the drop down will be removed.

UI-A-006	FR3	Being able to select a species not on the list. Entering a new species.	Species "Alpine catchfly"	Add button within the drop-down menu which allows for a new species to be entered.	The users input will appear in a text box.
UI-A-007	FR5	Editing the users existing recordings within the "Edit" section.	(editing the sunflower record) Was: DAFOR scale abundance: "O" Now: DAFOR scale abundance: "R"	The user will be taken to the record page with the edited data on display.	By clicking the Add button the data will be updated within the record.
UI-A-008	UI Local Storage	If the user is not currently connected to the internet, then they will be able to store their records on local storage.	Species: "Autumn Crocus" DAFOR scale abundance: "A" Species Coordinates: "SN585815" Typical location: "within a field" Additional information: "a delicate purple flower"	A pop-up box message informing the user that their entry has been stored for later.	Record has been stored in the device's local storage.

2.1.2 Android app UI

2.1.3 App Functionality Testing

Test Ref	Req. Tested	Test Content	Input	Output	Pass criteria
UI-A-1	FR1	Click a button, check the interaction	Home Page Record Button	Goes to User Data Page	Goes to appropriate screen
UI-A-2		Click a button, check the interaction	Home Page Explore Button	Goes to Explore Page	Goes to appropriate screen
UI-A-3	FR2	Test that title of Name cannot exceed 50 characters in length	User Data Page Name Field	Cursor appears	Cursor appears when Name length equals 50 characters and a new character is attempted to be added
UI-A-4	FR2	Test that title of Email cannot exceed 75 characters in length	User Data Page Email Field	Cursor appears	Cursor appears when Name length equals 75 characters and a new character is attempted to be added
UI-A-5	FR2	Test that title of Phone Number cannot exceed 25 characters in length	User Data Page Phone Number Field	Cursor appears	Cursor appears when Name length equals 25 characters and a new character is attempted to be added.
UI-A-6	FR1	Click a button, check the interaction	Blank Record Page Add Button	Takes the user to the Add Record Page	Goes to appropriate screen.
UI-A-7	FR4	Test that Species Field cannot be empty when Add is pressed	Add Record Page Species Field	Message "Species field cannot be empty" will display.	Error message displayed.
UI-A-8	FR4	Test that title of Species Field cannot exceed 30 characters in length	Add Record Page Species Field	Cursor appears	Cursor appears when Name length equals 30 characters and a new character is attempted to be added

UI-A-9	FR4	Test that DAFOR scale abundance field cannot exceed 2 characters in length	Add Record Page DAFOR scale abundance field	Cursor appears	Cursor appears when Name length equals 2 characters and a new character is attempted to be added
UI-A-10	FR4	Test that Species X Coordinates field exceed 10 characters in length	Add Record Page Species Coordinates X Field	Cursor appears	Cursor appears when Name length equals 10 characters and a new character is attempted to be added
UI-A-11	FR4	Test that Species Y Coordinates field exceed 10 characters in length	Add Record Page Species Coordinates Y Field	Cursor appears	Cursor appears when Name length equals 10 characters and a new character is attempted to be added
UI-A-12	FR4	Test that title of Species Field can not exceed 30 characters in length	Add Record Page Typical Location Field	Cursor appears	Cursor appears when Name length equals 30 characters and a new character is attempted to be added
UI-A-13	FR4	Test that title of Species Field can not exceed 60 characters in length	Add Record Additional Information Field	Cursor appears	Cursor appears when Name length equals 60 characters and a new character is attempted to be added
UI-A-14	FR4	Check if Camera button is function correctly	Add Record Page/Add Species Image/Camera Button	Camera screen popped out	Check if Camera screen is successfully popped out

UI-A-15	FR4	Check if Camera button is function correctly	Add Record Page/Add Location Image/Camera Button	Camera screen popped out	Check if Camera screen is successfully popped out
UI-A-16	FR1	Check if goes to appropriate page after clicking the button	Add Record Page Add Button	Takes the user to the Record Page	Go to Record page
UI-A-17	None	Check if goes to appropriate page after clicking the button	Record Page + Button	Takes the user to the New Record Page	Go to a new Record page
UI-A-18	None	Check if the previous photo of the current record is shown	Record Page < button	Previous photo appears	Shows previous photo
UI-A-19	None	Check if the next photo of the current record is shown	Record Page > button	Next photo appears	Shows next photo
UI-A-20	None	Test if the list of items in menu pops up correctly	Record Page Hamburger Button	Side menu popped up	Side menu popped up "showing Send, Edit, Delete, Back"
UI-A-21	None	Check if the previous photo of the Image Viewing page is shown	Image Viewing page < Button	Previous photo appears	Shows previous photo
UI-A-22	None	Check if the next photo of the Image Viewing page is shown	Image Viewing page > Button	Next photo appears	Shows next photo
UI-A-23	FR6	Test if records are all sent to server when button is pressed	Side Menu Send Button	Message popped up ""	All new records sent to server

UI-A-24	FR6	Test if records are all stored into device when button is pressed	Side Menu Send Button	Message popped up "No internet connection, data is stored"	All new records are stored temporarily
UI-A-25	FR5	Check if goes to appropriate page after clicking the button	Side Menu Edit Button	Goes to a previous Record page	Goes to a previous Record page
UI-A-26	FR5	Check if goes to appropriate page after clicking the button	Side Menu Delete Button	The current record is discarded and jump back to Home page	The current Record will be deleted and goes back to the Home page
UI-A-27	None	Check if goes to appropriate page after clicking the button	Side Menu Back Button	Goes to a previous page	Back to previous page

Document History

Version	Date	Changes made	Changed by
1.0	04/11/14	First version created	
1.1	05/11/14	Add tests	yta,cac,
1.2	06/11/14		yta,
	07/11/14	Categorize tests	
	07/11/14		
2.0	08/11/14	Lots improvement, finalize	Yta
2.1	11/11/14	Formatting improvement	Kpf
2.2	21/01/15	Edited according to feedback.	Mas

