Group Project Reserve Plant Species

November 6

2014

Test Specification

Group 10

Contents

Aberystwyth University / Computer Science

1 Introduction

In this document we discuss the tests that we are going to implement so that we can be sure that we are going to catch as many errors as we can during the development process.

1.1 Scope

The scope of this document is to show what tests we will be employing for different parts of the project and how each part will be tested differently to others.

1.2 Objectives

Our main objectives with this document are as follows:

1.1.1   Java Tests
1.1.2   Web Tests

Aberystwyth University / Computer Science

2 Java Tests

Test ID	Test Requirement	Test Content	Input	Output	Pass Criteria
JT1	FR1	Check that the software starts first time without errors on an Android device.	Application will be opened on test device.	Modal window prompting for contact details.	The application should have launched without crashing.
JT2	FR1	Check that the software starts second time with intended behaviour on an Android device.	Application will be opened on test device after previously having its user details set.	Prompt user to start a new recording.	The user should be able to start a new recording from app start without entering their details a second time.
JT3	FR1	Check that the software allows to record at a different site once a recording has ended.	A recording will be started, test items entered, then ended. This will be repeated two more times without closing the app.	App should end a recording then prompt user for a new one.	App should have taken and stored three separate recordings.
JT4	FR1 / FR2	Check that the user will be prompted for contact details at first boot up.	Application will be opened for the first time and a new recording will be started.	Modal window prompting for contact details.	The user should be prompted to fill in contact details.
JT5	FR2	Check that the user is able to select a natural reserve for the visit.	Start a new recording and identify the site by starting typing its name.	Drop down menu showing suggestions of the natural reserve.	Suggestions shown are relevant to what the user has started typing.
JT6	FR3	Check that the user is able to select a species or provide a name if it's not available.	When adding a new species the user will start typing its name into the species text field.	Drop down menu showing suggestions of species.	Suggestions shown are relevant to what the user has started typing.
JT7	FR4	Check that the GPS coordinates are obtained correctly from the Android OS.	Record a new species and touch the "Obtain GPS coordinates" button.	GPS coordinates are shown on the details of the newly recorded species.	GPS coordinates are the same as GPS coordinates recorded in parallel to this test.
JT8	FR4	Check that the radio buttons for the abundance store the correct data.	Record a new species and select a radio button "DAFOR".	The selected radio button gets selected (filled in).	The selected abundance is stored correctly in the species record

					(shown in the summary view).
JT9	FR4	Check that the user is able to add a free text comment.	Record a new species and add a little text comment in the comment text field.	The written text is shown in the comment text field.	The written text is stored correctly in the species record (shown in the summary view).
JT10	FR4	Check that the user is able to add a photo from the phones gallery for the general scene.	Record a new species, touch the "Add photo" button, select "From gallery" in the modal window that appears and select a photo from the phones gallery.	A thumbnail of the selected photo is shown next to the "Add photo" button.	A copy of the photo is stored correctly in the species record (shown in the summary view).
JT11	FR4	Check that the user is able to shoot a new photo using the phones camera for the general scene.	Record a new species, touch the "Add photo" button, select "Shoot photo" in the modal window that appears and shoot a photo with the phones camera app.	A thumbnail of the new photo is shown in the general scene section.	A copy of the new photo is stored correctly in the species record (shown in the summary view).
JT12	FR4	Check that the user is able to add a photo from the phones gallery for the species.	Record a new species, touch the "Add photo" button, select "From gallery" in the modal window that appears and select a photo from the phones gallery.	A thumbnail of the selected photo is shown next to the "Add photo" button.	A copy of the photo is stored correctly in the species record (shown in the summary view).
JT13	FR4	Check that the user is able to shoot a new photo using the phones camera for the species.	Record a new species, touch the "Add photo" button, select "Shoot photo" in the modal window that appears and shoot a photo with the phones camera app.	A thumbnail of the new photo is shown in the species section.	A copy of the new photo is stored correctly in the species record (shown in the summary view).
JT13	FR5	Check that the user is able to delete one species from a recording.	When viewing the list of species in an unsent recording select one species to delete.	Species disappears from the list of species.	Species and all its details are deleted from the recording.

JT14	FR5	Check that the user is able to delete a whole recording.	When viewing the list of unsent recordings select one recording to delete.	Recording disappears from the list of recordings.	Recording and all the species in it are deleted.
JT15	FR5	Check that the user is able to update an unsubmitted recording.	'Edit' button is clicked on the summary page.	User taken to a page where they are able to amend the recording.	Recording is updated correctly and the user is taken back to the summary page.
JT16	FR6	Check that the user that the user can send a recording to the server.	The recording button on the app is pressed.	The recording is displayed on the website and is added to the list	The Recording is sent to the server and then added to the database.Inline with the specification documents.
JT17	FR6	Check that the recording is sent with FR2 and FR4.	The recording is sent with the information from FR2 and FR4.	The information listed contains FR2, FR4 and FR6.	The data is displayed server side showing it has passed the test.

3 Web Tests

Test ID	Test Requirement	Test Content	Input	Output	Pass Criteria
WT1	FR7	Check that the server can receive and store recordings sent from the android app.	Send a recording to the server via a HTTP POST.	The database should contain the new recording with the correct data.	The data is saved correctly.
WT2	FR7	Check for corrupt/ incomplete files.	Compare and seeing whether the file sizes match on both sides.	File sizes comparison.	The file sizes should match.
WT3	FR8	Check that the reserves data can be added to.	Try adding some data to the reserves and saving it.	The added data should now be saved and on "The Reserves" page.	The data has been added correctly.
WT4	FR8	Check that the reserves data can be maintained.	Try to edit some of the data that has been added to the reserves. Edit part of the data saved and re-save it.	The data should have been updated and should show the changes.	The data is saved correctly.
WT5	FR8	Check that wrong data cannot be inputted into the fields.	Try adding numbers into a field that should only accept text and then try to save it.	You should be told that you can't save it because some fields were filled out incorrectly.	The data is not saved.
WT6	FR9	Check whether the user is able to sort the recordings by reserve.	Select a reserve to display recordings from using the UI. A list of recordings made from the specified reserve only should be displayed and should be in alphabetical order of Latin name.	The list should display recorder's name, the date and the abundance.	Appropriate recordings are being displayed and ordered correctly.

WT7	FR9	Check whether the user is able to sort the recordings by date added.	Select sort by date (descending or ascending) using the UI.	A list of recordings displayed in date order from newest to oldest or vice versa.	Recordings are being displayed and are in the correct order.
WT8 (Optional)	FR9	Check that the user can search for recordings of a specific species.	Search for a species that is in the database.	This species should now show up on the website so that you can see the data about it.	The species shows up.
WT9 (Optional)	FR9	Check that the user can search for recordings of a specific species.	Search for a species not on the database.	This should show up with no species.	Nothing shows up.

Version	Date	Changes Made	Changed by
1.0	11.11.2014	Original document.	cpm6
1.1	11.11.2014	Removed duplicated tests and typos.	cpm6
1.2	11.11.2014	Changes made after formal review.	cpm6

Aberystwyth University / Computer Science