TEST SPECIFICATION: GROUP 12

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1. Introduction

1.1 Purpose of this document

The purpose of this document is to specify in detail each of the system tests to be executed as part of a formal test process. The test specification will cross-reference to the appropriate section of the Specific Requirements in the Requirement specification document for each feature being tested. This test specification will provide a set of reproducible actions to test all of the main functionality of the system.

1.2 Scope

This test specification document includes test procedures which are derived from the Requirement specification document. In detail, the specific requirements section which has been provided. This is the **[1]** SE.QA.RS document. Furthermore the test table is done with accordance to the test specification section of the **[2]** SE.QA.06 Test Procedures document.

The main sections covered are:

- Android system tests
- Web system tests

1.3 Objectives

This document is here to show our testing plan for the proposed system and show that we have thought about all possible problems which could occur. Showing them along with context, input and output, and pass criteria.

The objectives this document has are:

- To outline all the tests which must take place.

- To show the input and output for each test.

- To display the criteria that must be met for a test to pass.

2. Test Table

Test ID	Requirement tested	Test context	Input	Output	Pass criteria
SE-F-001	FR1	Check that the application can be installed and is runnable	Install and start of the application.	Application starts and the home screen should show.	Correct presentation of the home screen.
SE-F-002	FR1	The application can be closed by pressing the quit button.	Press the quit button.	Closed application.	Application closes correctly and is no longer in the running tasks of the phone.
SE-F-003	FR1 & FR2	Check to see if walk can be created	Clicking Start new walk	Asks for name of walk.	Screen changes to a new screen that prompts user for the name of the walk
SE-F-004	FR1	Checking if the application launches.	Clicking on the application logo.	Home screen of the application shows up.	Home screen of the application should show up.
SE-F-005	FR1	Recording of a walk can be started.	Once starting a walk the coordinates are being recorded every	Coordinates from the walk stored in the SQLite database on the	Correct recording of the coordinates from the walk.

			stated period of time.	phone.	
SE-F-006	FR1 & FR5	Recording can be canceled.	Pressing the cancel walk button.	Screen goes back to main.	Recording of a walk is stopped and the main screen is displayed.
SE-F-007	FR1	Tour can be uploaded to the server.	Pressing the upload/finish button.	Tour is uploaded to the server.	Tour should now be on the server.
SE-F-008	FR1	Checking whether the uploaded tour is displayed on the website itself.	Going onto the tour website.	Tour is showed on the "Tours" page within the website.	Tour should be displayed on the website.
SE-F-008	FR1	Location can be added during the recording of the tour.	Pressing the add location during the currently recording tour.	Location added and screen goes back to the main tour recording screen.	Location should be added to the list of locations within the tour.
SE-F-009	FR2	Check to see if a name can be entered in for the walk.	Enter "Aberystwyth Pub Crawl"	User can move on to the short description of the walk.	Name accepted and prompts user for a short description.
SE-F-010	FR2	Check to see if the name of the walk has to be typed in	Try to start the tour with the name of the tour field being blank.	Message requiring for the user to fill in the field before	User is not able to proceed without a value typed

		before being able to proceed with the walk.		proceeding pops up.	in for the name of the walk.
SE-F-011	FR2	Check to see if user can enter a short description	Enter "This short length walk from Constitution Hill to Aberystwyth castle."	Screen changes to map/walk.	Description is accepted
SE-F-012	FR2	Check to see if the short description of the walk has to be typed in before being able to proceed with the walk.	Enter ""	Prompts the user asking to enter a valid description.	Description is rejected and prompted to retry.
SE-F-013	FR2	Check if the character limit of the short description is 100 characters	Try to enter a short description that's over 100 characters long.	User should not be able to input a short description which is that long.	User not able to enter any more than 100 characters for the short description.
SE-F-014	FR2	Check to see if user can enter a long description	Enter (Long description)	User is able to proceed to the next screen.	Description accepted.
SE-F-015	FR2	Check to see if user has entered a long description	Enter ""	Prompts the user asking to fill in the field.	Description is rejected and prompted to retry.
SE-F-016	FR2	Check if the	Try to enter a	User should	User not able

		user can't enter a description that is over 1000 characters in length.	description over 1000 characters long.	not be able to enter more than 1000 characters.	to enter any more than 1000 characters for the short description.
SE-F-017	FR2	Check to see if the user can edit a walk name.	Edit walk name	New walk name is typed in.	User allowed to edit the current walk name.
SE-F-018	FR2	Check to see if the user can edit the short walk description.	Edit walk's short description.	A new short description is typed in.	User allowed to edit the short description of a walk.
SE-F-019	FR2	Check to see if the user can edit the long walk description.	Edit walk's long description.	A new long description is typed in.	User allowed to edit the long description of a walk.
SE-F-020	FR3	Checking whether the users location can be identified correctly.	Going onto the Android application and pressing add location.	Users GPS location.	The location is checked against a correct location on Google maps and a correct match is produced.
SE-F-021	FR3	Checking whether an error message is shown when GPS signal is lost.	GPS turned off.	A message saying GPS signal has been lost.	When GPS is turned off a message saying letting the user know of the loss is displayed.
SE-F-022	FR2 & FR3	Check to see if user can add a location	Clicking on add a location.	Location is saved and user is able to continue on with the walk.	Current coordinates are saved.
SE-F-023	FR3 &FR4	Checking whether the	Clicking on add location	Latitude and longitude are	Latitude and longitude of

		latitude and longitude for a location have been saved.	button.	now saved and can be used to plot the line of the walking tour.	the location are saved correctly and they are they are the correct lat and long values. This is checked against Google maps on a computer.
SE-F-024	FR3 &FR4	Check to see if user can enter a location name.	Enter "Sea front"	Screen changes to accept a description.	Name is accepted.
SE-F-025	FR3 & FR 4	Check to see if user has to enter a location name.	Enter ""	Prompts the user asking to enter a valid name.	User must re-enter a name.
SE-F-026	FR3 & FR4	Check to see if user can enter a location description.	Enter "A great place to be at sunset or on a hot day."	Returns user back to the current walk's screen and the user can add more locations.	Description is accepted and user can continue on with the walk and add more locations.
SE-F-027	FR3	Check to see if user has to enter a location description	Enter ""	Message prompting the user to enter a valid location description is displayed.	Description is rejected and asks for another.
SE-F-028	FR3 & FR4	Check to see if user can't enter a description that's over 1000	Trying to type in a description which is more than 1000 characters long.	Prompts the user asking to enter a valid description.	Description is rejected and prompted to retry.

		characters in length.			
SE-F-029	FR3 & FR4	Check to see if time stamp is taken.	Save a location	Returns user back to map/walks	A correct location and time stamp are saved locally.
SE-F-030	FR4	Checking whether the camera application is launched correctly after adding a location.	Pressing add photo after pressing add location.	Camera application is launched.	Camera application is launched and after taking the picture, user is directed back to the location screen.
SE-F-0031	FR4	Check to see if the photo taken is saved.	Take photo.	User can go back to the add location screen.	Photo is accepted and saved locally.
SE-F-032	FR4	Checking to see if the user can take a different photo after one has been taken.	After taking a photo, pressing dismiss and taking another photo.	User can go back to the add location screen.	The new photo is accepted and the add location screen is displayed.
SE-F-033	FR4	Check to see if coordinates are taken when image is taken.	Take a photo/ get a photo from library.	Returns user back to map/walks.	Image is saved internally with the coordinates of the location.
SE-F-034	FR5	Check to see if user can cancel a walk	Start a walk, store some information, and then cancel.	Returned to main menu of the application.	All locally stored data on the current walk is deleted.
SE-F-035	FR5	Check to see if a message letting the user know that once canceled all	Press cancel walk.	Returned to the main menu and message produced.	Once the user pressed cancel, a message letting the user know

		walk data will be lost shows up.			that data will be lost should show up.
SE-F-036	FR5	After canceling a walk, checking whether user can then start a new one.	Pressing cancel walk and then starting a new walk from the main screen.	Data about the old walk is dismissed and new data is stored locally.	After canceling and starting a new walk, the current data is dismissed and the new data about the walk is stored locally.
SE-F-037	FR6	Checking whether the name is sent correctly to the server.	Finish walk and press upload.	Message saying the data is uploaded or will be uploaded soon in case of wi-fi unavailability is displayed.	Name of the walk is sent to the sever correctly.
SE-F-038	FR6	Checking whether the short description is sent correctly to the server.	Finish walk and press upload.	Message saying the data is uploaded or will be uploaded soon in case of wi-fi unavailability is displayed.	Short description the walk is sent to the sever correctly.
SE-F-039	FR6	Checking whether the long description is sent correctly to the server.	Finish walk and press upload.	Message saying the data is uploaded or will be uploaded soon in case of wi-fi unavailability is displayed.	Long description of the walk is sent to the sever correctly.
SE-F-040	FR6	Checking whether the	Finish walk and press	Message saying the	GPS coordinates

		GPS coordinates are sent correctly to the server.	upload.	data is uploaded or will be uploaded soon in case of wi-fi unavailability is displayed.	of the walk are sent to the sever correctly.
SE-F-041	FR6	Checking whether the time stamps for each location are sent to the server correctly.	Finish walk and press upload.	Message saying the data is uploaded or will be uploaded soon in case of wi-fi unavailability is displayed.	Time stamps of the locations are sent to the sever correctly.
SE-F-042	FR6	Checking whether the locations in a tour are sent correctly to the server.	Finish walk and press upload.	Message saying the data is uploaded or will be uploaded soon in case of wi-fi unavailability is displayed.	Locations within the walk are sent to the sever correctly.
SE-F-043	FR6	Checking whether the pictures in a tour are sent correctly to the server.	Finish walk and press upload.	Message saying the data is uploaded or will be uploaded soon in case of wi-fi unavailability is displayed.	Pictures are converted to base64 and are sent to the sever correctly.
SE-F-044	FR6 & FR8	Checking whether the name, title, long description and short description can now be displayed on the website	Going onto the website and clicking on the tours page.	Specified data which was sent to the server from the android application.	Name, title, long description and short description which have been sent to the server should now show up on

		itself.			the website correctly.
SE-F-045	FR6 & FR8	Checking whether the list of GPS coordinates and the time stamps can now be displayed on the website itself.	Going onto the website and clicking on the tours page.	Specified data which was sent to the server from the android application.	GPS coordinates and time stamps which been sent to the server should now show up on the website correctly.
SE-F-046	FR6 & FR8	Checking whether the list of locations can now be displayed on the website itself.	Going onto the website and clicking on a specific tour.	Locations which have been sent from the android and to the server.	Locations sent from the android application should now show up on the map within the web application.
SE-F-047	FR6 & FR8	Checking whether the pictures sent are displayed on the website correctly.	Going onto the website and clicking on a specific tour.	Pictures which have been sent from the android and to the server.	Pictures sent from the android application should now show up on the map within the web application.
SE-F-048	FR7	Closing mid way through a walk.	User pressing the home button.	Data which the user has already inputted is stored locally.	The data which is stored locally and once the application is reopened, the data is still present.
SE-F-049	FR7	Reopening the app halfway through a walk.	Open the WTC app.	Returns the user back to the screen they left it on.	Previous screen loads and data on the walk is retrieved from local

					storage and no data is lost. User can continue on with the walk.
SE-F-050	FR8	Checking whether when the user goes onto the WTD it shows the list of uploaded tours.	Going onto the Tours page within the website.	All of the tours which have been uploaded.	The tours which have been uploaded by the user show up correctly on the web client.
SE-F-051	FR8	Checking whether when the user clicks on a certain tour, all the details on it display correctly as sent by the Android client.	Clicking on a set tour.	Tour details.	All of the details about the tours which have been originally uploaded by the client are displayed correctly on the server.
SE-F-052	FR8	Checking whether the way points from the tour plot a correct line on the Google map embedded in the website.	Clicking on a specific tour.	Line drawn on the Google map embedded in the website.	Correct displaying of the tour way points and locations. Correct order required for this test to pass.
SE-F-053	FR8	Checking whether the locations added by the user are displayed correctly on the Google map embedded in the website.	Clicking on tour details at the Google map of each tour.	Locations on the Google map as selected by the user.	Correct locations display on the Google map.

SE-F-054	FR8	Checking whether the pictures which the user has taken at each way point are displayed correctly and are assigned to a correct way point.	Clicking on details about each tour.	Pictures assigned to locations.	Correct pictures are assigned to locations.
SE-F-055	FR8	Checking whether the locations set by the user have thumbnails which when hovered on have the picture taken at each location.	Hovering onto a location.	Picture of a location.	When hovering onto a location a correct location picture is displayed.
SE-F-056	FR9	Checking whether the server database has a correct format.	Look at the table fields in the database on the server.	Correct number and format of fields.	The fields match the fields specified in SE.QA.RS.
SE-F-057	FR9	Checking whether the server returns a success or error message back to the client after a successful or failed upload.	Input of correct or incorrect data to the server.	A message saying the upload has been correct or incorrect.	The android client sending a correct message as to whether the upload of the data has been successful or not.
SE-F-058	FR9	Checking whether the format of the message is correct.	The Android user sending data from the Android client and to the web server.	Message of whether the data has been uploaded received by the Android	Correct message sent from the server and received by the Android client.

					client.
SE-F-059	FR9 & FR8	Checking whether the uploaded walk shows up in the walks on the website.	Sending of the data from the Android client to the server as well as the retrieval of the data from the server and into the website.	Json data sent by the android client.	Correct data sent by the Android client and received by the
SE-F-060	EIR1	Checking whether the Android application is intuitive to other users.	Clicking on different buttons within the applications.	User is taken to the correct screens in the application.	The correct screens within the app
SE-F-061	PR1	Checking the responsiveness of the Android interface.	Accessing different screens within the application.	User is taken around the application.	The app is responsive and the screen change within one second of choosing a certain option.
SE-F-062	PR2	Checking whether the Android application runs on a phone with Android 2.2 and above.	Installing the application on a phone.	Application is installed on a phone.	The application is installed correctly on the Android 2.2 and up to Android 4.2
SE-F-063	PR2	Checking whether the web application runs on the latest versions of Google Chrome, Mozilla Firefox and	Accessing the website on latest versions of all 3 browsers.	Website displays on all browsers.	Website displays correctly on all 3 browsers.

		IE.			
SE-F-064	DC3	Checking whether the database has a structure as defined in the requirement specification document SE.QA.RS	Looking at the specified structure and the structure of the database.	Database structure.	The structure of the database matches the structure as specified in the SE.QA.RS document.

References

[1] Requirements specification document SE.QA.RS
[2] Test procedure standards document SE.QA.06
[3] QA Document SE.QA.03 - General Documentation Standards.

Document History

Version	CCF No.	Date	Changes made to the document	Changed by
1.0	N/A	31/10/13	N/A Original draft.	anp28, srp11
1.1	N/A	07/11/13	Introduction, contents and references added.	fik
1.2	N/A	13/11/13	Introduction appended.	alh32
1.3	N/A	27/01/14	Tests eddied in accordance to the current design.	fik
1.4	N/A	29/01/14	Feature creep tests removed.	fik
1.5	#11	29/01/14	Formatting & QA checked and corrected.	LPS1