

Software Development Group Project 02

Test Procedure Standards

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1 INTRODUCTION

The contents on this document will show the understanding of the tests and the planning of these tests onto the Walking Tour App that is currently being developed.

1.1 Purpose of this Document

The below content of this document shows the tests that will be carried out onto the developing system, these tests are necessary to ensure that the walking tour app will have full functionality and follows all the protocols that will be required.

The tables within the document show the input of the test which is the procedure that we wish the app to process and show the correct response which is the expected output; furthermore the test will be passed or failed depending on the result of the output from the app.

In addition the purpose of this document is to show that the application works correctly so that it can be used without any malfunctioning problems or coding errors.

1.2 Scope

This document will look at the testing of the written software; it will do this through the means of system level tests. This document will identify areas within the system that can be tested, it will provide information that can be used to test that area and provide details of the result which we expect to receive from that test. This document will give the testing team a guideline on what tests need to be completed to ensure the functionality of the system.

This document will not include any tests at a unit level.

1.3 Objectives

The Main objectives of this document are:

1. To ensure that the system functions correctly.
2. All output information is correct in relation to input.
3. To provide testers with a basis to conduct their tests.
4. To provide a test for every system requirement.
5. To provide details of each test and its expected outcome.

2 TEST SPECIFICATION

Test Ref.	Req being tested	Test Content	Input	Output	Pass criteria
SE-F-001	FR1	Check that Android application loads without complication	Using an Android based device (e.g. mobile phone or tablet) run the application.	The application should load successfully	The application loads correctly
SE-F-002	FR1	Check that the Start Screen is displayed correctly	Run the application on the android based device	Design screen should be displayed to the user as it was designed	The start screen is displayed, correctly, to the user
SE-F-003	FR1	Check that the user is prompted to input some basic details when a new walking tour is created.	Start a new walking tour, and look at the fields in the following window.	A new window should be displayed, along with some fields and descriptions for those fields.	The user is prompted for information, and the fields are displayed in an understandable manner.
SE-F-004	FR1	Check that the GPS recording begins recording at the right time.	The GPS recording begins after the user has entered the walks information (FR2 Test) and confirmed that the information is correct.	The users GPS should be tracked and the route should be displayed on screen to the user.	GPS recording starts after the user has confirmed the walks details; the GPS location is displayed and correctly updated to the screen.
SE-F-005	FR1	Check that the user is shown the option for cancelling the walk	Cancel the current walking tour.	Walking tour cancel screen is displayed	Walking tour cancel screen is displayed shortly after option is selected
SE-F-006	FR1	Check the user is shown The option for saving the current walking tour	Save the current walking tour	Save screen shows when the option is selected	Save screen is displayed shortly after the option is selected
SE-F-007	FR1	Check the user is shown the option for Adding a point of interest to the current walking tour	Add a new point of interest to the current walking tour	Screen for user to input new point of interest details is displayed	Point of interest screen is shown shortly after the option is selected
SE-F-008	FR2	Check that The user can specify the name, short description and the long description for the walk.	Enter “group02” for the walks name, “short description” for the short description and “This is a long description for the walk” for the long description.	The walk should have the following attributes: Name; - Title of walk Short description; - short description of walk Long description; - Long description of walk”	The walks attributes are correctly set.
SE-F-009	FR2	Check that the user	Enter “{}%&£\$/=” as	The application should not	Test passed if

		cannot input other characters than letters, A-Z (upper/lower case), and numbers, 0-9, in the title of the walking tour.	the title of the walking tour	accept this as input, and will tell the user to input another(valid) title for the walking tour	the input is rejected and the user is told that they cannot input such characters.
SE-F-010	FR2	Check title field cannot be submitted as empty	Leave title field empty and try to create the new walking tour	Application should inform user of blank field and ask them to supply information	Test passed if input is rejected, and the user is told to fill in any empty fields
SE-F-011	FR2	Check short description field cannot be submitted as empty	Leave short description field empty and try to create the new walking tour	Application should inform user of blank field and ask them to supply information	Test passed if input is rejected, and the user is told to fill in any empty fields
SE-F-012	FR2	Check long description field cannot be submitted as empty	Leave long description field empty and try to create the new walking tour	Application should inform user of blank field and ask them to supply information	Test passed if input is rejected, and the user is told to fill in any empty fields
SE-F-013	FR2	Check the title field only accepts 1 word(<15 characters)	Input more than 15 characters	Input should not be accepted and the user should be informed that they have entered too many characters. They should be informed to remove characters	Test passed if user informed that they have entered too many characters and are required to remove some
SE-F-014	FR2	Check the short description field only accepts <=100 characters	Input more than 100 characters	Input should not be accepted and the user should be informed that they have entered too many characters. They should be informed to remove characters	Test passed if user informed that they have entered too many characters and are required to remove some
SE-F-015	FR2	Check the long description field on accepts <=1000	Input more than 1000 characters	Input should not be accepted and the user should be informed that they have entered too many characters. They should be informed to remove characters	Test passed if user informed that they have entered too many characters and are required to remove some
SE-F-016	FR3	Check that the ability to add points of interest to the walk functions correctly	The point of interest button will be pressed during the recording phase of the walk (see FR4 tests for adding a photograph).	Screen displaying newly created point of interest should be shown	Point of interest is added to the current walk
SE-F-017	FR3	Check name is saved when point of interest is saved	User will input the name on the point of interest details screen	Name entered should be displayed correctly on the map screen of the point of interest	Name should be displayed on point of interest and should be correct to user's input
SE-F-018	FR3	Check description is saved when point of interest is saved	User will input a description on the point of interest details screen	Description should be displayed correctly in the details of the point of interest	Description should be displayed on point of interest details and should be

					correct to user input
SE-F-019	FR3	Check time stamp is correct when point of interest is saved	Time will be saved when point of interest is saved	Timestamp of the point of interest should be the same as the time the point of interest was created	Time stamp should be correct to time of point of interest creation
SE-F-020	FR3	Check GPS coordinates are used correctly when saving a point of interest	GPS coordinates will be retrieved and assigned to this point of interest	Point of interest should display on the map, where the point of interest was saved	GPS coordinates should be accurate to where the point of interest was created
SE-F-021	FR3	Check that the input in the name, and description fields are not invalid (I.e. empty, containing invalid characters, or too large).	Input should not be empty, should only contain letters found in the English alphabet and numbers 0-9, and it should not exceed the upper character limit for that field	Input is only accepted if it is valid; input is rejected if it is invalid, and a message explaining the rejection is displayed.	The input to the field(s) is valid, and the user can confirm that this information is correct before saving this location.
SE-F-022	FR3	Check input of invalid data into name and description fields	Input can be empty or a series of symbols. E.g. “!£\$%^”	Application should reject information as invalid and ask user for valid information	Test passed if application does not accept information as valid
SE-F-023	FR4	Check that the ability to add photographs from the camera functions correctly.	The user can create a point of interest with (an) attached photograph(s); this photograph can be taken with the device’s camera then added to the point of interest as a jpg.	The camera application will open and the taken photo will be added to the point of interest. This photo will be displayed when viewing the point of interest.	The camera application opens successfully and the taken photograph is returned to the walking tour application and assigned to the correct point of interest as a jpg.
SE-F-024	FR4	Check that the ability to add photographs from the device’s image library functions correctly.	The user can create a point of interest with an attached photograph; this photograph can be selected from the stored jpg images on the device, and then added to the point of interest.	The device’s media library will open and the taken photo will be added to the point of interest. This image will be displayed when viewing the point of interest.	The device’s media library application opens successfully and the selected jpg image is returned to the walking tour application and assigned to the correct point of interest.
SE-F-025	FR4	Check that the input in the name, and description fields are not invalid (I.e. empty, containing invalid characters, or too large).	Input should not be empty, should only contain letters found in the English alphabet and numbers 0-9, and it should not exceed the upper character limit for that specific field	Input is only accepted if it is valid; input is rejected if it is invalid, and a message explaining the rejection is displayed.	The input to the field(s) is valid, and the user can confirm that this information is correct before saving the jpg image.
SE-F-026	FR4	Check GPS coordinates	GPS coordinates will	GPS coordinates should	The jpg image is

		are added to image	be retrieved and assigned to the image on saving	match the location of where the image was taken	attached to the specified location with the GPS location
SE-F-027	FR4	Check Timestamp is added to image	Time will be saved and applied to the image when saved	Time stamp should be the same as when the image was taken	Time stamp is applied to the jpg image and is accurate to time of photo being taken
SE-F-028	FR5	Check that the user is able to abandon the uploading of the current walk.	Before uploading, the walk's review is displayed to the user. The user can then decide if they want to upload it to the server, or cancel the upload. This test will be carried out under the presumption that the user clicks the cancel upload button.	The current walk should not be uploaded and the user should be prompted for confirmation that they want to cancel this upload and stop recording.	The upload should not take place so the current walk should not be stored in the database, or be parsed by the server.
SE-F-029	FR5	Check that the prompt informing the user that they can edit the walk instead of deleting it completely displays correctly and the response executes the correct action.	When the cancel upload button is pressed, the option of editing the existing walk should be displayed to the user. This will then continue the walk's recoding (as if upload wasn't pressed) or deleted the current walk. In this case the user will select to edit the walk.	The walk will continue recording, maintaining the current route and points of interest.	The walk is displayed correctly on the map maintaining all its information.
SE-F-030	FR5	Check that the prompt informing the user that they can edit the walk instead of deleting it completely displays correctly and the response executes the correct action.	When the cancel upload button is pressed the option of editing the existing walk should be displayed to the user, this will then continue the walks recoding (as if upload wasn't pressed) or deleted the current walk. In this case the user will select to cancel the walk.	The user will be told that the walk will now be deleted, the walk will then be deleted locally and should not be present in the database and not be parsed by the server.	The walk is correctly deleted from all aspects of the application.
SE-F-031	FR5	Check that deleting a route will also delete all the locations associated to the walk.	When deleting a route, any saved points of interests and images created for this walking tour will be removed locally and from the database (if they exist there). The user will be prompted for confirmation of this action.	The user is informed that deleting this walk will permanently remove all locations, information, and images associated with the walk, from their device; A confirmation of this action is needed to finish the deletion.	The user is correctly prompted about the application's actions and the correct deletion operations take place.

SE-F-032	FR6	Check that a walk can be correctly uploaded to the server. Check the target URL is correct and present.	The upload confirmation button will be pressed, sending the current walk's information to the server as a Multipurpose Internet Mail Extension (MIME) message via an HTTP POST to the predefined URL.	The user's recently uploaded walk will be sent to the server, containing information about: name, title, long and short descriptions (as per FR2). List of GPS coordinates for the walk, from start to end, with a timestamp for each location. List of locations (points of interest) with associated information (as per FR3). Photos with associated information (as per FR4).	The walk is uploaded, and it matches the format expected by the server. The walk is saved.
SE-F-033	FR6	Check that the user is shown a summary of the walk before confirming the upload to the destination sever.	When the submit button is pressed all the current information associated with the walk should be retrieved and displayed neatly to user (including points of interest), before the upload is initiated.	The walks information will be retrieved and displayed in a neat, readable manner to the user. The information displayed should match the information added to the walk during the recording session.	The information is displayed correctly in a neat readable manner and containing the correct data.
SE-F-034	FR7	Check that the walking tour application can be minimised and still maintain functionality while running in the background, and after being reopened.	Minimise the walking tour application, run a different application, and finally reopen the walking tour application again.	The application can correctly drop in and out of focus whilst maintaining integrity and functionality. All information about a walk that was present before the user switched application will still be available when the user comes back to the walking tour application, and the GPS tracking should have captured your movements while minimised.	The switching between applications goes smoothly. There is a clean transition, no data/information is lost during this transition phase, and your route has been recorded while minimised.
SE-F-035	FR7	Check that it is not possible to open two separate instances of the walking tour application.	Attempting to launch a new instance of the walking tour application while another instance of the application is already running in the background.	Instead of opening a new instance of the walking tour application, the device will reopen the minimised instance of the application running in the background.	Minimised instance of the walking tour application is reopened when the icon for the application is activated on the device.
SE-F-036	FR8	Check that the web application can display a list of all walks and also a specific walk's information.	The web application can retrieve all walks currently saved in the database and display these as a neat list, each element in the list being a link to a walk. The user will then click the walk they want to view.	When a link is clicked, the correct walk will be displayed on a map in a new webpage. This map will display the walk's information about the route, including its name, duration and its descriptions. The Map will also contain every point of interest and its correct GPS coordinates. These points	The website correctly displays all saved walks. Each link displays the correct walk's information on the map, in the correct format. Points of interest also

				of interest, when selected, will display all their information (name, description, timestamp, and jpg image(s)).	exhibit the correct functionality, and display all of the information the user expects to see.
SE-F-037	FR9	Check that the server can understand the POST message and parse the information to the database.	The information about the current walk is sent to the server under the circumstances of FR6. The server will understand the POST request and correctly store the data in the specified SQL database ready for retrieval. All information about the walk should be present in the database. A message should be displayed to the user stating if the upload was successful. This walk should then be viewable in the web application (see FR8)	<p>The server is contacted by the application and the POST message is sent in the correct format (FR6). The walk's information is then stored correctly in the database and is viewable in the database's tables. A message will be displayed to the user to confirm a successful upload.</p> <p>If the upload is unsuccessful an error message will be displayed (e.g. upload failed, check internet connection). If the upload is successful, a walk, and all its information, should be viewable in the web application.</p>	The user is informed about the successful completion of the upload. If successful, the walk's data will be viewable as expected in the web application and database.

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DOCUMENT HISTORY

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