

Appendix 3: Test Cases

Test Case No: TC1		Related Requirement: FR1
Test Description:	Verify user can create an account on the system	
Prerequisites:	App is not running User has not got an account in the system with email used	
Test Procedure:	<ol style="list-style-type: none"> 1. Open application 2. Select the 'Sign up' button, User Registration screen is displayed 3. Input test data (email and password) 4. Select the 'Sign up' button, the User Login screen is displayed 5. Enter test data to login to the system. 'Start a walk' screen is displayed once signed in. 	
Test Data:	<ol style="list-style-type: none"> 1. User details: <ol style="list-style-type: none"> a. First name: Sarah b. Dogs name: Max c. Email: sarahbrown@gmail.com d. Password: Testing1234 2. User details: <ol style="list-style-type: none"> a. First name: *Leave blank* b. Dogs name: Max c. Email: sarahbrown@gmail.com d. Password: Testing1234 	
Expected Result:	<ol style="list-style-type: none"> 1. User will enter details, sign up, an account will be made on the system. The user will use their credentials to log in and will be displayed with the Start a walk screen. 2. When user tries to sign up, a toast will be displayed asking the user to enter all details before signing up. An account will not be made until all fields are filled. 	
Actual Result:	<ol style="list-style-type: none"> 1. As expected. 2. As expected. 	
Comments:	NA	
Test Status:	PASS	

Test Case No: TC2		Related Requirement: FR1
Test Description:	Verify user can log into the system	
Prerequisites:	App is not running User has an account on the system	
Test Procedure:	<ol style="list-style-type: none"> 1. Open application 2. Select the 'Log in' button, User Log In screen is displayed 3. Input test data 4. Select the 'Log In' button, 'Start a walk' screen is displayed once signed in. 	
Test Data:	<ol style="list-style-type: none"> 1. User details: <ol style="list-style-type: none"> a. Email: sarahbrown@gmail.com b. Password: Testing1234 2. User details: <ol style="list-style-type: none"> a. Email: sarahbrown@gmail.com b. Password: Apple1234 	
Expected Result:	<ol style="list-style-type: none"> 1. User will enter details, log in and will be displayed with the Start a walk screen. 2. User will enter details, however as they are incorrect will not sign in. A toast will be displayed asking the user to enter the correct details. 	
Actual Result:	<ol style="list-style-type: none"> 1. As expected. 2. As expected. 	
Comments:	NA	
Test Status:	PASS	

Test Case No: TC3		Related Requirement: FR1
Test Description:	Verify user can reset password	
Prerequisites:	App is not running User has an account on the system	
Test Procedure:	<ol style="list-style-type: none"> 1. Open application 2. Select the 'Log in' button, User Log In screen is displayed 3. Select the 'Forgot Password?' text, 'Forgot password' screen is displayed 4. Input test data and select 'Reset Password' button 5. Follow link sent to input data's email to change password 	
Test Data:	<ol style="list-style-type: none"> 1. User details: <ol style="list-style-type: none"> a. Email: sarahbrown@gmail.com 	
Expected Result:	<ol style="list-style-type: none"> 1. User will enter email, select reset password, a toast will display asking the user to check their emails. An email will appear in the user's inbox. The user will follow the link and reset their password. 	
Actual Result:	<ol style="list-style-type: none"> 1. As expected. 	
Comments:	NA	
Test Status:	PASS	

Test Case No: TC4		Related Requirement: FR2
Test Description:	Verify user can track and store a walk in real time	
Prerequisites:	App is running User is logged into the system User is on the Start Walk screen	
Test Procedure:	<ol style="list-style-type: none"> 1. User selects the start walk button. A toast is displayed to notify the user their location is being tracked. 2. User is presented with the 'Start Mood' screen. User selects the 'Exit' button. 3. User walks for a short period of time and their location is reflected on the map. The path they have taken is shown on the map. 4. User selects the stop walk button. User is presented with the 'End Mood' screen. User selects the 'Exit' button. 5. A toast is displayed to notify the user their location is no longer being tracked. 6. This walk is saved 7. A summary of the users walk is displayed which presents the user relevant information of that walk 	
Test Data:	NA	
Expected Result:	<ol style="list-style-type: none"> 1. Uses location will be tracked in real time. The users location will update every 5 seconds and the path they take is shown live. Once finished a summary of that walk is displayed. The walk is stored in Firebase. 	
Actual Result:	<ol style="list-style-type: none"> 1. As expected. 	
Comments:	NA	
Test Status:	PASS	

Test Case No: TC5		Related Requirement: FR3
Test Description:	Verify user can optionally add emotion tags	
Prerequisites:	App is running User is logged into the system & user is on the Start Walk screen	
Test Procedure:	<ol style="list-style-type: none"> 1. User selects the start walk button. A toast is displayed to notify the user their location is being tracked. 2. User is presented with the 'Start Mood' screen. User inputs test data (Test.1) and selects 'Save and back'. 3. User walks for a short period of time and their location is reflected on the map. 4. User selects the '+' button on the map. User selects 'Add a mood' 5. User is presented with the 'Add a current mood' screen. User inputs test data (Test.2) and selects 'Save and back'. 6. User selects the stop walk button. User is presented with the 'End Mood' screen. User inputs test data (Test.3) and selects 'Save and back'. 7. A toast is displayed to notify the user their location is no longer being tracked. 8. A summary of the users walk is displayed 	
Test Data:	<ol style="list-style-type: none"> 1. User moods: <ol style="list-style-type: none"> 1.1. Sad emoji 1.2. Neutral emoji 1.3. Happy emoji 2. User moods: <ol style="list-style-type: none"> 2.1. No mood selected 2.2. No mood selected 2.3. No mood selected 	
Expected Result:	<ol style="list-style-type: none"> 1. Once start mood 'sad' is selected and saved, this is reflected on the main walk screen by presenting the corresponding emoji on the screen. Once current mood is selected 'neutral' a neutral emoji icon is set on the map where the user was at the time of selecting this. After user sets end mood and saves the walk, a summary of the users which presents the user relevant information of that walk including recorded moods. 2. The user is optionally selecting not to record a mood at each of these stages, a 'no mood' icon will appear on the main walk screen once the user saves start mood without selecting a mood. No icon will be displayed once the user selects no current mood and when the user is viewing the saved walk, all moods will display with the 'no mood' icon. 	
Actual Result:	<ol style="list-style-type: none"> 1. As expected. 2. As expected. 	
Comments:	User can only add one emotion at these three stages. User can only add a current mood once during each walk.	
Test Status:	PASS	

Test Case No: TC6		Related Requirement: FR4
Test Description:	Verify user can optionally add activity tags	
Prerequisites:	App is running User is logged into the system User has started a walk and is on the walk screen	
Test Procedure:	<ol style="list-style-type: none"> 1. User selects the '+' button on the map. User selects 'Add an activity' 2. User is presented with the 'Add an activity' screen. User inputs test data and selects 'Save and back'. 3. User selects the stop walk button. User is presented with the 'End Mood' screen. User inputs selects the 'Exit' button 4. A toast is displayed to notify the user their location is no longer being tracked. 5. A summary of the users walk is displayed, including the activities they performed 	
Test Data:	<ol style="list-style-type: none"> 1. User selects 'Fetch' 2. User does not select and activity and selects 'Save and Back' without a selection 	
Expected Result:	<ol style="list-style-type: none"> 1. Once current activity is selected 'Fetch' a fetch emoji icon is set on the map where the user was at the time of selecting this. After user ends and saves the walk, a summary of the users which presents the user relevant information of that walk including activities recorded. 2. The user is optionally selecting not to record any activities. No icon will be displayed once the user selects no activity and when the user is viewing the saved walk, it will state no activities were recorded. 	
Actual Result:	<ol style="list-style-type: none"> 1. As expected. 2. As expected. 	
Comments:	User can add as many activities as they wish and these are displayed as icons on the map once recorded, saved and displayed accordingly.	
Test Status:	PASS	

Test Case No: TC7		Related Requirement: FR5
Test Description:	Verify user can optionally add a place to the walk	
Prerequisites:	App is running User is logged into the system User has started a walk and is on the walk screen	
Test Procedure:	<ol style="list-style-type: none"> 1. User selects a place on the map. 2. User is presented with a dialog box confirming the addition of the place to the walk. User selects test data response. 3. User is sent back to the walk screen. 4. User selects the stop walk button. User is presented with the 'End Mood' screen. User inputs selects the 'Exit' button 5. A toast is displayed to notify the user their location is no longer being tracked. 6. A summary of the users walk is displayed, including the activities they performed 	
Test Data:	<ol style="list-style-type: none"> 1. User selects 'Yes' 2. User selects 'No' 	
Expected Result:	<ol style="list-style-type: none"> 1. Once the user selects yes, the place is added to the walk and visually shown to the user by a marker being displayed on the map. Once finished walk and on summary page, this place marker is shown. 2. Once the user selects no, they are taken back to their walk and the place is not added to their walk. 	
Actual Result:	<ol style="list-style-type: none"> 1. As expected. 2. As expected. 	
Comments:	User can add as many places as they wish and these are displayed as markers on the map once recorded, saved and displayed accordingly.	
Test Status:	PASS	

Test Case No: TC8		Related Requirement: FR6
Test Description:	Verify user can optionally add a photograph to their walk	
Prerequisites:	App is running User is logged into the system User has started a walk and is on the walk screen	
Test Procedure:	<ol style="list-style-type: none"> 1. User selects the '+' button on the map. User selects 'Add a picture' 2. User is shown the 'Add a photo' screen. User selects the 'Select image' button 3. User selects image from their image library. 4. User is sent back to the 'Add a photo' screen and the chosen image is displayed. 5. User selects test data response. 6. User is sent back to the walk screen. 7. User selects the stop walk button. User is presented with the 'End Mood' screen. User inputs selects the 'Exit' button 8. A toast is displayed to notify the user their location is no longer being tracked. 9. A summary of the users walk is displayed. 	
Test Data:	<ol style="list-style-type: none"> 1. User selects 'Upload image' 3. User selects the exit button and does not upload a photo. 	
Expected Result:	<ol style="list-style-type: none"> 1. Once the user selects upload image, the image is stored into Firebase storage. Once viewing summary of walk, the image is attached to the walk and the user can view it. 2. Once the user selects exit, no image is attached to the walk and the summary does not include a photo. 	
Actual Result:	<ol style="list-style-type: none"> 1. As expected. 2. As expected. 	
Comments:	User can only add one photo per walk.	
Test Status:	PASS	

Test Case No: TC9		Related Requirement: FR7
Test Description:	Verify user can view past walk entries and filter these by time	
Prerequisites:	App is running User is logged into the system & has previously saved walks User is on the past walk screen	
Test Procedure:	<ol style="list-style-type: none"> 1. User is on past walk screen viewing all past walks in descending order of time by default. 2. User selects the dropdown menu and selects the user test data option. 3. Walks are displayed in the format selected. 	
Test Data:	<ol style="list-style-type: none"> 1. User selects "Most Recent" 2. User selects "Least Recent" 3. User selects "Daily" 4. User selects "Weekly" 5. User selects "Monthly" 	
Expected Result:	<ol style="list-style-type: none"> 1. Users walks are displayed sorted by most recent walk first. 2. Users walks are displayed sorted by least recent walk first. 3. Users are sorted by day, with all walks sorted into each day. With most recent day first. 4. Users are sorted by week, with all walks sorted into each week. With most recent week first. 5. Users are sorted by month, with all walks sorted into each month. With most recent month first. 	
Actual Result:	<ol style="list-style-type: none"> 1. As expected. 2. As expected. 3. As expected. 4. Walks are sorted into each week, but they are not sorted by most recent week first. 5. Walks are sorted into each month. but least recent month is first rather than most recent. 	
Comments:	Walks are sorted in 4 and 5, but just displayed in the incorrect order.	
Test Status:	FAIL	

Test Case No: TC10		Related Requirement: FR8
Test Description:	Verify user can view an individual past walk	
Prerequisites:	App is running User is logged into the system & has previously saved walks User is on the past walk screen	
Test Procedure:	<ol style="list-style-type: none"> 1. User is on past walk screen viewing all past walks in descending order of time by default. 2. User selects the user test data walk 3. The individual walk is displayed 	
Test Data:	1. User selects the walk on 'Sunday 3 rd May @ 18:47'	
Expected Result:	<ol style="list-style-type: none"> 1. The walk taken on Sunday 3rd May @ 18:47 is displayed including all details: Route taken, time taken, moods, activities, photograph and places recorded for that walk. 	
Actual Result:	1. As expected	
Comments:	User can access an individual past walk immediately after finishing a walk.	
Test Status:	PASS	

Test Case No: TC11		Related Requirement: FR9
Test Description:	Verify user can delete an individual past walk	
Prerequisites:	App is running User is logged into the system & has previously saved walks User is on the past walk screen	
Test Procedure:	<ol style="list-style-type: none"> 1. User is on past walk screen viewing all past walks in descending order of time by default. 2. User selects the user test data walk 3. The individual walk is displayed 4. User selects toolbar overflow menu in the top left 5. User selects 'Delete a walk' option 6. User selects option in pop up confirmation dialog by selecting option in user test data 	
Test Data:	<ol style="list-style-type: none"> 1. User selects the walk on 'Sunday 3rd May @ 18:47' and selects 'Yes' in dialog confirmation. 2. User selects the walk on 'Sunday 3rd May @ 18:47' and selects 'No' in dialog confirmation. 	
Expected Result:	<ol style="list-style-type: none"> 1. Once the user selects yes, a toast confirmation of walk deleted will appear and user will be taken back to the main walk screen. 2. Once the user selects no, the user will be taken back to the individual walk screen for the walk on Sunday 3rd May. 	
Actual Result:	<ol style="list-style-type: none"> 1. As expected 2. As expected 	
Comments:		
Test Status:	PASS	

Test Case No: TC12		Related Requirement: FR10
Test Description:	Verify user can view statistics regarding their walks	
Prerequisites:	App is running User is logged into the system & has previously saved walks User is on the User Profile screen	
Test Procedure:	1. User is on their personalised profile page and their personalised walk data is shown, this includes: most common start/current/ending mood, activity, average distance and number of walks.	
Test Data:	NA	
Expected Result:	1. User's personalised details are shown and correct	
Actual Result:	1. As expected	
Comments:		
Test Status:	PASS	

Test Case No: TC13		Related Requirement: FR10
Test Description:	Verify user can view statistics regarding their walks	
Prerequisites:	App is running User is logged into the system & has zero previously saved walks User is on the User Profile screen	
Test Procedure:	1. User is on their personalised profile page and their personalised walk data is shown, this includes: most common start/current/ending mood, activity, average distance and number of walks.	
Test Data:	NA	
Expected Result:	1. As user has not any saved walks, all statistics will show as NA	
Actual Result:	1. As expected	
Comments:		
Test Status:	PASS	

Test Case No: TC14		Related Requirement: FR11
Test Description:	Verify the user can perform search analysis of the walk entries, displaying emotions that match the provided emojis	
Prerequisites:	App is running User is logged into the system & has previously saved walks User is on the Past walks screen	
Test Procedure:	<ol style="list-style-type: none"> 1. User selects the mood stated in user test data 2. Any walks with that mood recorded in it are displayed, in descending order. 	
Test Data:	<ol style="list-style-type: none"> 1. User selects the 'Happy' emoji 2. User selects the 'Sad' emoji 3. User selects the 'Amazing' emoji 	
Expected Result:	<ol style="list-style-type: none"> 1. Walks with the happy emoji recorded are displayed 2. No walks are displayed as no walks have the sad emoji recorded 3. Walks with the amazing emoji are displayed 	
Actual Result:	<ol style="list-style-type: none"> 1. As expected 2. As expected 3. As expected 	
Comments:	When no moods are displayed, no visual indication of this just a blank screen	
Test Status:	PASS	

Test Case No: TC15		Related Requirement: FR12
Test Description:	Verify the user can delete their profile, including all location data	
Prerequisites:	App is running User is logged into the system and is on the User Profile screen	
Test Procedure:	<ol style="list-style-type: none"> 1. User selects the overflow menu in the top corner and selects the delete profile option 2. User is presented with a confirmation dialog of deletion 3. User selects the option in the user test data 	
Test Data:	<ol style="list-style-type: none"> 1. User selects 'Yes' 2. User selects 'No' 	
Expected Result:	<ol style="list-style-type: none"> 1. User confirms deletion and a toast confirming deletion is shown. User is taken back to application starting screen and all details of the user are deleted 2. User selects no and is taken back to the User Profile screen. Their account is not deleted. 	
Actual Result:	<ol style="list-style-type: none"> 1. As expected 2. As expected 	
Comments:	There is no option to just delete location data except delete each walk individually	
Test Status:	PASS	

Test Case No: TC16		Related Requirement: FR13
Test Description:	Verify the user can share details of a walk with their friends via email/message.	
Prerequisites:	App is running User is logged into the system and is on the User Profile screen	
Test Procedure:	<ol style="list-style-type: none"> 1. User is on past walk screen viewing all past walks in descending order of time by default. 2. User selects the user test data walk 3. The individual walk is displayed 4. User selects toolbar overflow menu in the top left 5. User selects 'Share walk' option 6. User selects method option in user test data 	
Test Data:	<ol style="list-style-type: none"> 1. User selects the walk on 'Sunday 3rd May @ 19:21' and selects to share the walk via Message. User sends message to the following number: +447545283378 2. User selects the walk on 'Sunday 3rd May @ 19:21' and selects to share the walk via Email. User sends message to the following email: ShieldsA@cardiff.ac.uk 	
Expected Result:	<ol style="list-style-type: none"> 1. User's messages are displayed with a pre set message detailing the users walk on Sunday 3rd May @ 19:21. This will include the distance, time and any activities performed. User sends the message and this is received by their friend. 2. User's messages are displayed with a pre set message detailing the users walk on Sunday 3rd May @ 19:21. This will include the distance, time and any activities performed. User sends the email and this is received by their friend. 	
Actual Result:	<ol style="list-style-type: none"> 1. As expected 2. As expected 	
Comments:		
Test Status:	PASS	

Test Case No: TC17		Related Requirement: FR14
Test Description:	Verify the user can edit their personal details	
Prerequisites:	App is running User is logged into the system and is on the User Profile screen	
Test Procedure:	<ol style="list-style-type: none"> 1. User selects their name in the Your name text box. 2. User changes this from Sarah to test data 3. User selects their dogs name in the Dogs name text box. 4. User changes this from Max to test data 5. User selects 'Update details' button 	
Test Data:	<ol style="list-style-type: none"> 1. Your name change to: Amy. Dogs name change to: Brian 2. Your name change to: "". Dogs name change to: "" 	
Expected Result:	<ol style="list-style-type: none"> 1. Name and dogs name is changed to Amy and Brian. This is updated in the database and reflected throughout the personalisation aspects in the app such as the toolbar. 2. A toast is displayed to prompt the user to enter a name for both and not leave this empty. The changes are not saved. 	
Actual Result:	<ol style="list-style-type: none"> 1. As expected 2. As expected 	
Comments:		
Test Status:	PASS	

Test Case No: TC18		Related Requirement: FR15
Test Description:	Verify the user will receive notifications to let them know once they have hit their pre inputted target distance for the day	
Prerequisites:	App is running User is logged into the system and is on the User Profile screen User has walked a certain amount of distance that day	
Test Procedure:	1. User will receive a notification on their phone.	
Test Data:	NA	
Expected Result:	1. The notification will state they have reached their target of distance for that day which was pre set.	
Actual Result:	1. No notification – feature not implemented	
Comments:	Due to timing, feature was not implemented	
Test Status:	FAIL	

Test Case No: TC19		Related Requirement: NFR4
Test Description:	Verify The system will provides a help feature	
Prerequisites:	App is running User is logged into the system User is on the Start Walk Screen	
Test Procedure:	<ol style="list-style-type: none"> 1. User navigates to test data screen 2. User selects the overflow menu at the top of the screen 3. User selects 'Help' option 	
Test Data:	<ol style="list-style-type: none"> 1. User navigates to 'User Profile' 2. User navigates to 'Start a walk' screen 3. User navigates to 'Past walks' 	
Expected Result:	<ol style="list-style-type: none"> 1. User profile help screen will be displayed with relevant information 2. Start a walk help screen will be displayed with relevant information 3. Past walks help screen will be displayed with relevant information 	
Actual Result:	<ol style="list-style-type: none"> 1. As expected 2. As expected 3. As expected 	
Comments:		
Test Status:	PASS	