Test Specification Group Project

Android Development

Authors:

Jack - UI Testing (Complete)

Elliot - Recordings (Complete)

Alan - Functionality (Incomplete)

Qiaoyang - Database (Imcomplete)

| Test Ref | Req being tested | Test content | Input | Output | Pass criteria |
| --- | --- | --- | --- | --- | --- |
|  | FR2 | Test a valid phone number for a recorder. | 01234564854 | Phone number is accepted when sent to the database. | No errors or warnings are produced. |
|  | FR2 | Test a phone number that contains characters. | 01a23d65845 | Phone number is rejected when the user attempts to submit the data. | An error is displayed to the user alerting them that the phone number is invalid due to characters. |
|  | FR2 | Test a phone number that contains special characters. | 215!254@\*90 | Phone number is rejected when the user attempts to submit the data. | An error is displayed to the user alerting them that the phone number is invalid due to special characters. |
|  | FR2 | Test a valid date. | 06/11/2014 | The date is accepted and sent to the database. | No warnings or errors are produced. |
|  | FR2 | Test a historic date. | 06/11/1900 | The date is rejected when the user attempts to submit the data. | An error is displayed to the user alerting them that the date is too far in the past. |
|  | FR2 | Test a date in the future. | A date further in the future of the current date | The date is rejected when the user attempts to submit the data. | An error is displayed to the user alerting them that the date cannot be in the future. |
|  | FR3 | Test a valid species from the list. | Search for a valid species that exists within the database. | The species is accepted when the user submits the data. | No warnings or errors are produced. |
|  | FR3 | Search for a species that does not exist. | Search for ‘$FS465bth’ | No results will be returned. | A message will alert the user that no matching results were obtained. A prompt to add a new species will appear. |
|  | FR3 | Test a valid unique species can be added. | Attempt to add a new valid species. | The new species will be added to the database when submitted. | No warning or error message will be displayed to the user as the data is valid. |
|  | FR3 | Test that a repeat of a species cannot be entered. | Attempt to add a new valid species that already exists in the database. | The new species will not be added to the database. | An error will be displayed to the user alerting them to the fact a duplicate of this species already exists. |
|  | FR4 | Test a valid abundance character. | ‘A’ | The character is accepted as valid on submission and sent to the database. | No error message or warning is produced for the valid character. |
|  | FR4 | Test an invalid abundance character. | ‘Z’ | The character will be rejected when the user attempts to submit data. | An error is displayed to the user alerting them that the abundance character is invalid. |
|  | FR4 | Test multiple characters in the abundance field. | ‘FA’ | The character will be rejected when the user attempts to submit the data. | An error is displayed to the user alerting them that only one character can be entered into the abundance field. |
|  | FR4 | Test no entry in the free text comment area. | Enter no data to the free text area. | On submission the data will be sent to the database. | No warning or error messages will be displayed for the valid entry. |
|  | FR4 | Test a valid entry in the free text comment area. | Enter more than 0 and less than 256 characters. | On submission the data will be sent to the database. | No warning or error message will be displayed for the valid entry. |
|  | FR4 | Test a comment that is more than the maximum number of valid characters in the free text comment field. | Enter more than 256 characters in the free text comment field. | The data will be rejected when the user attempts to submit the data. | An error message will alert the user to the fact that the free comment box is only able to take a comment of 256 characters or less. |
|  | FR4 | Testing the camera is loaded when the scene camera icon is pressed. | Press the scene camera icon. | The screen is switched to camera output. | The user can take a picture with the camera which is then saved. |
|  | FR4 | Testing the camera is loaded when the plant camera icon is pressed. | Press the plant camera icon. | The screen is switched to camera output. | The user can take a picture with the camera which is then saved. |
|  | FR5 | Testing a recording can be deleted. | Select a recording and press delete. | The recording will no longer be displayed in the list. | The database will no longer contain the recording that was deleted. |
|  | FR5 | Test a whole species can be deleted. | Select a pre-existing species and press delete. | The recording will no longer be displayed in the list. | The database will no longer contain the recording that was deleted. |
|  | FR5 | Change the abundance of a species. | Select a pre-existing species and change the abundance to a valid abundance. | The species will now be updated with the new abundance. | The database will be updated to match the new information given on submission. |
|  | FR5 | Change the abundance of a species to a non-valid abundance. | Select a pre-existing species and change the abundance to a non-valid abundance. | When the user submits the change the change is rejected. | An error message is produced alerting the user that the input for abundance is not valid. |
|  | FR5 | Change the typical location for a species. | Select a pre-existing species and change the pre-existing location to a new valid location. | The species record will be updated with the new value for typical location. | No errors or warning messages are produced as the data is valid. |
|  | FR5 | Change the image of a species (plant). | Select a pre-existing species and change the plant image to a valid image. | The species plant image will be updated with the new image. | The database will be updated to match the new information given on submission. |
|  | FR5 | Change the image of a species (scene). | Select a pre-existing species and change the scene input to a valid image. | The species scene image will be updated with the new image. | The database will be updated to match the new information given on submission. |

**Recordings and Species Module testing - Elliot**

## Functionality - Alan

| Test Ref | Req being tested | Test content | Input | Output | Pass criteria |
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| Test Ref | Screen | Test content | Input | Output | Pass criteria |
| --- | --- | --- | --- | --- | --- |
| 1-UI | Main Menu | The upload viewers change based on the record state | The record is in the local Database | Button should be red | Has to be red, |
| 2-UI | Main Menu | The upload viewers change based on the record state | The record is being uploaded | Button should change to orange | Needs to change to orange. |
| 3-UI | Main Menu | The upload viewers change based on the record state | The record has uploaded, stays for 5 minutes | The button changed to green, and disappears after 5 minutes | Needs to change and disappear in that time provided. |
| 4-UI | Record screen | Image select screen | Swipe right on the image select | Image swipe option correctly switches between image modes | The state is switched. |
| 5-UI | Record Screen | Reset button works correctly | The button is pressed | The data entry forms are cleared | They are cleared correctly |
| 6-UI | Main menu | Scaling to different screen sizes works correctly | Application is tested on larger screen | The buttons and icons scale correctly and the positions are relative to screen size | The buttons looks correctly scaled. |
| 7-UI | Main menu | Scaled to tablet size | Opened on tablet | All controls are scaled up for tablets and works correctly | Application must have all controls scale up appropriately |
| 8-UI | Record Screen | Scaled to tablet size | Opened on a tablet | The buttons and image size are scaled correctly | Needs to be scaled correctly without any errors with resolution or position |
| 9-UI | Main menu | Rotate to landscape | Rotated the device to landscape. | The elements rotate and resize to fit the screen more appropriately | Needs to resize and reposition elements correctlty |
| 10-UI | Record Screen | Rotate to landscape | Rotated the device to landscape. | The elements of the screen rotate and resize to fit the screen, this includes the image selector. | Needs to resize correctly and the image has to resize |
| 11-UI | Main Menu | 4 navigation buttons must be in the correct location | Opened the application | The buttons are spaced evenly and are the same size | Have to be spaced evenly and are the same size |
| 12-UI | Main menu | Upload button checks | Opened the application | The upload buttons are spaced and positioned evenly | They’re spaced evenly and are the same size |
| 13-UI | Main menu | Added recording to upload button | Added a recording to be displayed on the button display | The recording button is added to the end of the stack | Has to be added correctly to the display |
| 14-UI | Record Screen | GPS Screen disability | Turn off GPS | The GPS automatic entry should be disabled | Has to disable the controls once GPS is turned off |

# UI - Jack

Database - Qiaoyang