**Test Document**

**For**

**CountrySnap Hybrid Application**

**Application Name**: CountrySnap  
**Technology Stack**: Angular, Ionic, Capacitor  
**API Integrations**: REST Countries API, Pexels API

# 1. Test Plan

## 1.1 Objectives

* Ensure the integration of the REST Countries and Pexels APIs is functioning as expected.
* Verify that the UI elements display correct information and images.
* Test the smooth navigation between app pages.
* Check responsiveness on different device types (mobile, tablet, etc.).

## 1.2 Scope

* Functional Testing
* Integration Testing
* UI/UX Testing
* API Testing

# 2. Test Cases

## 2.1 Functional Testing

### 2.1.1 Home Page Load

|  |  |
| --- | --- |
| **Test Execution Log** | |
| Tester Name | Tharushi Premasiri |
| Test Date | October 04, 2024 |
| Test Environment | Google Chrome on Windows 11 |
| Test Case | Verify that the home page loads successfully |
| Precondition | User is on the home page |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Test Steps** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| **T01** | Launch the CountrySnap app | Home page loads with a search bar and displays default country and landscape data. | Home page loads with a search bar and displays default country and landscape data. | Pass |

### 2.1.2 Search for a Country

|  |  |
| --- | --- |
| **Test Execution Log** | |
| Tester Name | Tharushi Premasiri |
| Test Date | October 04, 2024 |
| Test Environment | Google Chrome on Windows 11 |
| Test Case | Verify the functionality of the country search feature |
| Precondition | User is on the home page |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Test Steps** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| **T01** | Type the country name in the search bar.  Click the search button | The app fetches data from the REST Countries API and displays relevant country details, along with related images from Pexels. | The app fetches data from the REST Countries API and displays relevant country details, along with related images from Pexels. | Pass |

### 2.1.3 Country Details Display

|  |  |
| --- | --- |
| **Test Execution Log** | |
| Tester Name | Tharushi Premasiri |
| Test Date | October 04, 2024 |
| Test Environment | Google Chrome on Windows 11 |
| Test Case | Verify that country information is displayed correctly |
| Precondition | User searches for a country |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Test Steps** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| **T01** | Search for a specific country.  View the country details section. | Country information official name, population, currency, and capital city should be displayed correctly | Country information official name, population, currency, and capital city should be displayed correctly | Pass |

### 2.1.4 Displaying Country Images

|  |  |
| --- | --- |
| **Test Execution Log** | |
| Tester Name | Tharushi Premasiri |
| Test Date | October 04, 2024 |
| Test Environment | Google Chrome on Windows 11 |
| Test Case | Verify that country-related images are retrieved from the Pexels API and displayed. |
| Precondition | User searches for a country |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Test Steps** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| **T01** | Search for a country.  Check the image section. | Images related to the country (landscapes, landmarks) should be displayed correctly from the Pexels API. | Country information official name, population, currency, and capital city displayed correctly | Pass |

### 2.1.5 Error Handling for Invalid Country Search

|  |  |
| --- | --- |
| **Test Execution Log** | |
| Tester Name | Tharushi Premasiri |
| Test Date | October 04, 2024 |
| Test Environment | Google Chrome on Windows 11 |
| Test Case | Verify that the app displays an error message when a user searches for an invalid country. |
| Precondition | User is on the home page |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Test Steps** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| **T01** | Enter an invalid or non-existent country name in the search bar.  Click the search button. | App displays a message such as "Country not found" or shows a user-friendly error message. | The app displays an empty screen with no error message | Fail |

## 2.2 Integration Testing

### 2.2.1 REST Countries API Integration

|  |  |
| --- | --- |
| **Test Execution Log** | |
| Tester Name | Tharushi Premasiri |
| Test Date | October 04, 2024 |
| Test Environment | Google Chrome on Windows 11 |
| Test Case | Verify successful integration and data retrieval from REST Countries API. |
| Precondition | User performs a country search. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Test Steps** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| **T01** | Search for any valid country.  Monitor the API call using developer tools. | API should return the correct country data in JSON format, and it should be displayed in the app. | API return the correct country data in JSON format, and it should be displayed in the app. | Yes |

### 2.2.2 Pexels API Integration

|  |  |
| --- | --- |
| **Test Execution Log** | |
| Tester Name | Tharushi Premasiri |
| Test Date | October 04, 2024 |
| Test Environment | Google Chrome on Windows 11 |
| Test Case | Verify successful integration and image retrieval from Pexels API. |
| Precondition | User searches for a country. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Test Steps** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| **T01** | Search for any valid country.  Monitor the API call using developer tools. | API should return the correct country data in JSON format, and it should be displayed in the app. | API return the correct country data in JSON format, and it should be displayed in the app. | Yes |

## 2.3 UI/UX Testing

### 2.3.1 Responsive Design

|  |  |
| --- | --- |
| **Test Execution Log** | |
| Tester Name | Tharushi Premasiri |
| Test Date | October 04, 2024 |
| Test Environment | Google Chrome on Windows 11 |
| Test Case | Verify that the app's layout is responsive on different screen sizes. |
| Precondition | App is launched on different devices |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Test Steps** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| **T01** | Open the app on devices of varying screen sizes (smartphones, tablets) | The app's layout should adjust appropriately without content overflow or misalignment issues. | The app's layout adjust appropriately without content overflow or misalignment issues.. | Yes |

### 2.3.2 Navigation Between Screens

|  |  |
| --- | --- |
| **Test Execution Log** | |
| Tester Name | Tharushi Premasiri |
| Test Date | October 04, 2024 |
| Test Environment | Google Chrome on Windows 11 |
| Test Case | Verify smooth navigation between different screens/pages of the app |
| Precondition | User is on the home page |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Test Steps** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| **T01** | Open the app on devices of varying screen sizes (smartphones, tablets) | The app's layout should adjust appropriately without content overflow or misalignment issues. | The app's layout adjust appropriately without content overflow or misalignment issues.. | Yes |

## 2.4 Negative Testing

### 2.4.1 API Failure Handling

|  |  |
| --- | --- |
| **Test Execution Log** | |
| Tester Name | Tharushi Premasiri |
| Test Date | October 04, 2024 |
| Test Environment | Google Chrome on Windows 11 |
| Test Case | Verify the app's behavior when the API fails or is unreachable |
| Precondition | Simulate API failure or disconnection |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Test Steps** | **Expected Result** | **Actual Result** | **Pass/Fail** |
| **T01** | Turn off the internet connection or mock API failure.  Search for a country. | The app should display an appropriate error message like "Unable to fetch data. Please try again later. | The app display an appropriate error message like "Unable to fetch data. Please try again later. | Yes |

# Conclusion

The CountrySnap application should be thoroughly tested across multiple dimensions, including functional correctness, API integrations, and user experience. Each test case will help ensure that the app provides users with accurate and visually appealing content, along with a smooth and engaging experience.