SOFTWARE TEST PLAN: WEATHER MAP WEB APPLICATION

Approvals:

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| Approved By: | Signature | Date |
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Change History

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| --- | --- | --- | --- |
| Doc. Version | Author | Date | Description / Change |
| 1.0 | Aticah | 2/2/2022 | Create the test plan details |
|  |  |  |  |

Distribution List

|  |  |
| --- | --- |
| Name | Role |
|  | PO (Project Owner) |
|  | PM Technical design |
|  | SM (Scrum master) |
|  | PM (QA manager) |

# Introduction

This test plan for how we going to test the Weather Map website in each of Sprint on Desktop

1) To detail the activities required to prepare for and support the test.

(2) To communicate to all responsible parties the tasks which they are to perform and the schedule to be followed in performing the tasks.

(3) To define the sources of information used to prepare the test plan.

(4) To define the test tools and environment needed to conduct the test.

# Scope

Complete Testing for all the items in each Sprint. Make sure the side effect bugs will be found as soon as possible in the Sprint. Create the most valuable automation Scripts to reduce the effort of manually testing in the hardening Sprint.

# Test Items

|  |  |
| --- | --- |
| Test Item Name | Description |
| Weather map UI |  |
| Weather map Functional |  |
| API testing |  |

## 

# Features to be Tested

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Featured** | **Parent Component/System** | **Overview** | **TCs(%Automate)** | **Est (hrs)** |
| Search weather function | Desktop View | search weather function at   * Navigate panel * Mobile container * Left container |  |  |
| Multi tab on the same web browser. |  |  |
| Performance |  |  |
| Register form | Register form function include positive and negative cases. |  |  |
| Login form | Login form function positive and negative cases. |  |  |
| Recover function | Verify the function recover |  |  |
| Header panel item | Verify each menu item function: make sure that the object will navigate to correct page after click on each link.   * Open weather icon * Guide * API * Dashboard * Pricing * Maps * Our Initiatives * Partners * Blog * Marketplace * Sign in * Menu item Support – list of item display after click on the Support value. |  |  |
| Hyperlink items and Buttons | Verify all the Hyperlink of each site.   * The color * Can navigate to the correct page * CSS |  |  |
| Zoom in/Zoom out | Zoom in function.   * Click on + icon * Use mouse * State of the + icon   Zoom out function.   * Click on – icon * Use mouse * State of the - icon |  |  |
| Weather control at top right panel | Weather control item   * Temperature * Pressure * Wind speed * Clouds * Global Precipitation   Cities condition checkbox function   * List of cities appear / disappear on the map   Full weather information of select city displays value of   * Country * Temp * Clouds * Humidity * Pressure * Wind Direction * Wind Speed |  |  |
| Play weather control function   * play-back-faster * play-back * play * stop * play-forward * play-forward-faster * label value shows current, mix and max date * control range to move between min and max date |  |  |
| Scale details at bottom right panel | Verify the scale line change and display correct details of min and max value   * Temperature * Pressure * Wind speed * Clouds * Global Precipitation |  |  |
| API |  | All supported API provided by the weather map should verify   * Method * Parameter * Response body * API key validation * API authorization validation |  |  |
| UI/ UX |  | The object/element, the image and the hyperlink   * Size * Position * Width/Height * Color * State |  |  |
| Information, message display clear and correct grammatically.  The colors of the error message or warning message. |  |  |

## 

# Features not to be Tested

|  |  |  |
| --- | --- | --- |
| Feature | Parent Component / System | Overview |
| N/A | N/A | N/A |

# Testing Risk Register

|  |  |
| --- | --- |
| Risk ID No. | MAP-R01 |
| Summary | Lack of resource |
| Probability of Occurrence | High |
| Customer Impact | High |
| Trigger | Not enough resource can cause testing coverage is not strong |
| Mitigation Action | Hide new employee |
| Contingency Action | Train current team member to have good technical or skill to deal with current situation |

|  |  |
| --- | --- |
| Risk ID No. | MAP-R02 |
| Summary | Tide schedules |
| Probability of Occurrence | High |
| Customer Impact | High |
| Trigger | Scrum’s schedule are very tide .More task are added after each sprint |
| Mitigation Action |  |
| Contingency Action | Completed all task on time without any side effect |

|  |  |
| --- | --- |
| Risk ID No. | MAP-R03 |
| Summary | Side effect bug fixed |
| Probability of Occurrence | High |
| Customer Impact | High |
| Trigger | Issue fixed may cause side effect on other component with QA does not know |
| Mitigation Action | Dev team needs to be careful when fixing issue. Inform QA team component cause effect and need verify. |
| Contingency Action |  |

# Test Approach (Strategy)

## Type of Testing

* Unit test (done by developer)
* Functional testing
* Integrate test
* (UI) Interface testing
* Usability testing
* Compatibility testing
* Security testing
* Performance test
* Regression test
* Acceptance testing

Will start from basic function case to more explorer case. Make sure the web applicate can work on multiple browsers and operation system.

Regression test will be divided into 2 parts: manual and automated

* Try to automated as much as possible to increase regression test’s coverage
* Each component will have all necessary test cases

Automation test script will execute during night and review result in the morning. The rest of the day will be time for manual test, improve coverage testing

* Execute level 1 – basic function on each component
* Execute level 2 – Cover more case with scenario case

Non-functional testing like compatibility, performance, security test will also be tested 2 or 3 times during the quarter

## Test TOOLS

* Jira (use for manage bug, issue)
* Selenium
* Postman

## Test Data

Application under Test

* Webpage Weather map – Use for testing on Web
* Browser:
  + - Chrome latest version
    - Firefox latest version
    - Microsoft Edge latest version
    - Safari on MAC latest version

## Test Environment

* Priority on
* Win 10 – 64bit /32bit
* MAC OS
* Linux
* Use VMW / Cloud environment for testing
* Win 10 – 64bit
* Win 8 – 64bit

# Personnel

|  |  |  |
| --- | --- | --- |
| Name | Role | Responsibility |
| Nguyen Van A | Test lead | Manage test team  Ensure the task complete on time  Create test plan, matrix, test scope…, support other team member |
| Tran C | SR.Test Engineer | Ensure the task complete on time  Rise issue when needed ,support other member |
| Toan Nguyen | Test Engineer | Complete all assigned task , rise any issue when need to scrum master |
| Bach Khuat | Test Engineer | Complete all assigned task , rise any issue when need to or scrum master |

## Test Estimation and Schedule

Schedule list of item will be test in each sprint. The time to do performance test, regression test, acceptance test.