TEST PLAN

Project/Product Name: Track Event API

Version: 1.0.0

Signature

| **Roles** | **Name** |
| --- | --- |
| Creator | Diep Pham |
| Reviewer |  |
| Approval |  |

Record of Change

| **Date** | **Change Items** | **Status** | **Change Description** | **New Version** |
| --- | --- | --- | --- | --- |
| 28/4/2022 | Create | Create |  | 1.0.0 |
|  |  |  |  |  |

# Introduction

1. Project/Product Overview

API Document: https://resola.stoplight.io/docs/resola/e2bebaae60b45-track-event

1. Purpose of Document

The Test Plan document documents and tracks the necessary information required to effectively define the approach to be used in the testing of the project’s product.

# Scope of Testing

1. Features to be Tested

| **System** | **Features** | **Sub-features** | **Acceptance Criteria** |
| --- | --- | --- | --- |
| API | Track Event API | API Request Body | [Follow API Document of API Request](https://resola.stoplight.io/docs/resola/e2bebaae60b45-track-event#Request) |
|  |  | API Response Body | [Follow API Document of API Response Body](https://resola.stoplight.io/docs/resola/e2bebaae60b45-track-event#response-body) |
|  |  | API Response Status Code | [Follow API Document of API Response](https://resola.stoplight.io/docs/resola/e2bebaae60b45-track-event#response-body) |

1. Test types / Test technique

* Use Postman for testing
* Automation test by using Postman

1. Test strategies

| **Test name** | **Objective** |
| --- | --- |
| Functionality testing | This involves testing the functional aspects of the API, such as verifying that the API behaves correctly when given valid input, and that it detects and handles invalid input properly. |
| Load testing | This involves testing the performance and scalability of the API by subjecting it to high levels of traffic or requests. |
| Security testing | This involves testing the API for vulnerabilities such as injection attacks, cross-site scripting (XSS) attacks, or other types of security flaws. |
| Usability testing | This involves testing the API to ensure that it is easy to use and understand, and that it provides clear and informative error messages. |
| Error handling testing | This involves testing the API's error handling capabilities, including its ability to detect and handle errors gracefully. |
| Regression testing | This involves testing the API after changes have been made, to ensure that it still works as expected and that there are no unexpected side effects. |
| Exploratory testing | This involves testing the API in an unstructured and ad-hoc way, to uncover potential issues that may not be caught by more structured testing methods. |

1. Test Environments

* Test entry point

1. Out of Scope

| **Items not be tested** | **Reason** |
| --- | --- |
| API authentication or authorization | Not be provided in the [API document](https://resola.stoplight.io/docs/resola/e2bebaae60b45-track-event#Responses) |
| API handling other errors (like 401, 403, 404, 500, 502…) | Not be provided in the [API document](https://resola.stoplight.io/docs/resola/e2bebaae60b45-track-event#Responses) |
| Data stored in database after API request sent | Unable to access the database |

# Test Activities in a Test Life Cycle

| **Activities** | **Deliverables** |
| --- | --- |
| Create Test Plan | [Test plan document](https://docs.google.com/document/d/1Ce6SCqBzzx5_NlMm8-7bvmYNJn8QOSVCejBSB2tGfhc/edit#) |
| Develop Test cases | [Test cases document](https://docs.google.com/spreadsheets/d/1dmzFnbZT8x0_ydaPb3SXX_4Thuu1yIFjVIOzcVGcuGQ/edit#gid=0) |
| Execute Test cases | [Test results](https://docs.google.com/spreadsheets/d/1dmzFnbZT8x0_ydaPb3SXX_4Thuu1yIFjVIOzcVGcuGQ/edit#gid=611043318) |
| Write test guide | [How to test document](https://docs.google.com/document/d/1t-sQBc-brbO1LeSIT83u-EivNNoU8GkWaYM9wDzvhVY/edit) |
| Report bugs | [Bug Reports](https://docs.google.com/spreadsheets/d/1r0C3bnd6QYQKzzBqRjgAd_rWCx5Ta-0RHATnQEgc9aM/edit#gid=466651266) |
| Create test report | [Overall Evaluation Test Report](https://docs.google.com/document/d/1s2xdBL-PQaSM8NewfbKg1tJFEaTq0U1YmIw8JWwkdFM/edit#) |

# Quality metrics

| **Measure Metrics** | **Description** | **Target** |
| --- | --- | --- |
| Functionality test execution | % Functionality test have executed | 100% |
| Functionality test passed | % Functionality test cases passed | 95% |
| Regression test execution | % Regression test have executed (in scope) | 100% |
| Regression test passed | % Regression test cases passed | 80% |
| Non-functionality test execution | % Non-functionality test (load test, performance test) have executed (in scope) | 100% |
| Non-functionality test passed | % Non-functionality test (load test, performance test) passed | 80% |
| Blocker bugs clean | No blocker bugs, other bugs have to be approved by PM/PO | 100% |
|  |  |  |

# Resource

| **Name** | **Position** | **Roles & Responsibility** |
| --- | --- | --- |
| Diep Pham | QA Engineer | Test Creation  Test Execution  Test Reporting |

# Risks and Mitigation

| **No** | **Risk** | **Rank** | **Mitigation Plan** |
| --- | --- | --- | --- |
| 1 | API Document is not clear and completed. | High | QA/QC clarify API requirements with tech lead, PO/PM |
| 2 | QA/QC don’t have permission to modified server. | Medium | QA/QC work with developer to modified server in order to execute full test cases. |
| 3 | QA/QC don’t have permission to access database | Medium | QA/QC work with developer to access database in order to verified data test. |
| 4 | QA/QC may have limit technical expertise of automation testing | Medium | Improve QA/QC automation testing skill. |
| 5 | Inconsistent test environments | Medium | DevOps ensures the consistence between test environments. |
| 6 | Integration risks | Medium | Suport QA/QC to setup testing the integration between the API and other system. |