Rise automation test project

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**Automation Test Plan**

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1. **INTRODUCTION**

The purpose of the project is to build the system that *[project description]*.

The Test Plan determine the scopes, objectives and risk of testing. Defining the overall test approach, the overall framework, enviroment that will support test activities, resolution for risk and contingency, test criteria, timeline and resource planning.

Build automation test scripts which using for regression test phase.

1. **TEST OBJECTIVES**

* Ensure that system functionality works as expected without any critical, high and medium bugs
* Ensure that the response time when using system meets expectation
* Ensure that the integration between modules and systems work as expectation

1. **TEST STRATEGY**
   1. *Scope of Testing* 
      1. *In scope testing*

In scope items will be system testing as usability of bellow features.

The following is the list features to be tested in this project:

|  |  |  |
| --- | --- | --- |
| No. | UserStory/Function | Degree of complex |
|  | Filter projects with “All projects” tag | 2 |
|  | Filter projects with “Completed” tag | 2 |
|  | Filter projects with “High Priority” tag | 2 |
|  | Filter projects with “Open projects” tag | 2 |
|  | Filter projects with “Upcoming” tag | 2 |
|  | Clear the current filter | 3 |
|  | Search filter | 3 |
|  | Create custom filter with "On track" label | 1 |
|  | Create custom filter with "Urgent" label |  |
|  | Create custom filter with "Perfect" label |  |
|  | Create custom filter with "Completed" Status |  |
|  | Create custom filter with "Hold" Status |  |
|  | Create custom filter with "Canceled" Status |  |
|  |  |  |
|  |  |  |

Degree: 1 – Complex, 2 – Medium, 3 – Low

* + 1. *Out of scope testing*

There are some out of scope items:

* Database test
* Mobile test
* Performance test
* Security test
* API test
  1. *Test Levels and Test Types*
     1. *Test levels*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Test level** | **Method** | **People in charge** | **Note** |
| 1 | Integration test | Manual/Automation | Tester | * Testing the integration of systems and packages; testing interfaces to external organizations * Test to find defects in the interfaces and in the interactions between integrated components or systems |
| 2 | System test | Manual/Automation | Tester | Verify that the whole system meets with requirements |
| 3 | User acceptance test | Manual/Automation | Client | Client test the system to make sure that the system is met the requirement. To make sure the useablitiy, maintanceability, reliablity. |

* + 1. *Test types*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Test type** | **Method** | **People in charge** | **Notes** |
| 1 | Review requirement (static testing) | Manual | Tester | To verify the correction and level of detail of User Story |
| 2 | Review code | Automated/Manual | Dev team | Self-review, Peer Review |
| 3 | Functional testing (dynamic testing) | Manual | Tester/Dev team | Verify that the system meets functional requirement |
| 4 | Non-functional testing | Manual | Tester | Performance test, API test, Security test |
| 5 | Re-testing | Manual | Tester/Dev team | Testing after fixing bug to confirm the bug is removed |

* 1. *Risks*

|  |  |  |
| --- | --- | --- |
| **No.** | **Risk** | **Mitigation** |
| 1 | Requirement contains a lot of technical related to encryption and module communication, not to mention a huge amount of distributed actor, leads tester to difficult to design test cases | * Testers need to review user story/requirement before writing test cases (usually the first 2 days of each Sprint) * Improve communication in the team * Peer review testcase |
| 2 | Project schedule is tight and short, it may be hard to complete testing on time | * Set priority for test activities: focus testing on the features that contains many critical bugs * Writing test checklist instead of test cases step by step if not enough time |
| 3 | System is complex so deployment may be has potential issue | In sprint planning, team need to clarify deployment schedule |
|  |  |  |

1. **TEST CRITERIA**
   1. *Entry Criteria*

The entry criteria refer to the conditions in order to start testing activities (test design, test execution):

1. The specification of a feature is approved and available on Jira before starting test design
2. Development completed (status must be Ready for test)
3. Features under test are already on QC environment
4. Test cases, test data are peer-review before test execution
   1. *Suspension Criteria*

The suspension criteria refer to the conditions that test activities will be suspended if suspension criteria are met during testing:

1. Any main flows are not covered
2. Main feature does not meet acceptance criteria
   1. *Exit Criteria*

The exit criteria are the targeted results of the test that need to be met to complete a test phase:

1. 100% of Test cases executed
2. No Critical, high, medium bug remaining
3. 5 % leakage (total bugs found by client / total bugs) : lọt lỗi sang khách hàng: khách hàng tìm được 5 bugs / 100 bugs team dự án tìm
4. **RESOURCE PLANNING**
   1. *System resource*

|  |  |  |
| --- | --- | --- |
| No. | Resources | Description |
| 1 | Test tool | * Eclipse * Azure Devop: Task, bug tracking, Quality monitoring, Test case management, Test execution |
| 3 | Computer | * The PCs with hardware, software required |
| 5 | **Web browser** | * *Chrome* * *Firefox* * *Edge* |
|  |  |  |

* 1. *Test Resource*

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Role** | **Start date** | **End date** |
| Hieu Truong | Tester work 100% | 26-Mar, 2024 | 30-Mar, 2024 |

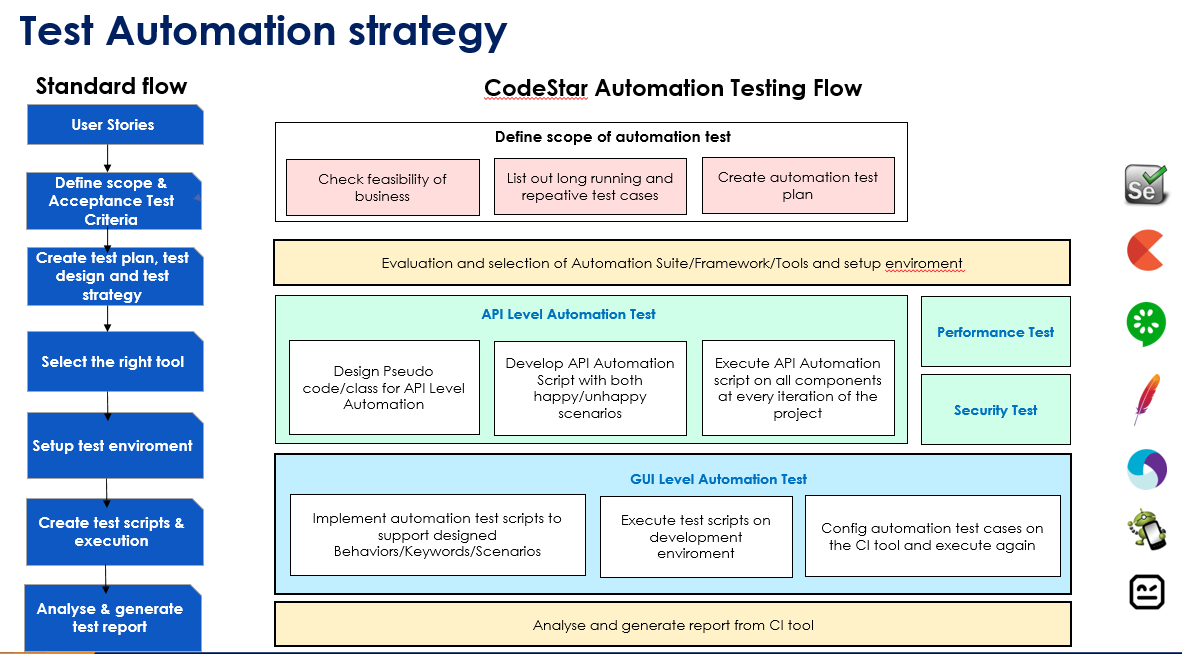
1. **SCHEDULE AND ESTIMATION**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Task** | **Member** | **Estimation Effort**  **(Man-day)** |
| 1 | Create test plan | Team | 1 |
| 2 | Study & review requirements | Team | 1 |
| 3 | Create test design, test cases | Team | 2 |
| 4 | Test execution | Team | 6 |
| 5 | Test report & Quality Control | Team | 1 |

1. **TEST DELIVERABLE**

|  |  |  |
| --- | --- | --- |
| **Phase** | **Deliverable Name** | **How to access** |
| **Before testing** |
| Test cases documents | All test cases will be uploaded on Microsoft Azure Devop.  Link: |
| **During testing** | Test cycles | Each Sprint will have at least 1 test cycle for executing sets of test cases.  Please follow this example to filter the test cycle: |
| **After testing** | Test reports | Test reports will be created after each sprint and published on Confluence: [https://conf. codestar.com/display/CDIS/Test+reports](https://conf.gemvietnam.com/display/CDIS/Test+reports) |
| Bugs | All bugs logged on Azure Devop   * Sprint bugs are sub-tasks of the corresponding User story * Bugs/Improvement are linked to User stories, not add into current sprint |

1. **AUTOMATION TESTING TOOL AND STRATEGY**
   1. *Automation strategy*



* 1. *Automation testing framework*

**Framework library/ tools:**

* Maven
* TestNG
* Github
* Selenium

**Language**:

* Java