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USEFUL JAPANSES DICTIONARY FOR VIETNAMESE

TEST PLAN

テスト計画書

プロジェクトコード： UJD\_VN

ドキュメントコード： UJD\_VN\_Test Plan\_v1.1\_JP

**Ha Noi, 16/06/2014**

変更履歴

\*A -追加、M – 修正、D – 削除

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 発効日 | 変更項目 | A\* M、D | 変更内容 | 版数 |
| 16/06/2014 |  | A | Create document | v1.0 |
| 23/06/2014 |  | M | Modify Acceptance test criteria, V-model | v1.1 |
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# はじめに

## 目的

The purpose of this document is show scope of testing, test items, test strategy, testing approach, resources, test environment, schedule of intended testing activities …

## 定義、頭字語および略語

| 定義/頭字語/略語 | 説明 | 備考 |
| --- | --- | --- |
| AT | 受入テスト |  |
| DMS | 不具合管理システム(Fsoftツール) |  |
| IT | 結合テスト |  |
| PM | プロジェクトマネージャ |  |
| PTL | プロジェクト技術リーダ |  |
| QA | 品質保証部 |  |
| SRS | ソフトウェア要求仕様書 |  |
| ST | システムテスト |  |
| TP | テスト計画書 |  |
| TC | テストケース |  |
| TR | テスト報告書 |  |
| UAT | ユーザ受入テスト |  |
| UT | 単体テスト |  |

## 参照資料

| ドキュメント名 | 作成者 | 版数 | 発行日 |
| --- | --- | --- | --- |
| UJD\_VN\_Software Requirement Specification\_v1.0\_EN | UJD\_VN Team | v1.0 | 20/06/2014 |
| UJD\_VN\_Project Plan\_v1.0\_EN | NamLD | v1.0 | 28/05/2014 |
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## 背景情報

* The target of testing is ensured all functions will be run correctly as SRS description. In addition, restrict maximum of defect during the user access in the application. To do this target, website will have to:
* Passed the stages of testing: Unit Testing, Component Testing, Integration Testing, System Testing, Acceptance Testing
* Passed the types of testing: Function Testing, User Interface Testing , Data and Data Integrity Testing
* Run normally in required devices/browsers.

## テスト範囲

* UJD\_VN will be tested by 5 phases:

**Phase 1: Unit testing**

* Unit testing will be done by developers
* Developers user While Box Testing technique to do
* When executing unit testing, if any bugs are found, developers have to log bug on “Defect Log Management” file and fix it until it is correct.

*Rule for filling test result:*

|  |  |
| --- | --- |
| Test result pass | Pass |
| Test result fail | Fail |
| Do not test | Untested |
| Cannot test | N/A (Not available) |

**Phase 2: Component testing**

* After finishing unit testing, component testing will be performed by testers.
* Material are component test cases, low- level design
* Testers user Black Box Testing technique to do
* When executing component testing, if any bugs are found, testers have to log on “Defect Log Management” file and assign to developer fix it and redo this process until it is correct.

*Rule for filling test result:*

|  |  |
| --- | --- |
| Test result pass | Pass |
| Test result fail | Fail |
| Do not test | Untested |
| Cannot test | N/A (Not available) |

**Phase 3: Integration testing**

* After finishing component testing, integration testing will be performed by testers.
* Material are integration test cases, high- level design and test tools.
* Do test by flow of functions and items which have relation.
* When executing integration testing, if any bugs are found, testers have to log on “Defect Log Management” file and assign to developer fix it and redo this process until it is correct.

*Rule for filling test result:*

|  |  |
| --- | --- |
| Test result pass | Pass |
| Test result fail | Fail |
| Do not test | Untested |
| Cannot test | N/A (Not available) |

**Phase 4: System testing**

* After finishing integration testing and developers collect all functions and items, testers will be performed system testing, it means doing test whole system.
* Material area system test case, SRS
* If any bugs are found, developers have to fix and testers will verify them. System test is ended only when test cases are passed and no bug is found.

*Rule for filling test result:*

|  |  |
| --- | --- |
| Test result pass | Pass |
| Test result fail | Fail |
| Do not test | Untested |
| Cannot test | N/A (Not available) |

**Phase 5: Acceptance testing**

* Base on customer/user requirement specification, system is tested again, for ensure there is not lacking or mistake any requirement.
* If there is any problem, developers have to fix/update and tester will verify them.
* Acceptance testing is ended only when whole system met requirement specification.

## 制約事項

* There are only 2 testers and tester don’t have experience in testing
* Time of Testing is short
* Have more environments should be tested: Window XP, Window 8… and more browsers: Firefox, IE, Chrome … But Test team can not cover all

## リスク一覧

* Performance test: Cannot test the case which many users connect to website at the same time.
* Not enough time to write all test cases, execute test or re-test for fixed bug.
* Tester can be ill during the testing phase

## 必要となるトレーニング

UJD\_VN project follows V-Model process:



**Figure 1: V-Model**

Testing progress is divided to 5 phases include: Unit test, Component test, Integration test, System test and Acceptance test

* Unit test:
* Unit testing is used to verify a single minimal unit of source code. The purpose of unit testing is to isolate the smallest testable parts of UJD\_VN and verify that they function properly in isolation.
* Unit testing is the first level of testing and is perform prior to component testing
* Unit testing will be done by developer.
* Component test:
* Component testing is used to validate a combined many minimal units of source code.
* Component testing is performed after unit testing and before integration testing
* Component testing will be done by tester
* Integration test:
* Integration testing is a level of the software testing process where individual units or component are combined and tested as a group.
* The purpose is to expose faults in the interaction between integrated units.
* Integration testing is performed after component testing
* Integration testing will be done by tester
* There are two methods of doing integration testing: Bottom-up Integration testing and Top Down Integration testing:

| No | Integration Testing Method |
| --- | --- |
| 1 | Bottom-up integration  This testing begins with unit testing, followed by tests of progressively higher-level combinations of units called modules. |
| 2 | Top- Down integration  This testing, the highest-level modules are tested first and progressively lower-level modules are tested after that |

**Table 1-3:** Integration test

* System test:
* System Testing is a level of the software testing process where a complete, integrated system is tested
* The purpose is to evaluate the system’s compliance with the specified requirements
* System testing is performed after integration testing
* System testing will be done by tester
* Acceptance test:
* Acceptance testing is performed after system testing
* Acceptance testing will be performed by the test leader and team leader.
* The acceptance test will be done for a period of 1 weeks after completion of the system test process.

# テスト要求

## テスト項目

1. *Member functions*

* Search sentences
* Search conversation
* Search grammar
* Search video
* Search specialized Japanese
* Log in by Facebook account
* Log in by registered account
* Log out
* Register
* Edit profile
* Forgot password
* Contribute content
* Contribute opinion
* Send Q&A
* Doing test
* Tracking mark
* Training listening
* Listening conversation
* Reading Elementary document
* Reading Intermediate document
* Reading Review document
* Reading Test document
* Reading Kanji document

1. *Admin functions*

* Add new admin
* Edit profile
* Delete admin
* Search member
* Ban/Unban member’s account
* Delete member
* Search vocabulary
* Add vocabulary
* Edit vocabulary
* Add reference sentence for vocabulary
* Delete vocabulary
* Approve contributed vocabulary
* Reject contributed vocabulary
* Search grammar
* Add grammar
* Edit grammar
* Add reference sentence for grammar
* Delete grammar
* Approve contributed grammar
* Reject contributed grammar
* Search reading document
* Add reading document
* Edit reading document
* Delete reading document
* Search conversation
* Add conversation
* Edit conversation
* Delete conversation
* Search video
* Add video
* Edit video
* Delete video
* Search listening article
* Add listening article
* Edit listening article
* Delete listening article
* Search test
* Add test
* Edit test
* Delete test
* Search Q&A
* Reply Q&A
* Delete Q&A
* Search opinion
* Reply opinion
* Delete opinion

## テスト受入基準

* Criteria for Unit test of Development team, for Test team accepts to start testing:
* Number of UTC/KLOC: 40 UTC/KLOC
* Number defects/KLOC: 3-4 defects/KLOC
* Statement coverage: 97%
* Branch coverage: 100%
* Path coverage: 100%
* Criteria for Integration test:
* Number of UTC/KLOC: 30 UTC/KLOC
* Number defects/KLOC: 2-3 defects/KLOC
* Criteria for System test:
* Number of UTC/KLOC: 60 UTC/KLOC
* Number defects/KLOC: 4-6 defects/KLOC
* Criteria for Acceptance test:
* Number defects/KLOC: 1-2 defects/KLOC

# テスト戦略

## テストタイプ

### 機能テスト

* Functional testing is a type of software testing whereby the system is tested against the functional requirements/specifications.
* Functions are tested by feeding them input and examining the output. Functional testing ensure that the requirements are properly satisfied by the website. This type of testing is not concerned with how processing occurs, but rather, with the results of processing.
* During functional testing, [Black Box Testing](http://softwaretestingfundamentals.com/black-box-testing/) technique is used in which the internal logic of the system being tested is not known to the tester.

|  |  |
| --- | --- |
| テスト目的 | The type of this test is to ensure proper target-of-test functionality, including user interaction, all function defined in specification document implemented correctly. |
| 方法 | Execute each use case, use-case flow, or function, using valid and invalid data, to verify the following:  -    The expected results occur when valid data is used.  -    The appropriate error or warning messages are displayed when invalid data is used.  -    Each business rule is properly applied.  - Use Test tool … |
| 完了基準 | - All planned tests have been executed.  - All identified defects have been addressed and closed. |
| 特記事項 | Testing may be stopped when   * Time runs out * A certain number of defects found * Test coverage > 97%   Stop when testing becomes unproductive |

### ユーザインタフェーステスト

* GUI testing is the process of ensuring proper functionality of the GUI for a given web and making sure it conforms to its written specifications.
* GUI testing evaluates design elements such as layout, colors, [fonts](http://whatis.techtarget.com/definition/font), font sizes, labels, text boxes, text formatting, captions, buttons, lists, icons, links, content and more.

|  |  |
| --- | --- |
| テスト目的 | Verify the following:  - Navigation through the target-of-test properly reflects business       functions and requirements, including window-to-window, field-to-field, and use of access methods (tab keys, mouse movements, accelerator keys)  - Window objects and characteristics, such as menus, size, position, state, and focus conform to standards. |
| 方法 | Create or modify tests for each window to verify proper navigation and object states for each application window and objects. |
| 完了基準 | Each window successfully verified to remain consistent with benchmark version or within acceptable standard |
| 特記事項 | Not all properties for custom and third party objects can be accessed. |

### データおよびデータベース整合性テスト

* The databases and the database processes should be tested as a subsystem within the Project. These subsystems should be tested without the target-of-test’s User Interface as the interface to the data.  Additional research into the Database Management System (DBMS) needs to be performed to identify the tools and techniques that may exist to support the testing identified below.

|  |  |
| --- | --- |
| テスト目的 | Ensure database access methods and processes function properly and without data corruption. |
| 方法 | - Invoke each database access method and process, seeding each with valid and invalid data or requests for data.  - Inspect the database to ensure the data has been populated as intended, all database events occurred properly, or review the returned data to ensure that the correct data was retrieved for the correct reasons. |
| 完了基準 | All database access methods and processes function as designed and without any data corruption. |
| 特記事項 | - Testing may require a DBMS development environment or drivers to enter or modify data directly in the databases.  - Processes should be invoked manually.  - Small or minimally sized databases (limited number of records) should be used to increase the visibility of any non-acceptable events. |

## テストステージ

* Clearly state the stage in which the test will be executed. Identified below are the stages in which common test are executed

| テストタイプ | テストステージ | | | |
| --- | --- | --- | --- | --- |
| 単体 | 結合 | 総合 | 受入 |
| <機能テスト> | X | X | X | X |
| <ユーザインターフェース テスト> |  | X | X |  |

## ツール

* List tools will be employed for this project

|  |  |  |  |
| --- | --- | --- | --- |
| 目的 | ツール | ベンダー/社内 | 版数 |
| UJD\_VN\_Defect Log Management\_v1.0\_EN | Microsoft Excel 2013, 2010 | FPT-University | v1.0 |
| Test effort | Microsoft Excel 2013, 2010 | FPT-University | v1.0 |

# リソース

## 人的リソース

下表にテストメンバーの担当作業を示す。

|  |  |
| --- | --- |
| 担当者名 | 作業内容/備考 |
| MinhPT (TL) | * Manage Test Resource and assign test tasks. * Create and review Test Plan. * Create and review Test Case. * Execute test. * Create and review Test Report |
| TuanNN | * Create and review Test Case. * Execute test. * Create Test view points * Create and review Test Report |

## システム

* **Hardware**

|  |  |  |
| --- | --- | --- |
| Name | Purpose | Detail |
| Laptop Asus | Device for create and execute test | Window 7 Ultimate Core i3 |
| Laptop Vaio | Device for create and execute test | Window 7 Ultimate Core i3 |

* **Software**

|  |  |  |
| --- | --- | --- |
| Name | Purpose | Detail |
| Test Plan | Managing test | Microsoft Word 2013, 2010 |
| Test case | Executing test | Microsoft Excel 2013, 2010 |
| Test report, Test checklist | Tracking test | Microsoft Excel 2013, 2010 |
| Chrome, CocCoc | Executing test | Chrome 35.0, CocCoc 35.0 |

# テストマイルストーン

|  |  |  |  |
| --- | --- | --- | --- |
| マイルストーンタスク | 工数（人日） | 開始日 | 終了日 |
| Create Test Plan | 6 | 16/06/2014 | 22/06/2014 |
| Review & update TP | 2 | 23/06/2014 | 23/06/2014 |
| Create Component Test case | 12 | 23/06/2014 | 26/06/2014 |
| Review & update Component TC | 2 | 27/06/2014 | 27/06/2014 |
| Create Integration Test case | 2 | 07/07/2014 | 07/07/2014 |
| Review & Update Integration TC | 2 | 08/07/2014 | 08/07/2014 |
| Create System Test case | 6 | 09/07/2014 | 11/07/2014 |
| Review & Update System TC | 2 | 11/07/2014 | 11/07/2014 |
| Execute Component test phase 1 | 1 | 16/07/2014 | 16/07/2014 |
| Execute Component test phase 2 | 1 | 24/07/2014 | 24/07/2014 |
| Execute Integration test phase 1 | 2 | 17/07/2014 | 17/07/2014 |
| Execute Integration test phase 2 | 2 | 25/07/2014 | 28/07/2014 |
| Execute System test phase 1 | 4 | 21/07/2014 | 22/07/2014 |
| Execute System test phase 2 | 4 | 28/07/2014 | 29/07/2014 |

# 納品物

| 項番 | 納品物 | 言語 | 納品日 |
| --- | --- | --- | --- |
| 1 | Test Plan | English | 23/06/2014 |
| 2 | Component Test case | English | 25/07/2014 |
| 3 | Integration Test case | English | 29/07/2014 |
| 4 | System Test case | English | 30/07/2014 |
| 5 | Defect Log Management | English | 31/07/2014 |
| 6 | Test report | English | 31/07/2014 |