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Services Directory Software Requirements Specification

TEST PLAN

Project Code: AB-SD-SRS

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**Ho Chi Minh City, 27/4/2021**

Record of change

\*A - Added M - Modified D - Deleted

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| Apr 20, 2021 |  |  | The first version | 1.0 |
| Apr 27, 2021 | User Interface testing | A | The second version | 1.1 |
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SIGNATURE PAGE

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# 

# INTRODUCTION

## Purpose

This test plan supports the following objectives:

1. Identify existing project information and the software components that should be tested
2. List the recommended test requirements (high level)
3. Recommend and describe the testing strategies to be employed
4. Identify the required resources and provide an estimate of the test efforts
5. List the deliverable elements of the test project

## Definitions, Acronyms, and Abbreviations

| Abbreviations | Description | Note |
| --- | --- | --- |
| AT | Acceptance test |  |
| DMS | Defect Management System (Fsoft tool) |  |
| IT | Integration test |  |
| PM | Project Manager |  |
| PTL | Project Technical Leader |  |
| PT/TT | Program test/ Total test |  |
| SRS | Software Requirement Specification |  |
| ST | System test |  |
| TP | Test Plan |  |
| TC | Test Case |  |
| TR | Test Report |  |
| UAT | User Acceptance test |  |
| UT | Unit test |  |

## Background information

AB currently does not have a central repository for the services that they (and associated) organisations provide. This system requirements specification is part of the project to deliver a central repository called the Services Directory.

## Scope of testing

* In scope: Functional testing, User Interface Testing
* Out scope: Performance Testing, Security and Access Control Testing, Data and Database Integrity Testing

## Constraints

Lack of some external systems that interface to the system-under-test

## Risk list

No formal meeting within the Development before starting a project*.*

## Training needs

Training of Test process, Test tools

# 

# Requirements for Test

## Test items

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Name of features and functions | Outline of features and functions | Number of Test case(Estimate) | Note |
|  | Login & Logout | User would enter User name and Password to login the system. | 10 |  |
|  | List Organisations | By clicking on ‘Organisations’ from the menu, ‘Organisation List’ screen is displayed showing all active Organisations by default. The list is paging with 15 records showing in one page. | 70 |  |
|  | Add Organisation | If user clicks on ‘Create’ button on the ‘Organisation List’ screen, ‘Organisation Details’ screen is displayed including two tabs: Details 1 and Details 2 to allow user to enter Organisation fields for new one. | 30 |  |
|  | Amend Organisation | By selecting an active Organisation from the list, the Organisation Details screen is displaying allowing user to amend. | 20 |  |
|  | Mark In-active Organisation | User can mark an Organisation to in-active by clicking on ‘In-active’ button on the details screen. If the Organisation already links to a Service or a Premise, the prompt message “This Organization is already in use, do you want to make this in-active?” should be displayed with two buttons “OK” and “Cancel” | 2 |  |
|  | List Supporting Materials | **The list should have standard behavior such as:**   * **Displaying active records by default but user can list in-active records as well** * **Sorting** * **Paging (15 records in a page)** * **Marking in-active record to active. The prompt message should be “Do you want to make this Supporting Materials active?”** | 20 |  |
|  | Add Supporting Materials | **In which:**   * **URL is mandatory field** * **Type could be Doc / PDF / Excel**   Added By and Added Date are read-only fields which showing current user name and current date. | 5 |  |
|  | Amend Supporting Materials | In ‘Edit’ mode of a Supporting Materials, use can edit URL, Description and Type fields. | 10 |  |
|  | Mark In-active a Supporting Materials | In Supporting Materials details screen, there is ‘In-active’ button that enable user to mark a record to in-active. | 2 |  |
|  | List Directorates | Similar to other list, this should have standard behaviors: displaying active/in-active, filtering, sorting, paging and marking an in-active Directorate to active. The prompt message when user selecting an inactive record to view should be “Do you want to make this BU/Directorate active?” | 70 |  |
|  | Add Directorate | **In BU/Directorate details screen, following fields should be mandatory:**   * **BU/Directorate Name** * **Type of Business** * **Address Line 1**   Postcode | 30 |  |
|  | Amend Directorate | All fields in ‘Details’ tab can be editable. Validation rules are the same as adding Directorate.Besides, there should be ‘Departments’ tab displaying. Refer to List Departments for more details | 10 |  |
|  | Mark In-active a Directorate | User can mark a Directorate to ‘In-active’ by clicking on ‘In-active’ button on amend Directorate screen. After a Directorate has been changed to ‘In-active’, all Departments and Teams belonging to that Directorate still keep their status. The in-active process is not cascade | 2 |  |
|  | List Departments | All standard behaviors in a List screen should be applied for List Departments.The prompt message when user selecting an inactive record to view should be “Do you want to make this Department active?” | 70 |  |
|  | Add Department | All fields in ‘Details’ tab can be editable. Validation rules are the same as adding Department. Besides, there should be ‘Teams’ tab displaying. Refer to List Teams for more details | 30 |  |
|  | Amend Department | User can mark a Department to ‘In-active’ by clicking on ‘In-active’ button on amend Department screen. After a Department has been changed to ‘In-active’, all Teams belonging to that Department still keep their status. The in-active process is not cascade | 10 |  |
|  | Mark In-active a Department | User can mark a Department to ‘In-active’ by clicking on ‘In-active’ button on amend Department screen. After a Department has been changed to ‘In-active’, all Teams belonging to that Department still keep their status. The in-active process is not cascade | 2 |  |
|  | List Teams | All standard behaviors in a List screen should be applied for List Departments.The prompt message when user selecting an inactive record to view should be “Do you want to make this Team active?” | 60 |  |
|  | Add Team | Mandatory fields should be: Team Name. This field also should be unique.Type of Business, SIC Code and Web Address fields should have defaulted values retrieved from Organisation that it belongs to.User can enter a new Address for Team (that postcode should be verified) or click on Copy from Organisation or Parent (Department) that Team belongs to. | 20 |  |
|  | Amend Team | All fields in screen can be editable. Validation rules are the same as adding Team. | 5 |  |
|  | Mark In-active a Team | User can mark a Team to ‘In-active’ by clicking on ‘In-active’ button on amend Team screen. | 2 |  |
|  | List Service | By clicking on ‘Services’ item under Services in the menu, ‘Service List’ screen is displayed showing all active Services by default. The list is paging with 15 records showing in one page. | 70 |  |
|  | Add Service | If user clicks on ‘Create’ button on the ‘Service List’ screen, ‘Service Details’ screen is displayed including three tabs: Details 1, Details 2 and Details 3 to allow user to enter Service fields for new one. | 30 |  |
|  | Amend Service | By selecting an active Service from the list, the Service Details screen is displaying allowing user to amend. All fields in Details 1, Details 2, Details 3, Contract, Funding tabs can be editable. | 10 |  |
|  | Mark In-active Service | User can mark a Service to in-active by clicking on ‘In-active’ button on the details screen. The prompt message should be displayed: “Do you want to mark this Service in-active?” If user clicks on ‘OK’ button, the Service will be changed status to ‘In-active’. Otherwise, it still keeps being ‘Active’.If the Service already links to an Organisation or a Premise, the prompt message “This Service is already in use, do you want to make this in-active?” should be displayed. If user clicks ‘OK’, this Service will be marked to ‘in-active’. | 2 |  |
|  | List Programmes | By clicking on ‘Programmes’ item under Services in the menu ‘Programme List’ screen is displayed showing all active Programmes by default. Similar to other lists, this should have standard behaviors: displaying active/in-active, filtering, sorting, paging and marking an in-active Programme to active. | 40 |  |
|  | Add Programme | If user clicks on ‘Create’ button on the ‘Programme List’ screen, ‘Programme Details’ screen is displayed to allow user to enter Programme fields for new one. | 20 |  |
|  | Amend Programme | By selecting an active Programme from the list, the Programme Details screen is displaying allowing user to amend. All fields are editable.When user click on ‘Save’ button, all changes are saved into database | 5 |  |
|  | Mark In-active Programme | User can mark a Programme to in-active by clicking on ‘In-active’ button on the details screen. The prompt message should be displayed: “Do you want to make this Programme in-active?”If the Programme already links to a Service, the prompt message should be displayed: “This Programme is already in use, do you want to make this in-active?”  If user clicks on ‘OK’ button, the Programme will be changed status to ‘In-active’. Otherwise, it still keeps being ‘Active’ | 2 |  |
|  | List Trust Regions | By clicking on ‘Trust Region/Trust District’ sub item under Geography in the menu, ‘Trust Region List’ screen is displayed. This list screen has all standard behavior of a list that already mentioned in Organisation module.The prompt message when user selecting an inactive record to view should be “Do you want to make this Trust Region active?” | 70 |  |
|  | Add Trust Region | In which, Nation/Country is mandatory and user can select one from a dropdown list.Trust Region Name is also mandatory and this field should be unique. | 30 |  |
|  | Amend Trust Region | All fields in Details tab can be editable.Besides, there should be ‘Trust Districts’ tab into the Trust Region details screen.Refer to List Trust Districts for more details. | 10 |  |
|  | Mark In-active Trust Region | User can mark a Trust Region to ‘In-active’ by clicking on ‘In-active’ button on amend Trust Region screen. After a Trust Region has been changed to ‘In-active’, all Trust Districts/Trust Areas belonging to that Trust Region still keep their status. The in-active process is not cascade. | 2 |  |
|  | List Trust Districts | The Trust District tab should belong to a Trust Region details screen. It has all behaviors of a standard list in the system.The prompt message when user selecting an inactive record to view should be “Do you want to make this Trust District active?” | 70 |  |
|  | Add Trust District | In which, Trust Region Name is read-only and shows the Trust Region that the District belongs to.Trust District Name is mandatory and unique on each Trust Region. | 30 |  |
|  | Amend Trust District | User can change Trust District Name and Description.Note that Trust District Name should be mandatory and unique on each Trust Region. | 20 |  |
|  | Mark In-active Trust District | User can mark a Trust District to ‘In-active’ by clicking on ‘In-active’ button on amend Trust District screen. After a Trust District has been changed to ‘In-active’, all Trust Areas belonging to that Trust District still keep their status. The in-active process is not cascade. | 2 |  |
|  | List Government Office Region | By clicking on ‘Trust Region/Trust District’ sub item under Geography in the menu, ‘Government Office Region List’ screen is displayed. This list screen has all standard behavior of a list that already mentioned in Organisation module apart from making an in-active to active.In this phase, only list and view GORs are implemented | 50 |  |
|  | View Government Office Region | All of fields in the screen are read-only. User can clicks on ‘Back’ button to come back to the list screen. | 20 |  |
|  | List Premises | By clicking on ‘Premises’ from the menu, ‘Premise List’ screen is displayed showing all active Premises by default. The list is paging with 15 records showing in one page. | 70 |  |
|  | Add Premise | If user clicks on ‘Create’ button on the ‘Premise List’ screen, ‘Premise Details’ screen is displayed including two tabs: Details 1, Details 2 and Details 3 to allow user to enter Premise fields for new one | 50 |  |
|  | Amend Premise | By selecting an active Premise from the list, the Premise Details screen is displaying allowing user to amend. All fields in Details tabs are editable.If user ticks on ‘Volunteering Opportunities’ in Details 2 tab, it should navigate to Volunteering tab automatically.In Edit mode, user can see Facilities, Volunteering (if ‘Volunteering Opportunities’ in Details 2 tab is already ticked), Minor Works, and Services tabs. They will be described in more details below.After clicking ‘Save’ button, all changes are saved into database | 50 |  |
|  | Mark In-active Premise | User can mark Premise to in-active by clicking on ‘In-active’ button on the details screen. The prompt message should be displayed ‘Do you want to make this Premise in-active?’If user clicks on ‘OK’ button, the Premise will be changed status to ‘In-active’. Otherwise, it still keeps being ‘Active’. | 2 |  |
|  | Facility Maintenance | List Facilities, Add Facility | 20 |  |
|  | Volunteering Opportunity | List Volunteering Opportunity, Add Volunteering Opportunity | 20 |  |
|  | Minor Work Projects | List Minor Work Project, Amend Minor Work Project, In-active Minor Work Project | 10 |  |
|  | Services | User clicks on ‘Associate new Service’ button, a pop-up window is displayed listing all active Services in the system which have not linked to the Premise.User select a Service from the list, enter Project Code then click ‘Select’ button, the link between selected Service and Premise will be added, pop-up window is closed and the Service list in the tab will be refreshed automatically. | 30 |  |
|  | List Contacts | User can enter First Name or Surname to relevant text boxes for filtering the Contacts. The application will search all Contacts records which have Name beginning with input data into First Name or Surname.By default, the list will include all active Contact but if user ticks on Include in-active contact check box, this will return active and in-active records both. | 70 |  |
|  | Add Contacts | In which, First Name, Surname and Contact Type are mandatory fields.Contact Type and Best Contact Method are reference data can be get from reference data. User can set Manager of the Contact by click on Lookup link and then it will show another Search Contact pop-up window to select a Contact.To set a Contact being Active or In-active, user can tick/un-tick the relevant check box in the screen. | 30 |  |
|  | Edit Contacts | User can edit a Contact by clicking on ‘Edit’ below the list. The Contact details screen look like the same as illustration on Add Contact above. | 30 |  |
|  | Address lookup | This function is to list addresses queried from the database for populate an address to Organisation, Directorate, etc. record in SD system. The input criteria can be postcode, street or town. After user select an Address in the result list, all of Address fields: Address lines 1-3, Postcode, Town, County, and Country will populate to the screen which are retrieved. | 10 |  |
|  | Type of Business lookup | This lookup to show SIC code that need to be attached for an Organisation, Directorate, Department or a Team. | 10 |  |

## Acceptance Test Criteria

* Test coverage: 100%
* Successful Test coverage: 90%
* Number of Test cases (Unit/Integration/System Test cases): 800
* Number of defects/Weighted defects: 80

# TEST STRATEGY

## Test types

### Function Testing

#### Function Testing

|  |  |
| --- | --- |
| Test Objective: | Ensure proper target-of-test functionality, including navigation, data entry, processing, and retrieval |
| Technique: | 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. |
| Completion Criteria: | -   All planned tests have been executed.  -     All identified defects have been addressed and closed |
| Special Considerations: | Identify or describe those items or issues (internal or external) that impact the implementation and execution of function test |

#### Business Cycle Testing

|  |  |
| --- | --- |
| Test Objective | Ensure proper target-of-test and background processes function according to required business models and schedules. |
| Technique: | Testing will simulate several business cycles by performing the following:  The tests used for target-of-test’s function testing will be modified or enhanced to increase the number of times each function is executed to simulate several different users over a specified period.  All time or date-sensitive functions will be executed using valid and invalid dates or time periods.    All functions that occur on a periodic schedule will be executed or launched at the appropriate time.  Testing will include 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. |
| Completion Criteria: | All planned tests have been executed.  All identified defects have been addressed. |
| Special Considerations: | System dates and events may require special support activities  Business model is required to identify appropriate test requirements and procedures. |

### 3.1.2 User Interface Testing

|  |  |  |
| --- | --- | --- |
| Test Objective: | | 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. |
| Technique: | Create or modify tests for each window to verify proper navigation and object states for each application window and objects. | |
| Completion Criteria: | Each window successfully verified to remain consistent with benchmark version or within acceptable standard | |
| Special Considerations: | Not all properties for custom and third party objects can be accessed. | |

## Test stages

| Type of Tests | Stage of Test | | | |
| --- | --- | --- | --- | --- |
| Unit | Integration | System | Acceptance |
| Function Test | X | X | X | X |

# 

# RESOURCE

## Human Resource

|  |  |  |  |
| --- | --- | --- | --- |
| Worker/Doer | Role | Specific Responsibilities/Comments | Location |
| Trung Trot  51801034@student.tdtu.edu.vn | Leader | Manage Test resource and assign test tasks  Create TP  Review TC  Create Test report | **TDTU**, Vietnam |
| Hoang Truc  51801034@student.tdtu.edu.vn | Tester | Create testcase  Execute test  Review TC  Report test result | **TDTU**, Vietnam |
| Huu Tai  51801034@student.tdtu.edu.vn | Tester | Create testcase  Execute test  Review TC  Report test result | **TDTU,** Vietnam |
| Phat Thinh  51801034@student.tdtu.edu.vn | Tester | Create testcase  Execute test  Review TC  Report test result | **TDTU,** Vietnam |

# Test environment

## Hardware

*The hardware used for the development of the project is:*

|  |  |
| --- | --- |
| *PROCESSOR* | *Intel Core I5-8250U 1.6GHz* |
| *RAM* | *16 GB* |
| *MONITOR* | *15.7 inch COLOR* |
| *HARDISK* | *1 TGb* |
| *KEYBOARD* | *STANDARD 102 KEYS* |
| *MOUSE* | *3 BUTTON* |

## Software

*The software used for the development of the project is:*

|  |  |  |
| --- | --- | --- |
|  | *Windows* | *Mac OS* |
| *IE* | *X* |  |
| *Chrome* | *X* |  |
| *Opera* | *X* |  |
| *Safari* |  | *X* |

# 

# TEST MILESTONES

|  |  |  |  |
| --- | --- | --- | --- |
| Milestone Task | Effort (pd) | Start Date | End Date |
| Create Unit Test Plan |  | 2021-03-20 | 2021-05-03 |
| Review & update UTP |  | 2021-04-20 | 2021-05-03 |
| Create Unit Test case |  | 2021-04-20 | 2021-05-03 |
| Review & update UTC |  | 2021-04-20 | 2021-05-03 |
| Create Test Plan |  | 2021-04-20 | 2021-05-03 |
| Review & update TP |  | 2021-04-20 | 2021-05-03 |
| Create Integration Test case |  | 2021-04-20 | 2021-05-03 |
| Review & Update Integration TC |  | 2021-04-20 | 2021-05-03 |
| Create System Test case |  | 2021-04-20 | 2021-05-03 |
| Review & Update System TC |  | 2021-04-20 | 2021-05-03 |
| Execute Unit Test |  | 2021-04-20 | 2021-05-03 |
| Execute Integration test |  | 2021-04-20 | 2021-05-03 |
| Execute System test |  | 2021-04-20 | 2021-05-03 |