

National Taiwan University
2022 Fall Software Engineering

System Test Plan (Version 1.0)

Multifunctional Verbatim Management System

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Change Log

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Section 1 Objective and Acceptance Criteria

1.1 Purpose of this Document

This document establishes the test and integration schemes through planning of the environment, resources, and scenarios.

1.2 Test Scope

The test scope focuses on the new functions developed according to client's customization requirements as well as the overall MVM system functions by integrating those customized functions together.

1.3 Test Goal

The ultimate goal of the testing is to establish the confidence of product quality by meeting the following purpose:

- Satisfy the customer's requirement
- Find the defects
- Remove the integration conflict

Section 2 Personnel and Responsibility

2.1 Testing Schedule

- Date
 - 2022/11/11 ~ 11/25 Component Integration & Testing
 - 2022/11/26 ~ 12/2 System Integration & Testing
 - 2022/12/6 & 12/13 Final Presentation
- Product
 - Multifunctional Verbatim Management System
- Milestone (Formal Review)
 - Test Readiness Review: 2022/11/18
 - Delivery Review: 2022/11/25

2.2 Personnel and Responsibility

Test Activity	Responsibilities
Test Plan Development	All
Unit Testing	All
Interface Testing	All
Functional Testing	All
Environment and Testing Tools Design	All
Testing Report	All

Section 3 Testing Environment

3.1 Hardware Specification and Configuration

- Server
 - Intel Pentium III 2.0 GHZ or higher recommended
 - 1G RAM minimum; 2 G RAM recommended
- Clients
 - Intel Pentium III 1.0 GHZ or higher
 - SVGA (800x600) display minimum; 1024x768 recommended
 - 512 MB RAM or higher

3.2 Software Specification and Configuration

- Server
 - JRE Version 8 Update 351
 - Apache Tomcat Server 10.1.0
 - MongoDB 6.0
- Clients
 - Chrome 107.0.5304.110

Section 4 Test Cases and Test Report

4.1 Testing Environment

Testing Environment			
Time			
Place			
Tester			
Server Configuration	JRE	JRE Version 8 Update 351	
	Tomcat	Tomcat Apache 10.1.0	
	MongoDB	MongoDB 6.0	
Client Configuration	OS	macOS Big Sur 11.5.1	
	Browser	Chrome 107.0.5304.110	

4.2 Test Case

Function 1: User Authentication

Test ID	Scenario / Condition			Data		Expected Result	Notes	Pass / Failed	Test Comments
	Name	Starting	Alternate	Username	Password				
1.1	User Registration (UC-SYS-001)					User successfully registered an account.			
1.1.1	Scenario 1 - Successful Registration	Basic Flow		Valid	Valid	Prompt a dialog to inform the user about the success of the register and return the user to the login page.			
1.1.2	Scenario 2 - Invalid Username	Basic Flow	4a	Invalid	N/A	The system displays appropriate messages below the username column and labels it red for users to correct the form.			
1.1.3	Scenario 3 - Invalid Password	Basic Flow	4b	N/A	Invalid	The system displays appropriate messages below the password column and labels it red for users to correct the form.			
1.1.4	Scenario 4 - Cancel Registration	Basic Flow	4c	N/A	N/A	The system returns the user to the login page and any information entered has been erased.			

Test ID	Scenario / Condition			Data		Expected Result	Notes	Pass / Failed	Test Comments
	Name	Starting	Alternate	Username	Password				
1.2	User Login (UC-SYS-001)					User successfully registered an account.			
1.2.1	Scenario 1 - Successful Login	Basic Flow		Valid	Valid	Prompt a dialog to inform the user about the success of the login and redirect the user to the main page.			
1.2.2	Scenario 2 - Username Not Existing	Basic Flow	2a	Invalid	N/A	The system displays appropriate messages below and marks the two columns red for users to correct the form.			
1.2.3	Scenario 3 - Incorrect Password	Basic Flow	2b	N/A	Invalid	The system displays appropriate messages below and marks the two columns red for users to correct the form.			
1.2.4	Scenario 4 - Go to Registration	Basic Flow	2c	N/A	N/A	The system redirects the user to the register page and any information entered has been erased.			

Function 2: Project Management

Test ID	Scenario / Condition			Data		Expected Result	Notes	Pass / Failed	Test Comments
	Name	Starting	Alternate	Blocks	Download Destination				
2.1	Export Project (UC-PM-001)					The user successfully exports the transcription as a file from the system.			
2.1.1	Scenario 1 - Successful Export	Basic Flow		Valid	Valid	The transcription file is generated and downloaded to the user's device.			
2.1.2	Scenario 2 - No Available Block	Basic Flow	1a	Invalid	N/A	The system prompts an error message that there is no available block to export.			
2.1.3	Scenario 3 - Cancel Export	Basic Flow	2a	N/A	N/A	System returns the user to the main page with no file generated.			

Test ID	Scenario / Condition			Expected Result	Notes	Pass / Failed	Test Comments
	Name	Starting	Alternate				
2.2	Start New Project (UC-PM-002)			The user successfully exports the transcription as a file from the system.			
2.2.1	Scenario 1 - Successful Restart	Basic Flow		All previous data, files and transcription blocks from the account are cleared. The main page is reloaded and initialized.			
2.2.2	Scenario 2 - Cancellation	Basic Flow	2a	The system returns the user back to the main page with no changes.			

Function 3: Block Management & Text Edition

Test ID	Scenario / Condition			Expected Result	Notes	Pass / Failed	Test Comments
	Name	Starting	Exception				
3.1	Block Management (UC-BM-001)				Prepare some pre-established blocks		
3.1.1	Scenario 1 - Add a block	Basic flow		An empty new block being added at the button of the page.			
3.1.2	Scenario 2 - Select a block	Alternate flow 1		The selected block shows being selected.			
3.1.3	Scenario 3 - Delete selected	Alternate flow 1a		The selected blocks are deleted.			
3.1.4	Scenario 4 - Hide selected	Alternate flow 1b		The selected blocks are hidden.			
3.1.5	Scenario 5 - Show selected	Alternate flow 1c		The selected blocks show up.			
3.1.6	Scenario 6 - Merge selected	Alternate flow 1d		The selected blocks are merged into one block at the position of the top-most block selected.			
3.1.7	Scenario 7 - Duplicate selected	Alternate flow 1e		The selected blocks are duplicated at the button of the page.			
3.1.8	Scenario 8 - Select nothing	Alternate flow 1 (one of a~e)	Exception flow 1	Everything remains unchanged.			

Test ID	Scenario / Condition			Expected Result	Notes	Pass / Failed	Test Comments
	Name	Starting	Exception				
3.1.9	Scenario 9 - Toggle hiding	Alternate flow 2		The block holding the button toggles its hiding status.			
3.1.10	Scenario 10 - Delete	Alternate flow 3		The block holding the button is deleted.			
3.1.11	Scenario 11 - Move upward	Alternate flow 4		The block holding the button moves one-block upward.			
3.1.12	Scenario 12 - Move downward	Alternate flow 5		The block holding the button moves one-block downward.			
3.2	Text Edition (UC-BM-002)				Prepare some pre-established blocks, which are not displaying real-time content (transcript & translation)		
3.2.1	Scenario 1 - Enter edition window	Basic flow 1~2		The edition window of the block prompts, filled with the content of the block, and is editable.			
3.2.2	Scenario 2 - Make edition	Basic flow 1~3		The edition made by the user is stored by the edition window.			
3.2.3	Scenario 3 - Save edition	Basic flow 1~4		The edition window closes. The editions made are saved in the system (database).			
3.2.4	Scenario 4 - Discard edition	Basic flow 1~3	Exception flow 1	The edition window closes. Nothing has changed.			

Function 4: Academic Term

Test ID	Scenario / Condition			Data	Expected Result	Notes	Pass / Failed	Test Comments
	Name	Starting	Alternate	Content				
4.1	Generate Academic Terms Search Links (UC-AT-002)				The links of academic terms are created successfully.			
4.1.1	Scenario 1 - success	Basic flow		Valid	The retrieved clickable terms are displayed.			
4.1.2	Scenario 2 - no content	Basic flow	Alternate flow 1	Invalid	There should be no terms displayed.			
4.1.3	Scenario 3 - no term	Basic flow	Alternate flow 2	Valid	There should be no terms displayed.			

Test ID	Scenario / Condition			Data	Expected Result	Notes	Pass / Failed	Test Comments
	Name	Starting	Alternate	Content				
4.2	The user requests to show the academic term description (UC-AT-001)				The description of a certain term is displayed.			
4.2.1	Scenario 1 - success	Basic flow		Valid	The description of the term is displayed below.			
4.2.2	Scenario 2: no search result	Basic flow	Alternate flow 3	Valid	The description should remain empty.			

Test ID	Scenario / Condition			Data	Expected Result	Notes	Pass / Failed	Test Comments
	Name	Starting	Alternate	Content				
4.3	The user requests to hide the academic term description (UC-AT-003)				The description of the term is hidden.			
4.3.1	Scenario 1: success	Basic flow		Valid	The description of the term is hidden.			
4.3.2	Scenario 2: no search result	Basic flow	Alternate flow 2	Valid	The shape of the button should be changed.			

Function 5: Abstract Block

Test ID	Scenario / Condition			Data	Expected Result	Notes	Pass / Failed	Test Comments
	Name	Starting	Alternate	Content				
5.1	The user clicks “Summarize Block” from the tool box (UC-AB-001)				The abstract is generated successfully.			
5.1.1	Scenario 1: success	Basic flow		Valid	The abstract should be displayed in a new block below.			
5.1.2	Scenario 2: no content	Basic flow	Alternate flow 1	Invalid	The user should be notified that there is no content in the block.			

Function 6: Audio Operation

Test ID	Scenario / Condition			Data	Expected Result	Notes	Pass / Failed	Test Comments
	Name	Starting	Alternate	AudioFile				
6.1	Record Sound (UC-AO-001)				The system stores the recorded audio file in the database			
6.1.1	Scenario 1 - Recording Successful	Basic Flow		Valid	Prompt a dialog to inform the user about the success of the file recording and uploading and return to the main page.			
6.1.2	Scenario 2 - Microphone not working	Basic Flow	1a	N/A	The system notifies the user that it cannot open the microphone			
6.1.3	Scenario 3 - Connection aborted	Basic Flow	1b	Valid	The system stops the recording and stores the recording locally, attempting to upload it once the connection is reestablished.			
6.1.4	Scenario 4 - Corrupted File	Basic Flow	1c	Invalid	Notify the user there was an error with the file itself, then return to the main page.			
6.2	Audio File Upload (UC-AO-002)				The system stores the selected file into the database			
6.2.1	Scenario 1 - Audio uploaded successfully	Basic Flow		Valid	The system uploads the selected file into the database and notifies the user the operation was successful			
6.2.2	Scenario 2 - Upload operation canceled	Basic Flow	2a	N/A	System returns to normal state			

Test ID	Scenario / Condition			Data	Expected Result	Notes	Pass / Failed	Test Comments
	Name	Starting	Alternate	AudioFile				
6.2.3	Scenario 3 - File selector cannot be opened	Basic Flow	2b	N/A	The system notifies the user it was unable to open the file selector			
6.2.4	Scenario 4 - Upload File Error	Basic Flow	2c	Invalid	System notifies the user that the upload was not successful, then returns to the normal state			
6.2.5	Scenario 5 - Upload Operation Canceled	Basic Flow	2d	Invalid	System returns to normal state			
6.2.6	Scenario 6 - File Name or Type Error	Basic Flow	2e	N/A	System notifies the user the selected file has an invalid name or invalid type, then returns to normal state			
6.3	Generate Verbatim (UC-AO-003)				The system generates a verbatim and returns the result into a block			
6.3.1	Scenario 1 - Verbatim Generated	Basic Flow		Valid	System notifies the user it was a success and displays the verbatim block			
6.3.2	Scenario 2 - Failure to Generate Verbatim	Basic Flow	3a	N/A	System notifies the user about which step of the process it failed on			

Test ID	Scenario / Condition			Expected Result	Notes	Pass / Failed	Test Comments
	Name	Starting	Alternate				
6.4	Audio Play Back (UC-AP-001)			The user successfully plays an audio file saved on the server.			
6.4.1	Scenario 1 - Select an Audio File	Basic Flow		The 'Play' and the 'Pause' will show on the list.			
6.4.2	Scenario 2 - Choose a 'Play'	Basic Flow		The audio file plays according to the current time cursor.			
6.4.3	Scenario 3 - Choose a 'Pause'		Alternate Flow 1	The playing audio stops.			
6.5	Audio Download(UC-AD-001)			The user successfully downloads an audio file saved on the server to the local device.			
6.5.1	Scenario 1 - Select an Audio File	Basic Flow 1		The 'Download' will show on the list.			
6.5.2	Scenario 2 - Choose a 'Download'	Basic Flow 2		The audio file will save on the user's local device.			

Function 7: Translated Block

Test ID	Scenario / Condition			Expected Result	Notes	Pass / Failed	Test Comments
	Name	Starting	Alternate				
7.1	Add an Translated Block (UC-TR-001)			The user successfully downloads an audio file saved on the server to the local device.			
7.1.1	Scenario 1 - Select a block	Basic Flow 1		The selected block shows being selected.			
7.1.2	Scenario 2 - Choose a 'Download'	Basic Flow 2		The translated block (Default : English) will append under the selected block			
7.1.3	Scenario 3 - Choose 'Other Languages' from the tool box		Alternate flow 1	The system will translate by the assigned language.			