



SECP3204: Software Engineering WBL

## **System Test Descriptions (STD)**

MengajiOnetoOne Salary Management System

Version 4.0

17/07/2022

School of Computing, Faculty of Engineering

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## Revision Page

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### a. Overview

In this version of system description, we have completed the System Test Description (STD) section. This section will list out every test case needed and also the Test Approach we will take to test our system. For every test case, we have outlined the detailed steps and the expected results. While for the test approach analysis section, we will explain how we conduct the test using equivalence partitioning (EP) and boundary value analysis (BVA).

### b. Target Audience

The targeted audience of this system description are the developers, lecturers of UTM 2u2i Program and also the CEO of Mengaji One to One Program. They will use this system description to understand how the system testing is conducted (how to conduct the system testing) and the testing outcome.

### c. Project Team Members

Team Member	Task	Status
Lee Sze Yuan	TC003 Test Cases & TC004 Test Cases	Completed
Mohamad Amin Hazeeq Bin Hisham	TC001 Test Cases	Completed
Khor Yong Xin	TC005 Test Cases	Completed
Nalini Vijayan	TC002 Test Cases	Completed

### d. Version Control History

Version	Primary Author(s)	Description of Version	Date Completed
Version 1.0	Sze Yuan	Completed the solution proposal and produced Use Case Diagram (PR1.0)	31/05/2022
Version 2.0	Hazeeq	Completed the SRS - Software Requirement Description (PR2.0)	09/06/2022

Version 3.0	Yong Xin	Completed the SDD - Software Design Description (PR3.0)  Improved the SRS with latest Use Case Diagram	07/07/2022
Version 4.0	Nalini	Completed the STD - Software Test Description (PR4.0)	17/07/2022

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## 8. Test Cases

### 8.1 TC001: Test <User Management> Subsystem: <Manage User (UC001)>

This test contains the following test cases:

- (a) TC001\_01: Test <Create User (SD001)>
- (b) TC001\_02: Test <Edit User Profile (SD002)>
- (c) TC001\_03: Test <Delete User (SD003)>
- (d) TC001\_04: Test <View User (SD004)>

#### 8.1.1 TC001\_01: Test <Create User (SD001)>

Test Case ID	TC001_01	Test Case Description	Test the functionality of create user for both teachers and students		
Created By	Mohamad Amin Hazeq Bin Hisham	Reviewed By	Sze Yuan	Version	1.0
QA Tester's Log	None				
Tester's Name	Sze Yuan	Date Tested	01/07/2022	Test Case (Pass/Fail/Not)	Pass
S#	Prerequisites:	S#	Test Data		
1	Access to Internet Browser	1	username = Admin		
2	Login to MengajiOnetoOne System	2	password = qwel23		
		3	username = hazeq		
		4	email = astonmartin4800@gmail.com		
		5	firstname = hazeq		
		6	lastname = hisham		
		7	contact = 0101234567		
		8	age = 22		
		9	address = No.1,Taman Universiti		
		10	usertype = Student		
Test Scenario	Verify on creating user for both teachers and students.				
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not Executed / Suspended	
1	Click on User Management Tab	Displayed the dropdown for teachers and students.			
2	Select "Teacher" or "Student"	Redirects to the list of users for "teachers" or "students" page.			
3	Click on the "Create New" button	Redirect to the create users form			
4	Fill in the form for the users details	A create form page is filled with correct value.			
5	Click on 'Create' button .	The user is created for the particular user type (teachers/students).			

#### 8.1.2 TC001\_02: Test <Edit User Profile (SD002)>

Test Case ID	TC001_02	Test Case Description	Test the functionality of edit user for both teachers and students		
Created By	Mohamad Amin Hazeeq Bin Hisham	Reviewed By	Sze Yuan	Version	1.0
QA Tester's Log	None				
Tester's Name	Sze Yuan	Date Tested	01/07/2022	Test Case (Pass/Fail/Not)	Pass
S#	Prerequisites:	S#	Test Data		
1	Access to Internet Browser	1	username = Admin		
2	Login to MengajiOnetoOne System	2	password = qwel23		
		3	username = haziq		
		4	email = astonmartin4800@gmail.com		
		5	firstname = haziq		
		6	lastname = hisham		
		7	contact = 0101234567		
		8	age = 22		
		9	address = No 1, Taman Universiti		
		10	usertype = Student		
Test Scenario	Verify on editing user for both teachers and students.				
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not Executed / Suspended	
1	Click on User Management Tab	Displayed the dropdown for teachers and students.			
2	Select "Teacher" or "Student"	Redirects to the list of users for "teachers" or "students" page.			
3	Click on the "Edit" button for a user from the list	Redirect to the edit particular user form			
4	Update the form for the users details	An edit form page is filled with correct value.			
5	Click on 'Save' button	The edited details is saved			

### 8.1.3 TC001\_03: Test <Delete User (SD003)>

Test Case ID		TC001_03	Test Case Description		Test the functionality of delete user for both teachers and students		
Created By		Mohamad Amin Hazeq Bin Hisham	Reviewed By		Sze Yuan	Version	1.0
QA Tester's Log		None					
Tester's Name		Sze Yuan	Date Tested		01/07/2022	Test Case (Pass/Fail/Not)	Pass
S#		Prerequisites:		S#		Test Data	
1		Access to Internet Browser		1		username = Admin	
2		Login to MengajiOnetoOne System		2		password = qwel23	
3				3		studentId = S2 (Nalini)	
4							
5							
Test Scenario		Verify on deleting user for both teachers and students					
Step #		Step Details		Expected Results		Actual Results	
1		Click on User Management Tab		Displayed the dropdown for teachers and students.			
2		Select "Teacher" or "Student"		Redirects to the list of users for "teachers" or "students" page.			
3		Input the name if want to filter the user		Displayed the relevant user from the search filter			
4		Click on 'Delete' button on a selected user.		The reconfirmation message is popped up.			
5		Click on 'Ok' button.		The user is deleted.			

### 8.1.4 TC001\_04: Test <View User (SD004)>

Test Case ID		TC001_04	Test Case Description		Test the functionality of view detail of user for both teachers and students		
Created By		Mohamad Amin Hazeq Bin Hisham	Reviewed By		Sze Yuan	Version	1.0
QA Tester's Log		None					
Tester's Name		Sze Yuan	Date Tested		01/07/2022	Test Case (Pass/Fail/Not)	Pass
S#	Prerequisites:		S#	Test Data			
1	Access to Internet Browser		1	username = Admin			
2	Login to MengajiOnetoOne System		2	password = qwe123			
3			3	userId = T2 (Xin)			
4			4				
Test Scenario		Verify on read user for both teachers and students.					
Step #	Step Details		Expected Results		Actual Results		Pass / Fail / Not Executed / Suspended
1	Click on User Management Tab		Displayed the dropdown for teachers and students.				
2	Select "Teacher" or "Student"		Redirects to the list of users for "teachers" or "students" page.				
3	Input the name if want to filter the user		Displayed the relevant user from the search filter				
4	Click on the "Details" button for a user from the list		Redirect to the view particular user detail (Xin)				

## 8.2 TC002: Test <Tutoring Management> Subsystem: <Manage Teacher-Student Pairing (UC002)>

This test contains the following test cases:

- (e) TC002\_01: Test <Create Teacher-Student Pairing (SD005)>
- (f) TC002\_02: Test <Delete Teacher-Student Pairing (SD006)>
- (g) TC002\_03: Test <Read Teacher-Student Pairing (SD007)>

### 8.2.1 TC002\_01: Test <Create Teacher-Student Pairing (SD005)>

Test Case ID	TC002_01	Test Case Description	Test the functionality of create teacher-student pairing			
Created By	Sze Yuan	Reviewed By	Yong Xin	Version	1.0	
QA Tester's Log	None					
Tester's Name	Sze Yuan	Date Tested	01/07/2022	Test Case (Pass/Fail/Not)	Pass	
S#	Prerequisites:		S#	Test Data		
1	Access to Internet Browser		1	userId = admin		
2	Login to MengajiOnetoOne System		2	password = qwe123		
3			3	studentId = S001 (Hazeeq)		
4			4	teacherId = T003 (Sze Yuan)		
Test Scenario	Verify on assigning student to a teacher					
Step #	Step Details	Expected Results	Actual Results		Pass / Fail / Not Executed / Suspended	
1	Click on Teacher-Student Pairing Tab	List of Teachers will be shown				
2	Click on Teacher 'Sze Yuan'	List of student under this teacher will be shown				
3	Click on 'Add Student' button	Add Student Form page will be shown				
4	Choose Teacher from the dropdown	dropdown can be used				
5	Choose Student from the dropdown	dropdown can be sued				
6	Click on 'Create' button	New pairing record is saved				

### 8.2.2 TC002\_02: Test <Delete Teacher-Student Pairing (SD006)>

Test Case ID	TC002_02	Test Case Description	Test the functionality of delete teacher-student pairing			
Created By	Sze Yuan	Reviewed By	Yong Xin	Version	1.0	
QA Tester's Log	None					
Tester's Name	Sze Yuan	Date Tested	01/07/2022		Test Case (Pass/Fail/Not)	Pass
S#	Prerequisites:		S#	Test Data		
1	Access to Internet Browser		1	userid = admin		
2	Login to MengajiOnetoOne System		2	password = qwe123		
3			3			
4			4			
Test Scenario	Verify on remove student from teacher					
Step #	Step Details	Expected Results	Actual Results		Pass / Fail / Not Executed / Suspended	
1	Click on Teacher-Student Pairing Tab	List of Teachers will be shown				
2	Click on Teacher 'Sze Yuan'	List of student under this teacher will be shown				
3	Click on the Delete button from a selected student row	A Prompt Message will be shown				
4	Click on "OK"	The selected student will be removed from this teacher				



### 8.2.3 TC002\_03: Test <Read Teacher-Student Pairing (SD007)>

Test Case ID	TC002_03	Test Case Description	Test the functionality of read teacher-student pairing				
Created By	Sze Yuan	Reviewed By	Yong Xin	Version	1.0		
QA Tester's Log	None						
Tester's Name	Sze Yuan	Date Tested	01/07/2022		Test Case (Pass/Fail/Not)	Pass	
S#	Prerequisites:		S#	Test Data			
1	Access to Internet Browser		1	userId = admin			
2	Login to MengajiOnetoOne System		2	password = qwe123			
3			3				
4			4				
Test Scenario	Verify on assigning student to a teacher						
Step #	Step Details	Expected Results	Actual Results		Pass / Fail / Not Executed / Suspended		
1	Click on Teacher-Student Pairing Tab	List of Teachers will be shown					
2	Click on Teacher 'Sze Yuan'	List of student under this teacher will be shown					

### 8.3 TC003: Test <Tutoring Management> Subsystem: <Manage Class (UC003)>

This test contains the following test cases:

- (a) TC003\_01: Test <Create Class Proposal (SD008)>
- (b) TC003\_02: Test <Read Class Detail (SD009)>
- (c) TC003\_03: Test <Respond Class Proposal (SD010)>
- (d) TC003\_04: Test <Clock In, Clock Out (SD011)>
- (e) TC003\_05: Test <Report Class (SD012)>
- (f) TC003\_06: Test <Resolve Class Report (SD013)>
- (g) TC003\_07: Test <Delete Class Records (SD014)>

#### 8.3.1 TC003\_01: Test <Create Class Proposal (SD008)>

Test Case ID	TC003_01	Test Case Description	Test the functionality of create class proposal			
Created By	Sze Yuan	Reviewed By	Yong Xin	Version	1.0	
QA Tester's Log	None					
Tester's Name	Sze Yuan	Date Tested	01/07/2022	Test Case (Pass/Fail/Not)	Pass	
S#	Prerequisites:		S#	Test Data		
1	Access to Internet Browser		1	userId = lee		
2	Login to MengajiOnetoOne System		2	password = qwe123		
3			3	studentId = S001 (Hazeeq)		
4			4	teacherId = T003 (Sze Yuan)		
			5	Detail = "Teach Chapter 1"		
			6	Date = 18/07/2022		
			7	Start Time = 12.00PM		
			8	End Time = 1.00PM		
Test Scenario	Verify on create class proposal for student					
Step #	Step Details	Expected Results	Actual Results		Pass / Fail / Not Executed / Suspended	
1	Click on Proposal Tab	List of Students will be shown				
2	Click on 'Manage Class Proposal' button of the student 'Hazeeq' row	List of class proposals under this student is shown				
3	Click on "Create New Proposal" button	A class proposal form is displayed				
4	Key in the input	Every field can accept input				
5	Click on 'Create' button	New Class Proposal record is saved				

### 8.3.2 TC003\_02: Test <Read Class Detail (SD009)>

Test Case ID	TC003_02	Test Case Description	Test the functionality of read class detail		
Created By	Sze Yuan	Reviewed By	Yong Xin	Version	1.0
QA Tester's Log	None				
Tester's Name	Sze Yuan	Date Tested	01/07/2022	Test Case (Pass/Fail/Not)	Pass
S#	Prerequisites:		S#	Test Data	
1	Access to Internet Browser		1	userId = lee	
2	Login to MengajiOnetoOne System		2	password = qwe123	
3			3	studentId = S001 (Hazeeq)	
4			4		
Test Scenario	Verify on read class detail				
Step #	Step Details	Expected Results	Actual Results		Pass / Fail / Not Executed / Suspended
1	Click on Class Records Tab	List of Students will be shown			
2	Click on 'Manage Class Record' button of the student "Hazeeq" row	List of class records under this student is shown			
3	Click on 'Detail' button of selected class record row	The detail of class record is shown			

### 8.3.3 TC003\_03: Test <Respond Class Proposal (SD010)>

Test Case ID	TC003_03	Test Case Description	Test the functionality of respond class proposal		
Created By	Sze Yuan	Reviewed By	Yong Xin	Version	1.0
QA Tester's Log	None				
Tester's Name	Sze Yuan	Date Tested	01/07/2022	Test Case (Pass/Fail/Not)	Pass
S#	Prerequisites:		S#	Test Data	
1	Access to Internet Browser		1	userId = hazeeq	
2	Login to MengajiOnetoOne System		2	password = qwe123	
3			3		
4			4		
Test Scenario	Verify on respond class proposal				
Step #	Step Details	Expected Results	Actual Results		Pass / Fail / Not Executed / Suspended
1	Click on Class Proposal Tab	List of Class Proposals will be shown			
2	Change the class response status of the selected class proposal row	The class response status can be changed			

### 8.3.4 TC003\_04: Test <Clock In, Clock Out (SD011)>

Test Case ID	TC003_04	Test Case Description	Test the functionality of check in, check out			
Created By	Sze Yuan	Reviewed By	Yong Xin	Version	1.0	
QA Tester's Log	None					
Tester's Name	Sze Yuan	Date Tested	01/07/2022		Test Case (Pass/Fail/Not)	Pass
S#	Prerequisites:		S#	Test Data		
1	Access to Internet Browser		1	userId = hazeeq		
2	Login to MengajiOnetoOne System		2	password = qwe123		
3			3			
4			4			
Test Scenario	Verify on check in, check out functionality					
Step #	Step Details	Expected Results	Actual Results		Pass / Fail / Not Executed / Suspended	
1	Click on Class Today Tab	List of Today Class will be shown				
2	Click the "Check In" button of selectec class row	A user prompt message is displayed				
3	Click on "OK"	The student check in time will be recorded. The 'Check In' button dissappear The 'Check Out' button appear				
4	Click the "Check Out" button of selectec class row	A user prompt message is displayed				
5	Click on "OK"	The student check out time will be recorded. The 'Check Out' button disappear The 'Class Completed' Status appear				

### 8.3.5 TC003\_05: Test <Report Class (SD012)>

Test Case ID	TC003_05	Test Case Description	Test the functionality of Report Class			
Created By	Sze Yuan	Reviewed By	Yong Xin	Version	1.0	
QA Tester's Log	None					
Tester's Name	Sze Yuan	Date Tested	01/07/2022	Test Case (Pass/Fail/Not)	Pass	
S#	Prerequisites:		S#	Test Data		
1	Access to Internet Browser		1	userId = hazeeq		
2	Login to MengajiOnetoOne System		2	password = qwe123		
3			3			
4			4			
Test Scenario	Verify on report class					
Step #	Step Details	Expected Results	Actual Results		Pass / Fail / Not Executed / Suspended	
1	Click on Class Record Tab	List of Past Class Records will be shown				
2	Click the "Report" button of selectec class row	A user prompt message is displayed				
3	Click on "OK"	The class status will change from "Completed" to "Under Investigation"				

### 8.3.6 TC003\_06: Test <Resolve Class Report (SD013)>

Test Case ID		TC003_06	Test Case Description		Test the functionality of Resolve Class Report		
Created By		Size Yuan	Reviewed By		Yong Xin	Version	1.0
QA Tester's Log		None					
Tester's Name		Size Yuan	Date Tested		01/07/2022	Test Case (Pass/Fail/Not)	Pass
S#	Prerequisites:		S#	Test Data			
1	Access to Internet Browser		1	userId = admin			
2	Login to MengajiOnetoOne System		2	password = qwe123			
3			3				
4			4				
Test Scenario		Verify on resolve class report					
Step #	Step Details		Expected Results		Actual Results		Pass / Fail / Not Executed / Suspended
1	Click on Class Report Tab		List of Class Report will be shown				
2	Click the "Mark As Complete" button or "Mark As Incomplete" button		A user prompt message is displayed				
3	Click on "OK"		The class status will change from "Completed" to "Under Investigation" The class report removed from the list				

### 8.3.7 TC003\_07: Test <Delete Class Records (SD014)>

Test Case ID	TC003_07	Test Case Description	Test the functionality of Delete Class Records		
Created By	Sze Yuan	Reviewed By	Yong Xin	Version	1.0
QA Tester's Log	None				
Tester's Name	Sze Yuan	Date Tested	01/07/2022	Test Case (Pass/Fail/Not)	Pass
S#	Prerequisites:	S#	Test Data		
1	Access to Internet Browser	1	userId = admin		
2	Login to MengajiOnetoOne System	2	password = qwe123		
3		3	studentId = S001 (Hazeeq)		
4		4	teacherId = T003 (Sze Yuan)		
Test Scenario	Verify on delete class record				
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not Executed / Suspended	
1	Click on Class History Tab	List of Teachers will be shown			
2	Click on Teacher 'Sze Yuan'	List of student under this teacher will be shown			
3	Click on 'Manage Class Record' button of the student "Hazeeq" row	List of past class records under this student is shown			
4	Click on "Delete" button of the selected class records	A user prompt message is displayed			
5	Click "OK"	The class record is deleted			

## 8.4 TC004: Test <Tutoring Management> Subsystem: <Manage Student Performance Feedback (UC004)>

This test contains the following test cases:

- (a) TC004\_01: Test <Create Student Feedback (SD015)>
- (b) TC004\_02: Test <Update Student Feedback (SD016)>
- (c) TC004\_03: Test <Read Student Feedback (SD017)>
- (d) TC004\_04: Test <Delete Student Feedback (SD018)>
- (e) TC004\_05: Test <Generate Report (SD019)>

### 8.4.1 TC004\_01: Test <Create Student Feedback (SD015)>

Test Case ID	TC004_01	Test Case Description	Test the functionality of create student-feedback		
Created By	Nalini Vijayan	Reviewed By	Sze Yuan	Version	1.0
QA Tester's Log	None				
Tester's Name	Sze Yuan	Date Tested	01/07/2022	Test Case (Pass/Fail/Not)	Pass
S#	Prerequisites:	S#	Test Data		
1	Access to Internet Browser	1	userId = lee		
2	Login to MengajiOnetoOne System	2	password = qwe123		
3		3	studentId = S001 (Hazeeg)		
4		4	teacherId = T003 (Sze Yuan)		
5		5	classId =36		
Test Scenario	Verify on creating feedback for the selected student under the teacher.				
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not Executed / Suspended	
1	Click on Student Feedback Tab	Redirects you the Student Feedback page.			
2	Click on the 'Manage Feedbacks' for the student 'Hazeeg'	Redirects you the completed class records page.			
3	Filter the 'Month' and 'Year'	Enlisting the classes for the selected month and year.			
4	Click on 'Create' button on a selected chapter.	A feedback form is pops out for the chosen class.			
5	Click on 'Create' button .	The feedback is created for the particular student.			

### 8.4.2 TC004\_02: Test <Update Student Feedback (SD016)>

Test Case ID	TC004_02	Test Case Description	Test the functionality of edit student-feedback		
Created By	Nalini Vijayan	Reviewed By	Sze Yuan	Version	1.0
QA Tester's Log	None				
Tester's Name	Sze Yuan	Date Tested	01/07/2022	Test Case (Pass/Fail/Not)	Pass
S#	Prerequisites:	S#	Test Data		
1	Access to Internet Browser	1	userId = lee		
2	Login to MengajiOnetoOne System	2	password = qwe123		
3		3	studentId = S001 (Hazeeg)		
4		4	teacherId = T003 (Sze Yuan)		
5		5	classId=35		
Test Scenario	Verify on editing feedback for the selected student under the teacher.				
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not Executed / Suspended	
1	Click on Student Feedback Tab.	Redirects you the Student Feedback page.			
2	Click on the 'Manage Feedbacks' for the student 'Hazeeg'.	Redirects you the completed class records page.			
3	Filter the 'Month' and 'Year'.	Enlisting the classes for the selected month and year.			
4	Click on 'Edit' button on a selected chapter.	The edit feedback form is created for the chosen class.			
5	Click on 'Save' button.	The edited details is saved.			

### 8.4.3 TC004\_03: Test <Read Student Feedback (SD017)>

Test Case ID		TC004_03	Test Case Description		Test the functionality of detail student-feedback.	
Created By		Nalini Vijayan	Reviewed By		Sze Yuan	Version1.0
QA Tester's Log		None				
Tester's Name		Sze Yuan	Date Tested		01/07/2022	Test Case (Pass/Fail/Not)Pass
S#	Prerequisites:		S#	Test Data		
1	Access to Internet Browser		1	userId = lee		
2	Login to MengajiOnetoOne System		2	password = qwe123		
3			3	studentId = S001 (Hazeeq)		
4			4	teacherId = T003 (Sze Yuan)		
5			5	classId=35		
Test Scenario		Verify on read feedback for the selected student under the teacher.				
Step #	Step Details		Expected Results		Actual Results	
1	Click on Student Feedback Tab.		Redirects you the Student Feedback page.			
2	Click on the 'Manage Feedbacks' for the student 'Hazeeq'.		Redirects you the completed class records page.			
3	Filter the 'Month' and 'Year'.		Enlisting the classes for the selected month and year.			
4	Click on 'Detail' button on a selected chapter.		The feedback details is displayed for the chosen class.			

### 8.4.4 TC004\_04: Test <Delete Student Feedback (SD018)>

Test Case ID		TC004_04	Test Case Description		Test the functionality of delete student-feedback.	
Created By		Nalini Vijayan	Reviewed By		Sze Yuan	Version1.0
QA Tester's Log		None				
Tester's Name		Sze Yuan	Date Tested		01/07/2022	Test Case (Pass/Fail/Not)Pass
S#		Prerequisites:		S#		Test Data
1		Access to Internet Browser		1		userId = lee
2		Login to MengajiOnetoOne System		2		password = qwe123
3				3		studentId = S001 (Hazeeq)
4				4		teacherId = T003 (Sze Yuan)
5				5		classId=35
Test Scenario		Verify on deleting feedback for the selected student under the teacher.				
Step #		Step Details		Expected Results		Actual Results
1		Click on Student Feedback Tab.		Redirects you the Student Feedback page.		Pass / Fail / Not Executed / Suspended
2		Click on the 'Manage Feedbacks' for the student 'Hazeeq'.		Redirects you the completed class records page.		
3		Filter the 'Month' and 'Year'.		Enlisting the classes for the selected month and year.		
4		Click on 'Delete' button on a selected chapter.		The reconfirmation message is popped up.		
5		Click on 'Ok' button.		The feedback is deleted.		

## 8.4.5 TC004\_05: Test <Generate Report (SD019)>

Test Case ID	TC004_05	Test Case Description	Test the functionality of generating student-feedback report.			
Created By	Nalini Vijayan	Reviewed By	Sze Yuan	Version	1.0	
QA Tester's Log	None					
Tester's Name	Sze Yuan	Date Tested	01/07/2022		Test Case (Pass/Fail/Not)	Pass
S#	Prerequisites:		S#	Test Data		
1	Access to Internet Browser		1	userId = lee		
2	Login to MengajiOnetoOne System		2	password = qwe123		
3			3	studentId = S001 (Hazeeq)		
4			4	teacherId = T003 (Sze Yuan)		
5			5	classId=35		
Test Scenario	Verify on generating student feedback report.					
Step #	Step Details	Expected Results	Actual Results		Pass / Fail / Not Executed / Suspended	
1	Click on Student Feedback Tab.	Redirects you the Student Feedback page.				
2	Click on the 'Manage Feedbacks' for the student 'Hazeeq'.	Redirects you the completed class records page.				
3	Filter the 'Month' and 'Year' under report segment.	Enlisting the classes for the selected month and year.				
4	Click on 'Generate Report' button on a selected chapter.	The report for the selected month is displayed.				
5	Click on 'Print' button.	The report is printed in pdf form.				



## 8.5 TC005: Test <Salary Management Subsystem> Subsystem: <Manage Salary (UC005)>

This test contains the following test cases:

(a) TC005\_01: Test <Salary Rate Adjustment (SD020)>

### 8.5.1 TC005\_01: Test <Salary Rate Adjustment (SD020)>

Test Case ID	TC005_01	Test Case Description	Test the functionality of salary rate adjustment				
Created By	Yong Xin	Reviewed By	Sze Yuan	Version		1.0	
QA Tester's Log	None						
Tester's Name	Yong Xin	Date Tested	01/07/2022	Test Case (Pass/Fail/Not)		Pass	
S#	Prerequisites:		S#	Test Data			
1	Access to Internet Browser		1	Salary rate = 20			
2	Login to MengajiOnetoOne System		2				
3			3				
4			4				
Test Scenario	Verify on adjusting salary rate						
Step #	Step Details	Expected Results	Actual Results		Pass / Fail / Not Executed / Suspended		
1	Click on Salary Payment tab	List of salary of respective month will be shown					
2	Click on Adjust Salary Rate button	Adjust Salary Rate interface will be shown					
3	Key in the input	The field can accept the input					
4	Click on Update button	New salary rate is updated					
5							
6							

## 9. Test Approach Analysis

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The test approach includes the use of Black Box Testing to test our system. Black Box Testing is a strategy which lets us focus on the testing of system functionalities. The testing can be conducted without the internal knowledge of the system. In other words, we will only focus on the output we get from a set of input we used, and we won't be spending too much time testing the internal mechanism of our system.

For this system, to be more precise, we used a combination of Equivalence Partitioning (EP) and Boundary Value Analysis (BVA). First, EP is to help us keep the number of test cases we need to conduct to a minimum. This is because for every test case, EP will classify the input value needed into "Valid" and "Invalid" classes only. The concept behind this is that if a value in one class results in a certain error, then other values of the class would also likely cause the same error. And we can save time by reducing the number of input values we use for testing.

On top of EP, we have BVA to complement it. BVA let us only conduct test cases that used boundary input values. The reason being is because every system tends to have errors to occur when it uses boundary input value. Therefore, boundary input value can help us to discover the weakness of our system fast.

From here, we can see that Black Box Testing has a few strong advantages. The first obvious one is that our tester doesn't need any internal knowledge in order to conduct the test. Therefore, we can let our client be the tester as they are the one who knows what they want and need. Besides, the test cases are easily reproducible. And every test case is designed in a way to explore every potential weakness/error a system has.

## 9.1 TC001: Test <User Management> Subsystem: <Manage User (UC001)>

### 9.1.1 TC001\_01: Test <Create User (SD001)>

- **Range Value**

Test Case ID	Step#	Input data	Invalid	Valid	Invalid
TC001_01	4	Username	<i>less than 2 characters</i>	nalini	<i>More than 50 Characters</i>
TC001_01	4	Email	<i>less than 2 characters &amp; not valid email format</i>	nalini@gmail.com	<i>More than 50 Characters &amp; not valid email format</i>
TC001_01	4	Firstname	<i>less than 2 characters</i>	nalini	<i>More than 50 Characters</i>
TC001_01	4	Lastname	<i>less than 2 characters</i>	vijayan	<i>More than 50 Characters</i>

- **Boolean/Set Value**

Test Case ID	Step#	Input data	Valid	Invalid
TC001_01	4	Contact	0103054807	<i>Input is not in numbers</i>
TC001_01	4	Age	22	<i>Input is not in numbers</i>
TC001_01	4	User Type	{Teacher, Student}	<i>Options Provided in the dropdown</i>

### 9.1.2 TC001\_02: Test <Edit User Profile (SD002)>

- **Range Value**

Test Case ID	Step#	Input data	Invalid	Valid	Invalid
TC001_02	4	Username	<i>less than 2 characters</i>	nalini	<i>More than 50 Characters</i>
TC001_02	4	Email	<i>less than 2 characters &amp; not valid email format</i>	nalini@gmail.com	<i>More than 50 Characters &amp; not valid email format</i>
TC001_02	4	Firstname	<i>less than 2 characters</i>	nalini	<i>More than 50 Characters</i>
TC001_02	4	Lastname	<i>less than 2 characters</i>	vijayan	<i>More than 50 Characters</i>

- **Boolean/Set Value**

Test Case ID	Step#	Input data	Valid	Invalid
TC001_02	4	Contact	0103054807	<i>Input is not in numbers</i>
TC001_02	4	Age	22	<i>Input is not in numbers</i>
TC001_02	4	User Type	{Teacher, Student}	<i>Options Provided in the dropdown</i>

*9.1.3 TC001\_03: Test <Delete User (SD003)>*

*NO INPUT DATA*

*9.1.4 TC001\_04: Test <View User (SD004)>*

*NO INPUT DATA*

## 9.2 TC002: Test <Tutoring Management> Subsystem: <Manage Teacher-Student Pairing (UC002)>

### 9.2.1 TC002\_01: Test <Create Teacher-Student Pairing (SD005)>

- **Range Value**

*NO INPUT DATA*

- **Boolean/Set Value**

Test Case ID	Step#	Input data	Valid	Invalid
TC002_01	4	Teacher ID	{List of Teachers provided in the dropdown}	{Teacher that is not inside the dropdown}
TC002_01	5	Student ID	{List of Students provided in the dropdown}	{Teacher that is not inside the dropdown}

### 9.2.2 TC002\_02: Test <Delete Teacher-Student Pairing (SD006)>

*NO INPUT DATA*

### 9.2.3 TC002\_03: Test <Read Teacher-Student Pairing (SD007)>

*NO INPUT DATA*

### 9.3 TC003: Test <Tutoring Management> Subsystem: <Manage Class (UC003)>

#### 9.3.1 TC003\_01: Test <Create Class Proposal (SD008)>

- **Range Value**

Test Case ID	Step#	Input data	Invalid	Valid	Invalid
TC003_01	2	Date		Date that is 3 days	
TC003_01	2	Start Time	-1:00 AM	0:00 AM - 11:59 PM	25:00 PM
TC003_01	2	End Time	<i>Smaller Than Start Time</i>	<i>Bigger than Start Time</i>	25:00 PM

- **Boolean/Set Value**

Test Case ID	Step#	Input data	Valid	Invalid
TC003_03	2	Detail	{Pending, Yes, No}	<i>Options Not Provided in the dropdown</i>

#### 9.3.2 TC003\_02: Test <Read Class Detail (SD009)>

NO INPUT DATA

#### 9.3.3 TC003\_03: Test <Respond Class Proposal (SD010)>

- **Range Value**

NO INPUT DATA

- **Boolean/Set Value**

Test Case ID	Step#	Input data	Valid	Invalid
TC003_03	2	Class Response Status	{Pending, Yes, No}	<i>Options Not Provided in the dropdown</i>

9.3.4 TC003\_04: Test <Clock In, Clock Out (SD011)>

NO INPUT DATA

9.3.5 TC003\_05: Test <Report Class (SD012)>

NO INPUT DATA

9.3.6 TC003\_06: Test <Resolve Class Report (SD013)>

- **Range Value**

NO INPUT DATA

- **Boolean/Set Value**

Test Case ID	Step#	Input data	Valid	Invalid
TC003_06	2	Report Status	{'Mark as Complete', 'Mark as Incomplete'}	<i>Options Not Provided in the dropdown</i>

9.3.7 TC003\_07: Test <Delete Class Records (SD014)>

NO INPUT DATA



#### 9.4 TC004: Test <Tutoring Management> Subsystem: <Manage Student Performance Feedback (UC004)>

##### 9.4.1 TC004\_01: Test <Create Student Feedback (SD015)>

- **Range Value**

Test Case ID	Step#	Input data	Invalid	Valid	Invalid
TC004_01	2	Date	Date that has year smaller than 2000	Any Valid Date	Date bigger than current date

- **Boolean/Set Value**

Test Case ID	Step#	Input data	Valid	Invalid
TC004_01	2	Detail	Any string with more than 2 characters	No Value Input

##### 9.4.2 TC004\_02: Test <Update Student Feedback (SD016)>

- **Range Value**

Test Case ID	Step#	Input data	Invalid	Valid	Invalid
TC004_02	2	Date	Date that has year smaller than 2000	Any Valid Date	Date bigger than current date

- **Boolean/Set Value**

Test Case ID	Step#	Input data	Valid	Invalid
TC004_02	2	Detail	Any string with more than 2 characters	No Value Input

##### 9.4.3 TC004\_03: Test <Read Student Feedback (SD017)>

NO INPUT DATA

#### 9.4.4 TC004\_04: Test <Delete Student Feedback (SD018)>

NO INPUT DATA

#### 9.4.5 TC004\_05: Test <Generate Report (SD019)>

- **Range Value**

Test Case ID	Step#	Input data	Invalid	Valid	Invalid
TC004_05	4	Year	1999	2000 <= Year <= 3000	3001

- **Boolean/Set Value**

Test Case ID	Step#	Input data	Valid	Invalid
TC004_05	4	Month	{1,2,3,4,5,6,7,8,9,10,11,12}	{Month that is not inside the dropdown}

**9.5 TC005: Test <Salary Management Subsystem> Subsystem: <Manage Salary (UC005)>**

**9.5.1 TC005\_01: Test <Salary Rate Adjustment (SD020)>**

- ***Range Value***

Test Case ID	Step#	Input data	Invalid	Valid	Invalid
TC005_01	3	Salary Rate	-1.00	0.00 < Salary Rate <= 200.00	210.00

- ***Boolean/Set Value***

*NO INPUT DATA*

## Appendix A: Traceability Matrix

Test Case ID	Use Case ID/ Sequence Diagram ID	Package ID
TC001 for <User Management> Subsystem <ul style="list-style-type: none"> <li>• TC001_01</li> <li>• TC001_02</li> <li>• TC001_03</li> <li>• TC001_04</li> </ul>	UC001 <ul style="list-style-type: none"> <li>• SD001</li> <li>• SD002</li> <li>• SD003</li> <li>• SD004</li> </ul>	P001
TC002 for <Tutoring Management> Subsystem <ul style="list-style-type: none"> <li>• TC002_01</li> <li>• TC002_02</li> <li>• TC002_03</li> </ul>	UC002 <ul style="list-style-type: none"> <li>• SD005</li> <li>• SD006</li> <li>• SD007</li> </ul>	P002
TC003 for <Tutoring Management> Subsystem <ul style="list-style-type: none"> <li>• TC003_01</li> <li>• TC003_02</li> <li>• TC003_03</li> <li>• TC003_04</li> <li>• TC003_05</li> <li>• TC003_06</li> <li>• TC003_07</li> </ul>	UC003 <ul style="list-style-type: none"> <li>• SD008</li> <li>• SD009</li> <li>• SD010</li> <li>• SD011</li> <li>• SD012</li> <li>• SD013</li> <li>• SD014</li> </ul>	P002
TC004 for <Tutoring Management> Subsystem <ul style="list-style-type: none"> <li>• TC004_01</li> <li>• TC004_02</li> <li>• TC004_03</li> <li>• TC004_04</li> <li>• TC004_05</li> </ul>	UC004 <ul style="list-style-type: none"> <li>• SD015</li> <li>• SD016</li> <li>• SD017</li> <li>• SD018</li> <li>• SD019</li> </ul>	P002
TC005 for <Salary Management> Subsystem <ul style="list-style-type: none"> <li>• TC005_01</li> </ul>	UC005 <ul style="list-style-type: none"> <li>• SD020</li> </ul>	P003