

Test Case ID:	1	Test Designed by:	Goh Hong Xiang, Bryan			
Module Name:	Login	Test Executed by:	Chong Jing Hong			
Test Title:	Verify Login Credentials	Test Execution Date:	31/10/2021			
Description	Verify Login Credentials from user input with Login Credentials in Database					
Pre-conditions:	User must already have an existing account					
Dependencies:						
Post-conditions:	The system notifies the user when login is successful or login failure					
Step	Test Step	Test Data	Expected Results	Actual Results	Status	Notes
1	Start the game	-	Login menu form appears	As expected	Pass	
2	Provide email	correct_email@e.ntu.edu.sg		As expected	Pass	
3	Provide password	correct_password		As expected	Pass	
4	Click login button		Direct user to main game	As expected	Pass	Login credentials is correct and within the database
Alternate Flows:						
1	Start the game	-	Login menu form appears	As expected	Pass	
2	Provide email	correct_email@e.ntu.edu.sg	-	As expected	Pass	
3	Provide password	wrong_password		As expected	Pass	
4	Click login button		"Invalid email/password"	As expected	Pass	Login credentials is wrong since password not in database
1	Start the game	-	Login menu form appears	As expected	Pass	
2	Provide email	wrong_email@e.ntu.edu.sg	-	As expected	Pass	
3	Provide password	correct_password	-	As expected	Pass	
4	Click login button		"Invalid email/password"	As expected	Pass	Login credentials is wrong since email not in database

Test Case ID:	2	Test Designed by:		Goh Hong Xiang, Bryan		
Module Name:	Register	Test Executed by:		Chong Jing Hong		
Test Title:	Register a new user account	Test Execution Date:		31/10/2021		
Description	Create new account					
Pre-conditions:	User must not have an existing account					
Dependencies:						
Post-conditions:	The system notifies the user when register is successful or register failure					
Step	Test Step	Test Data	Expected Results	Actual Results	Status	Notes
1	Start the game	-	Login menu form appears	As expected	Pass	
2	Click on register button	-	Register menu form appears	As expected	Pass	
3	Provide username	valid_username	-	As expected	Pass	
4	Provide email	valid_email@e.ntu.edu.sg	-	As expected	Pass	
5	Provide student ID	valid_studentID	-	As expected	Pass	
6	Provide password	Valid_password123!	-	As expected	Pass	
7	Provide password again	Valid_password123!	-	As expected	Pass	
8	Provide account type	student	-	As expected	Pass	
9	Click create button	-	Direct user to login menu	As expected	Pass	Username, email, student ID, password and account type are all valid, password and password again matches
Alternate Flows:						
1	Start the game	-	Login menu form appears	As expected	Pass	
2	Click on register button	-	Register menu form appears	As expected	Pass	
3	Provide username	valid_username	-	As expected	Pass	
4	Provide email	valid_email@e.ntu.edu.sg	-	As expected	Pass	
5	Provide student ID	valid_studentID	-	As expected	Pass	
6	Provide password	Valid_password123!	-	As expected	Pass	
7	Provide password again	Valid_password123!	-	As expected	Pass	
8	Provide account type	student	-	As expected	Pass	
9	Click create button	-	System displays the 'Account Created' message	As expected	Pass	Username, email, student ID, password and account type are all valid, password and password again matches
1	Start the game	-	Login menu form appears	As expected	Pass	
2	Click on register button	-	Register menu form appears	As expected	Pass	
3	Provide username	valid_username	-	As expected	Pass	
4	Provide email	registered_email@e.ntu.edu.sg	-	As expected	Pass	
5	Provide student ID	valid_studentID	-	As expected	Pass	
6	Provide password	Valid_password123!	-	As expected	Pass	
7	Provide password again	Valid_password123!	-	As expected	Pass	
8	Provide account type	student	-	As expected	Pass	
9	Click create button	-	System displays an "Invalid email or email already in use" message.	As expected	Pass	Email is already in use

1	Start the game	-	Login menu form appears	As expected	Pass	
2	Click on register button	-	Register menu form appears	As expected	Pass	
3	Provide username	valid_username	-	As expected	Pass	
4	Provide email	invalid_email	-	As expected	Pass	
5	Provide student ID	valid_studentID	-	As expected	Pass	
6	Provide password	Valid_password123!	-	As expected	Pass	
7	Provide password again	Valid_password123!	-	As expected	Pass	
8	Provide account type	student	-	As expected	Pass	
9	Click create button	-	System displays an "Invalid email or email already in use" message.	As expected	Pass	Invalid email
1	Start the game	-	Login menu form appears	As expected	Pass	
2	Click on register button	-	Register menu form appears	As expected	Pass	
3	Provide username	valid_username	-	As expected	Pass	
4	Provide email	valid_email@e.ntu.edu.sg	-	As expected	Pass	
5	Provide student ID	valid_studentID	-	As expected	Pass	
6	Provide password	invalid_password	-	As expected	Pass	
7	Provide password again	invalid_password	-	As expected	Pass	
8	Provide account type	student	-	As expected	Pass	
9	Click create button	-	System displays "Passwords must be at least 12 characters long, and have at least 1 uppercase letter, 1 lowercase letter, 1 number and 1 special character" message.	As expected	Pass	Invalid password as passwords must be at least 12 characters long, and have at least 1 uppercase letter, 1 lowercase letter, 1 number and 1 special character
1	Start the game	-	Login menu form appears	As expected	Pass	
2	Click on register button	-	Register menu form appears	As expected	Pass	
3	Provide username	valid_username	-	As expected	Pass	
4	Provide email	valid_email@e.ntu.edu.sg	-	As expected	Pass	
5	Provide student ID	valid_studentID	-	As expected	Pass	
6	Provide password	Valid_password123!	-	As expected	Pass	
7	Provide password again	Another_valid_password123!	-	As expected	Pass	
8	Provide account type	student	-	As expected	Pass	
9	Click create button	-	System displays a "Passwords do not match" message.	As expected	Pass	Passwords do not match
1	Start the game	-	Login menu form appears	As expected	Pass	
2	Click on register button	-	Register menu form appears	As expected	Pass	
3	Provide username	valid_username	-	As expected	Pass	
4	Provide email	valid_email@e.ntu.edu.sg	-	As expected	Pass	
5	Provide password	Valid_password123!	-	As expected	Pass	
6	Provide password again	Valid_password123!	-	As expected	Pass	

7	Provide account type	Teacher	-	As expected	Pass	
8	Click create button	-	System displays the 'Account Created' message	As expected	Pass	Username, email, student ID, password and account type are all valid, password and password again matches
1	Start the game	-	Login menu form appears	As expected	Pass	
2	Click on register button	-	Register menu form appears	As expected	Pass	
3	Provide username	valid_username	-	As expected	Pass	
4	Provide email	registered_email@e.ntu.edu.sg	-	As expected	Pass	
5	Provide password	Valid_password123!	-	As expected	Pass	
6	Provide password again	Valid_password123!	-	As expected	Pass	
7	Provide account type	Teacher	-	As expected	Pass	
8	Click create button	-	System displays an "Invalid email or email already in use" message.	As expected	Pass	Email is already in use
1	Start the game	-	Login menu form appears	As expected	Pass	
2	Click on register button	-	Register menu form appears	As expected	Pass	
3	Provide username	valid_username	-	As expected	Pass	
4	Provide email	invalid_email	-	As expected	Pass	
5	Provide password	Valid_password123!	-	As expected	Pass	
6	Provide password again	Valid_password123!	-	As expected	Pass	
7	Provide account type	Teacher	-	As expected	Pass	
8	Click create button	-	System displays an "Invalid email or email already in use" message.	As expected	Pass	Invalid email
1	Start the game	-	Login menu form appears	As expected	Pass	
2	Click on register button	-	Register menu form appears	As expected	Pass	
3	Provide username	valid_username	-	As expected	Pass	
4	Provide email	valid_email@e.ntu.edu.sg	-	As expected	Pass	
5	Provide password	invalid_password	-	As expected	Pass	
6	Provide password again	invalid_password	-	As expected	Pass	
7	Provide account type	Teacher	-	As expected	Pass	
8	Click create button	-	System displays "Passwords must be at least 12 characters long, and have at least 1 uppercase letter, 1 lowercase letter, 1 number and 1 special character" message.	As expected	Pass	Invalid password as passwords must be at least 12 characters long, and have at least 1 uppercase letter, 1 lowercase letter, 1 number and 1 special character
1	Start the game	-	Login menu form appears	As expected	Pass	
2	Click on register button	-	Register menu form appears	As expected	Pass	
3	Provide username	valid_username	-	As expected	Pass	
4	Provide email	valid_email@e.ntu.edu.sg	-	As expected	Pass	
5	Provide password	Valid_password123!	-	As expected	Pass	

6	Provide password again	Another_valid_password123!	-	As expected	Pass	
7	Provide account type	Teacher	-	As expected	Pass	
8	Click create button	-	System displays a "Passwords do not match" message.	As expected	Pass	Passwords do not match

Test Case ID:	3	Test Designed by:	Goh Hong Xiang, Bryan			
Module Name:	Controls	Test Executed by:	Chong Jing Hong			
Test Title:	Gameplay controls and flows	Test Execution Date:	31/10/2021			
Description	Gameplay controls and flows					
Pre-conditions:	Users must have an existing account and are already logged in					
Dependencies:						
Post-conditions:	Character moves					
Step	Test Step	Test Data	Expected Results	Actual Results	Status	Notes
1	Press up arrow key / w key		Character moves up	As expected	Pass	
2	Press right arrow / d key		Character moves right	As expected	Pass	
3	Press down arrow / s key		Character moves down	As expected	Pass	
4	Press left arrow / a key		Character moves left	As expected	Pass	
5	Press 'e' key		Character interacts with objects or NPCs	As expected	Pass	
6	Press 'esc' key		Home Page Scene should be loaded	As expected	Pass	

Test Case ID:	4	Test Designed by:	Goh Hong Xiang, Bryan			
Module Name:	World	Test Executed by:	Chong Jing Hong			
Test Title:	Gameplay flows	Test Execution Date:	31/10/2021			
Description	Gameplay flows					
Pre-conditions:	Users must have an existing account and are already logged in					
Dependencies:						
Post-conditions:	Gameplay events					
Step	Test Step	Test Data	Expected Results	Actual Results	Status	Notes
1	Move character to portal		Character is supposed to move to another scene	As expected	Pass	
1	Move character in the grass patches		Random knowledge will appear	As expected	Pass	
1	Move character into solid objects		Character should not phase through solid objects	As expected	Pass	

Test Case ID:	5	Test Designed by:	Goh Hong Xiang, Bryan			
Module Name:	Gym	Test Executed by:	Chong Jing Hong			
Test Title:	Gym battle	Test Execution Date:	31/10/2021			
Description	Interacting with the gym leader NPCs					
Pre-conditions:	User must already entered through the gym portal					
Dependencies:						
Post-conditions:	Users' scores are logged					
Step	Test Step	Test Data	Expected Results	Actual Results	Status	Notes
1	Move the character to the NPC	-	Character is able to reach the NPC	As expected	Pass	
2	Interact with the NPC	Press the 'e' key	Dialog(s) between the player and NPC is shown	As expected	Pass	
3	Challenge the NPC	Press the 'e' key	Player is brought to the question interface and starts solving the questions	As expected	Pass	

Test Case ID:	6	Test Designed by:	Goh Hong Xiang, Bryan			
Module Name:	Questions	Test Executed by:	Chong Jing Hong			
Test Title:	Questionnaire	Test Execution Date:	31/10/2021			
Description	Answering quiz questions					
Pre-conditions:	Users should already be logged in, users should have already interacted with the NPC					
Dependencies:						
Post-conditions:	The system notifies the user on their score					
Step	Test Step	Test Data	Expected Results	Actual Results	Status	Notes
Repeat for n questions						
1	User is shown the question	-	Question and options displayed	As expected	Pass	
2	User selects an answer for question	-	Answer is highlighted and 'submit' button will appear	As expected	Pass	
3	User confirms selection by clicking on 'submit' button	-	Next question will be displayed	As expected	Pass	
Alternative Flows						
1	User shown question	-	Question and options displayed	As expected	Pass	
2	User selects an answer for question	-	Answer is highlighted and 'submit' button will appear	As expected	Pass	
3	User confirms selection	-	Results of quiz shown	As expected	Pass	
4	User selects 'Done'	-	User returns back to Gym scene	As expected	Pass	

Test Case ID:		7	Test Designed by:		Goh Hong Xiang, Bryan	
Module Name:		Create Assignment	Test Executed by:		Chong Jing Hong	
Test Title:		Create Assignment	Test Execution Date:		31/10/2021	
Description		Create new assignments for students to complete				
Pre-conditions:		User must be a teacher and has already been logged in				
Dependencies:						
Post-conditions:		The system notifies the teacher that assignment is successfully created				
Step	Test Step	Test Data	Expected Results	Actual Results	Status	Notes
1	Click on 'Set Assignment' button	-	Set Assignment UI displayed	As expected	Pass	
2	Input the number of question	4	Input displayed in input field	As expected	Pass	
3	Click on the 'create' button	-	Create Questions UI displayed	As expected	Pass	
4	Input the question	"The answer is 1. What is the answer?"	Input displayed in input field	As expected	Pass	
5	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
6	Input option 2	"Answer is 2"	Input displayed in input field	As expected	Pass	
7	Input the correct answer	1	Input displayed in input field	As expected	Pass	
8	Click on the 'done' button	-	User will be shown an interface to input details for next question	As expected	Pass	
9	Input the question	"The answer is 2. What is the answer?"	Input displayed in input field	As expected	Pass	
10	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
11	Input option 2	"Answer is 2"	Input displayed in input field	As expected	Pass	
12	Input the correct answer	2	Input displayed in input field	As expected	Pass	
13	Click on the 'done' button	-	User will be shown an interface to input details for next question	As expected	Pass	
14	Input the question	"The answer is 3. What is the answer?"	Input displayed in input field	As expected	Pass	
15	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
16	Input option 2	"Answer is 3"	Input displayed in input field	As expected	Pass	
17	Input the correct answer	2	Input displayed in input field	As expected	Pass	
18	Click on the 'done' button	-	"Question created" message displays	As expected	Pass	
19	Input the question	"The answer is 4. What is the answer?"	Input displayed in input field	As expected	Pass	
20	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
21	Input option 2	"Answer is 4"	Input displayed in input field	As expected	Pass	
22	Input the correct answer	2	Input displayed in input field	As expected	Pass	
23	Click on 'create question'	-	Set Assignment UI displays	As expected	Pass	
24	Input deadline date	"07/11/2021"	Input displayed in input field	As expected	Pass	
25	Input deadline time	"23:59:59"	Input displayed in input field	As expected	Pass	
26	Click on 'submit'	-	Assignment is created	As expected	Pass	
Alternative Flows						
1	Click on 'Set Assignment' button	-	Set Assignment UI displayed	As expected	Pass	
2	Input the number of question	4	Input displayed in input field	As expected	Pass	
3	Click on the 'create' button	-	Create Questions UI displayed	As expected	Pass	
4	Input the question	"The answer is 1. What is the answer?"	Input displayed in input field	As expected	Pass	
5	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
7	Input the correct answer	1	Input displayed in input field	As expected	Pass	
8	Click on the 'done' button	-	"Question, Option1, Option2 and Answer cannot be empty"	As expected	Pass	
1	Click on 'Set Assignment' button	-	Set Assignment UI displayed	As expected	Pass	
2	Input the number of question	4	Input displayed in input field	As expected	Pass	
3	Click on the 'create' button	-	Create Questions UI displayed	As expected	Pass	
4	Input the question	"The answer is 1. What is the answer?"	Input displayed in input field	As expected	Pass	
5	Input option 2	"Answer is 1"	Input displayed in input field	As expected	Pass	

7	Input the correct answer	1	Input displayed in input field	As expected	Pass	
8	Click on the 'done' button	-	"Question, Option1, Option2 and Answer cannot be empty"	As expected	Pass	
1	Click on 'Set Assignment' button	-	Set Assignment UI displayed	As expected	Pass	
2	Input the number of question	4	Input displayed in input field	As expected	Pass	
3	Click on the 'create' button	-	Create Questions UI displayed	As expected	Pass	
4	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
5	Input option 2	"Answer is 2"	Input displayed in input field	As expected	Pass	
7	Input the correct answer	1	Input displayed in input field	As expected	Pass	
8	Click on the 'done' button	-	"Question, Option1, Option2 and Answer cannot be empty"	As expected	Pass	
1	Click on 'Set Assignment' button	-	Set Assignment UI displayed	As expected	Pass	
2	Input the number of question	4	Input displayed in input field	As expected	Pass	
3	Click on the 'create' button	-	Create Questions UI displayed	As expected	Pass	
4	Input the question	"The answer is 1. What is the answer?"	Input displayed in input field	As expected	Pass	
5	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
7	Input option 2	"Answer is 2"	Input displayed in input field	As expected	Pass	
8	Click on the 'done' button	-	"Question, Option1, Option2 and Answer cannot be empty"	As expected	Pass	
1	Click on 'Set Assignment' button	-	Set Assignment UI displayed	As expected	Pass	
2	Click on the 'create' button	-	System displays an "Number of questions cannot be empty" message.	As expected	Pass	
1	Click on 'Set Assignment' button	-	Set Assignment UI displayed	As expected	Pass	
2	Input the number of question	0	Input displayed in input field	As expected	Pass	
3	Click on the 'create' button	-	System displays an "Invalid number of questions" message.	As expected	Pass	
1	Click on 'Set Assignment' button	-	Set Assignment UI displayed	As expected	Pass	
2	Input the number of question	4	Input displayed in input field	As expected	Pass	
3	Click on the 'create' button	-	Create Questions UI displayed	As expected	Pass	
4	Input the question	"The answer is 1. What is the answer?"	Input displayed in input field	As expected	Pass	
5	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
6	Input option 2	"Answer is 2"	Input displayed in input field	As expected	Pass	
7	Input the correct answer	1	Input displayed in input field	As expected	Pass	
8	Click on the 'done' button	-	User will be shown an interface to input details for next question	As expected	Pass	
9	Input the question	"The answer is 2. What is the answer?"	Input displayed in input field	As expected	Pass	
10	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
11	Input option 2	"Answer is 2"	Input displayed in input field	As expected	Pass	
12	Input the correct answer	2	Input displayed in input field	As expected	Pass	
13	Click on the done button	-	User will be shown an interface to input details for next question	As expected	Pass	
14	Input the question	"The answer is 3. What is the answer?"	Input displayed in input field	As expected	Pass	
15	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
16	Input option 2	"Answer is 3"	Input displayed in input field	As expected	Pass	
17	Input the correct answer	2	Input displayed in input field	As expected	Pass	
18	Click on the 'done' button	-	User will be shown an interface to input details for next question	As expected	Pass	
19	Input the question	"The answer is 4. What is the answer?"	Input displayed in input field	As expected	Pass	
20	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
21	Input option 2	"Answer is 4"	Input displayed in input field	As expected	Pass	
22	Input the correct answer	2	Input displayed in input field	As expected	Pass	
23	Click on 'create question'	-	Set Assignment UI displays	As expected	Pass	
24	Click on 'submit'	-	"Deadline cannot be empty."	As expected	Pass	No deadline date and time entered

1	Click on 'Set Assignment' button	-	Set Assignment UI displayed	As expected	Pass	
2	Input the number of question	4	Input displayed in input field	As expected	Pass	
3	Click on the 'create' button	-	Create Questions UI displayed	As expected	Pass	
4	Input the question	"The answer is 1. What is the answer?"	Input displayed in input field	As expected	Pass	
5	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
6	Input option 2	"Answer is 2"	Input displayed in input field	As expected	Pass	
7	Input the correct answer	1	Input displayed in input field	As expected	Pass	
8	Click on the 'done' button	-	User will be shown an interface to input details for next question	As expected	Pass	
9	Input the question	"The answer is 2. What is the answer?"	Input displayed in input field	As expected	Pass	
10	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
11	Input option 2	"Answer is 2"	Input displayed in input field	As expected	Pass	
12	Input the correct answer	2	Input displayed in input field	As expected	Pass	
13	Click on the done button	-	User will be shown an interface to input details for next question	As expected	Pass	
14	Input the question	"The answer is 3. What is the answer?"	Input displayed in input field	As expected	Pass	
15	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
16	Input option 2	"Answer is 3"	Input displayed in input field	As expected	Pass	
17	Input the correct answer	2	Input displayed in input field	As expected	Pass	
18	Click on the 'done' button	-	User will be shown an interface to input details for next question	As expected	Pass	
19	Input the question	"The answer is 4. What is the answer?"	Input displayed in input field	As expected	Pass	
20	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
21	Input option 2	"Answer is 4"	Input displayed in input field	As expected	Pass	
22	Input the correct answer	2	Input displayed in input field	As expected	Pass	
23	Click on 'create question'	-	Set Assignment UI displays	As expected	Pass	
24	Input deadline time	"23:59:59"	Input displayed in input field	As expected	Pass	
25	Click on 'submit'	-	"Deadline cannot be empty."	As expected	Pass	No deadline date entered
1	Click on 'Set Assignment' button	-	Set Assignment UI displayed	As expected	Pass	
2	Input the number of question	4	Input displayed in input field	As expected	Pass	
3	Click on the 'create' button	-	Create Questions UI displayed	As expected	Pass	
4	Input the question	"The answer is 1. What is the answer?"	Input displayed in input field	As expected	Pass	
5	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
6	Input option 2	"Answer is 2"	Input displayed in input field	As expected	Pass	
7	Input the correct answer	1	Input displayed in input field	As expected	Pass	
8	Click on the 'done' button	-	User will be shown an interface to input details for next question	As expected	Pass	
9	Input the question	"The answer is 2. What is the answer?"	Input displayed in input field	As expected	Pass	
10	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
11	Input option 2	"Answer is 2"	Input displayed in input field	As expected	Pass	
12	Input the correct answer	2	Input displayed in input field	As expected	Pass	
13	Click on the done button	-	User will be shown an interface to input details for next question	As expected	Pass	
14	Input the question	"The answer is 3. What is the answer?"	Input displayed in input field	As expected	Pass	
15	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
16	Input option 2	"Answer is 3"	Input displayed in input field	As expected	Pass	
17	Input the correct answer	2	Input displayed in input field	As expected	Pass	
18	Click on the 'done' button	-	User will be shown an interface to input details for next question	As expected	Pass	
19	Input the question	"The answer is 4. What is the answer?"	Input displayed in input field	As expected	Pass	

20	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
21	Input option 2	"Answer is 4"	Input displayed in input field	As expected	Pass	
22	Input the correct answer	2	Input displayed in input field	As expected	Pass	
23	Click on 'create question'	-	Set Assignment UI displays	As expected	Pass	
24	Input deadline date	"07/11/2021"	Input displayed in input field	As expected	Pass	
25	Click on 'submit'	-	"Deadline cannot be empty."	As expected	Pass	No deadline time entered

1	Click on 'Set Assignment' button	-	Set Assignment UI displayed	As expected	Pass	
2	Input the number of question	4	Input displayed in input field	As expected	Pass	
3	Click on the 'create' button	-	Create Questions UI displayed	As expected	Pass	
4	Input the question	"The answer is 1. What is the answer?"	Input displayed in input field	As expected	Pass	
5	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
6	Input option 2	"Answer is 2"	Input displayed in input field	As expected	Pass	
7	Input the correct answer	1	Input displayed in input field	As expected	Pass	
8	Click on the 'done' button	-	User will be shown an interface to input details for next question	As expected	Pass	
9	Input the question	"The answer is 2. What is the answer?"	Input displayed in input field	As expected	Pass	
10	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
11	Input option 2	"Answer is 2"	Input displayed in input field	As expected	Pass	
12	Input the correct answer	2	Input displayed in input field	As expected	Pass	
13	Click on the 'done' button	-	User will be shown an interface to input details for next question	As expected	Pass	
14	Input the question	"The answer is 3. What is the answer?"	Input displayed in input field	As expected	Pass	
15	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
16	Input option 2	"Answer is 3"	Input displayed in input field	As expected	Pass	
17	Input the correct answer	2	Input displayed in input field	As expected	Pass	
18	Click on the 'done' button	-	User will be shown an interface to input details for next question	As expected	Pass	
19	Input the question	"The answer is 4. What is the answer?"	Input displayed in input field	As expected	Pass	
20	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
21	Input option 2	"Answer is 4"	Input displayed in input field	As expected	Pass	
22	Input the correct answer	2	Input displayed in input field	As expected	Pass	
23	Click on 'create question'	-	Set Assignment UI displays	As expected	Pass	
24	Input deadline date	"30/10/2021"	Input displayed in input field	As expected	Pass	Deadline entered is before present day
25	Input deadline time	"23:59:59"	Input displayed in input field	As expected	Pass	
26	Click on 'submit'	-	"Invalid Deadline"	As expected	Pass	

1	Click on 'Set Assignment' button	-	Set Assignment UI displayed	As expected	Pass	
2	Input the number of question	4	Input displayed in input field	As expected	Pass	
3	Click on the 'create' button	-	Create Questions UI displayed	As expected	Pass	
4	Input the question	"The answer is 1. What is the answer?"	Input displayed in input field	As expected	Pass	
5	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
6	Input option 2	"Answer is 2"	Input displayed in input field	As expected	Pass	
7	Input the correct answer	1	Input displayed in input field	As expected	Pass	
8	Click on the 'done' button	-	User will be shown an interface to input details for next question	As expected	Pass	
9	Input the question	"The answer is 2. What is the answer?"	Input displayed in input field	As expected	Pass	
10	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
11	Input option 2	"Answer is 2"	Input displayed in input field	As expected	Pass	
12	Input the correct answer	2	Input displayed in input field	As expected	Pass	
13	Click on the 'done' button	-	User will be shown an interface to input details for next question	As expected	Pass	
14	Input the question	"The answer is 3. What is the answer?"	Input displayed in input field	As expected	Pass	

15	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
16	Input option 2	"Answer is 3"	Input displayed in input field	As expected	Pass	
17	Input the correct answer	2	Input displayed in input field	As expected	Pass	
18	Click on the 'done' button	-	User will be shown an interface to input details for next question	As expected	Pass	
19	Input the question	"The answer is 4. What is the answer?"	Input displayed in input field	As expected	Pass	
20	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
21	Input option 2	"Answer is 4"	Input displayed in input field	As expected	Pass	
22	Input the correct answer	2	Input displayed in input field	As expected	Pass	
23	Click on 'create question'	-	Set Assignment UI displays	As expected	Pass	
24	Input deadline date	"32/11/2021"	Input displayed in input field	As expected	Pass	No such date
25	Input deadline time	"25:59:59"	Input displayed in input field	As expected	Pass	No such time
26	Click on 'submit'	-	"Unable to parse deadline to DateTime"	As expected	Pass	
1	Click on 'Set Assignment' button	-	Set Assignment UI displayed	As expected	Pass	
2	Input the number of question	4	Input displayed in input field	As expected	Pass	
3	Click on the 'create' button	-	Create Questions UI displayed	As expected	Pass	
4	Input the question	"The answer is 1. What is the answer?"	Input displayed in input field	As expected	Pass	
5	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
6	Input option 2	"Answer is 2"	Input displayed in input field	As expected	Pass	
7	Input the correct answer	0	Input displayed in input field	As expected	Pass	Answer does not correspond to any of the options
8	Click on the done button	-	"Invalid Answer"	As expected	Pass	

Test Case ID:	8	Test Designed by:	Goh Hong Xiang, Bryan			
Module Name:	Report Generation	Test Executed by:	Chong Jing Hong			
Test Title:	Generate Report	Test Execution Date:	31/10/2021			
Description	Generate Report by teachers to view students' progress					
Pre-conditions:	User must be a teacher and has already logged in					
Dependencies:						
Post-conditions:						
Step	Test Step	Test Data	Expected Results	Actual Results	Status	Notes
1	Click on 'View Summary' button	-	View Summary UI displays	As expected	Pass	
2	Input student's username	"valid_username"	Input display in input field	As expected	Pass	
3	Click on 'get report' button	-	Scores for each gym, challenge and assignment completed is displayed	As expected	Pass	
Alternative Flows						
1	Click on 'View Summary' button	-	View Summary UI displays	As expected	Pass	
2	Input student's username	"invalid_username"	Input display in input field	As expected	Pass	
3	Click on 'Get Report' button	-	Nothing is displayed	As expected	Pass	
1	Click on 'View Summary' button	-	View Summary UI displays	As expected	Pass	
2	Input student's username	"user_with_no_scores"	Input display in input field	As expected	Pass	
3	Click on 'Get Report' button	-	"No Records"	As expected	Pass	

Test Case ID:	9	Test Designed by:	Goh Hong Xiang, Bryan			
Module Name:	Leaderboard	Test Executed by:	Chong Jing Hong			
Test Title:	Leaderboard	Test Execution Date:	31/10/2021			
Description	Viewing student's ranking in the leaderboard based on gyms, assignments and challenges					
Pre-conditions:	Users should already be logged in, users should have already finished at least 1 gym battle, assignment or challenge					
Dependencies:	Gym battle score, Assignment score, Challenge score					
Post-conditions:	Students' ranking are correctly displayed					
Step	Test Step	Test Data	Expected Results	Actual Results	Status	Notes
1	Student clicks on 'View Leaderboard' button	-	Leaderboard page is displayed with all existing players' scores sorted in descending order	As expected	Pass	

Test Case ID:	10	Test Designed by:	Goh Hong Xiang, Bryan			
Module Name:	Create Challenges	Test Executed by:	Chong Jing Hong			
Test Title:	Create Challenges	Test Execution Date:	31/10/2021			
Description	Students can create challenges for their friends to complete					
Pre-conditions:	User must be a student and have already been logged in					
Dependencies:						
Post-conditions:	The system notifies the students that challenge is successfully created					
Step	Test Step	Test Data	Expected Results	Actual Results	Status	Notes
1	Move the character to the NPC	-	Character is able to reach NPC	As expected	Pass	
2	Interact with the NPC	Press the 'e' key	Dialog(s) between the player and NPC is shown and View Challenge UI is displayed after	As expected	Pass	
3	Click on the 'Create Challenge' button	-	Create Challenge UI displayed	As expected	Pass	
4	Input the number of question	3	Input display in input field	As expected	Pass	
5	Click on the 'Create' button	-	Create New Question UI displayed	As expected	Pass	
6	Input the question	"The answer is 1. What is the answer?"	Input display in input field	As expected	Pass	
7	Input option 1	"Answer is 1"	Input display in input field	As expected	Pass	
8	Input option 2	"Answer is 2"	Input display in input field	As expected	Pass	
9	Input the correct answer	1	Input display in input field	As expected	Pass	
10	Click on next question	-	User will be shown an interface to input details for next question	As expected	Pass	
11	Input the question	"The answer is 2. What is the answer?"	Input display in input field	As expected	Pass	
12	Input option 1	"Answer is 1"	Input display in input field	As expected	Pass	
13	Input option 2	"Answer is 2"	Input display in input field	As expected	Pass	
14	Input the correct answer	2	Input display in input field	As expected	Pass	
15	Click on next question	-	User will be shown an interface to input details for next question	As expected	Pass	
16	Input the question	"The answer is 3. What is the answer?"	Input display in input field	As expected	Pass	
17	Input option 1	"Answer is 1"	Input display in input field	As expected	Pass	
18	Input option 2	"Answer is 3"	Input display in input field	As expected	Pass	
19	Input the correct answer	3	Input display in input field	As expected	Pass	
20	Click on 'create question'	-	Create Challenge UI displays	As expected	Pass	
21	Input opponent email	valid_email@e.ntu.edu.sg	Input displayed in input field	As expected	Pass	
22	Click on 'submit'	-	Challenge is created	As expected	Pass	
Alternative Flows:						
1	Click on 'Create Challenge' button	-	Create Challenge UI displayed	As expected	Pass	
2	Input the number of question	3	Input displayed in input field	As expected	Pass	
3	Click on the 'create' button	-	Create Questions UI displayed	As expected	Pass	
4	Input the question	"The answer is 1. What is the answer?"	Input displayed in input field	As expected	Pass	
5	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
7	Input the correct answer	1	Input displayed in input field	As expected	Pass	
8	Click on the done button	-	"Question, Option1, Option2 and Answer cannot be empty"	As expected	Pass	
1	Click on 'Create Challenge' button	-	Create Challenge UI displayed	As expected	Pass	
2	Input the number of question	3	Input displayed in input field	As expected	Pass	
3	Click on the 'create' button	-	Create Questions UI displayed	As expected	Pass	
4	Input the question	"The answer is 1. What is the answer?"	Input displayed in input field	As expected	Pass	
5	Input option 2	"Answer is 1"	Input displayed in input field	As expected	Pass	
7	Input the correct answer	1	Input displayed in input field	As expected	Pass	
8	Click on the done button	-	"Question, Option1, Option2 and Answer cannot be empty"	As expected	Pass	

1	Click on 'Create Challenge' button	-	Create Challenge UI displayed	As expected	Pass	
2	Input the number of question	3	Input displayed in input field	As expected	Pass	
3	Click on the 'create' button	-	Create Questions UI displayed	As expected	Pass	
4	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
5	Input option 2	"Answer is 2"	Input displayed in input field	As expected	Pass	
7	Input the correct answer	1	Input displayed in input field	As expected	Pass	
8	Click on the done button	-	"Question, Option1, Option2 and Answer cannot be empty"	As expected	Pass	
1	Click on 'Create Challenge' button	-	Create Challenge UI displayed	As expected	Pass	
2	Input the number of question	3	Input displayed in input field	As expected	Pass	
3	Click on the 'create' button	-	Create Questions UI displayed	As expected	Pass	
4	Input the question	"The answer is 1. What is the answer?"	Input displayed in input field	As expected	Pass	
5	Input option 1	"Answer is 1"	Input displayed in input field	As expected	Pass	
7	Input option 2	"Answer is 2"	Input displayed in input field	As expected	Pass	
8	Click on the done button	-	"Question, Option1, Option2 and Answer cannot be empty"	As expected	Pass	
1	Click on 'Create Challenge' button	-	Create Challenge UI displayed	As expected	Pass	
2	Input the number of question	0	Input displayed in input field	As expected	Pass	
3	Click on the 'create' button	-	System displays an "Invalid number of questions" message.	As expected	Pass	
1	Click on 'Create Challenge' button	-	Create Challenge UI displayed	As expected	Pass	
2	Input the number of question	1	Input displayed in input field	As expected	Pass	
3	Click on the 'create' button	-	"Only 3 questions are required for challenge"	As expected	Pass	
1	Move the character to the NPC	-	Character is able to reach NPC	As expected	Pass	
2	Interact with the NPC	Press the 'e' key	Dialog(s) between the player and NPC is shown and View Challenge UI is displayed after	As expected	Pass	
3	Click on the 'Create Challenge' button	-	Create Challenge UI displayed	As expected	Pass	
4	Input the number of question	3	Input display in input field	As expected	Pass	
5	Click on the 'Create' button	-	Create New Question UI displayed	As expected	Pass	
6	Input the question	"The answer is 1. What is the answer?"	Input display in input field	As expected	Pass	
7	Input option 1	"Answer is 1"	Input display in input field	As expected	Pass	
8	Input option 2	"Answer is 2"	Input display in input field	As expected	Pass	
9	Input the correct answer	1	Input display in input field	As expected	Pass	
10	Click on next question	-	User will be shown an interface to input details for next question	As expected	Pass	
11	Input the question	"The answer is 2. What is the answer?"	Input display in input field	As expected	Pass	
12	Input option 1	"Answer is 1"	Input display in input field	As expected	Pass	
13	Input option 2	"Answer is 2"	Input display in input field	As expected	Pass	
14	Input the correct answer	2	Input display in input field	As expected	Pass	
15	Click on next question	-	User will be shown an interface to input details for next question	As expected	Pass	
16	Input the question	"The answer is 3. What is the answer?"	Input display in input field	As expected	Pass	
17	Input option 1	"Answer is 1"	Input display in input field	As expected	Pass	
18	Input option 2	"Answer is 3"	Input display in input field	As expected	Pass	
19	Input the correct answer	3	Input display in input field	As expected	Pass	
20	Click on 'create question'	-	Create Challenge UI displays	As expected	Pass	
21	Click on 'submit'	-	"Opponent Email cannot be empty"	As expected	Pass	

Test Case ID:	11	Test Designed by:	Goh Hong Xiang, Bryan			
Module Name:	Edit Student Profile	Test Executed by:	Chong Jing Hong			
Test Title:	Edit Student Profile	Test Execution Date:	31/10/2021			
Description	Students can edit their profiles					
Pre-conditions:	User must be a student and has already been logged in					
Dependencies:						
Post-conditions:	The system notifies the students that their profile has been successfully edited					
Step	Test Step	Test Data	Expected Results	Actual Results	Status	Notes
1	Input username	"valid_username"	Input displays in input field	As expected	Pass	
2	Input student ID	"valid_studentID"	Input displays in input field	As expected	Pass	
3	Input email	"valid_email"	Input displays in input field	As expected	Pass	
4	Input password	"Valid_password123!"	Input displays in input field	As expected	Pass	
5	Re-enter password	"Valid_password123!"	Input displays in input field	As expected	Pass	
6	Select Edit	-	"Successfully change username, studentId, email and password"	As expected	Pass	
Alternative Flows:						
1	Input username	"valid_username"	Input displays in input field	As expected	Pass	
2	Input student ID	"valid_studentID"	Input displays in input field	As expected	Pass	
3	Input email	"valid_email"	Input displays in input field	As expected	Pass	
4	Input password	"Valid_password123!"	Input displays in input field	As expected	Pass	
5	Re-enter password	"Another_password123!"	Input displays in input field	As expected	Pass	
6	Select Edit	-	"Password does not match"	As expected	Pass	
1	Input username	"valid_username"	Input displays in input field	As expected	Pass	
2	Input student ID	"valid_studentID"	Input displays in input field	As expected	Pass	
3	Input email	"valid_email"	Input displays in input field	As expected	Pass	
4	Input password	"invalid_pass"	Input displays in input field	As expected	Pass	
5	Re-enter password	"invalid_pass"	Input displays in input field	As expected	Pass	
6	Select Edit	-	"Please ensure that your password contains uppercase, lowercase, number, and symbols"	As expected	Pass	
1	Input username	"valid_username"	Input displays in input field	As expected	Pass	
2	Input student ID	"valid_studentID"	Input displays in input field	As expected	Pass	
3	Input email	"valid_email"	Input displays in input field	As expected	Pass	
4	Input password	"<12Chars"	Input displays in input field	As expected	Pass	
5	Re-enter password	"<12Chars"	Input displays in input field	As expected	Pass	
6	Select Edit	-	"Password is less than 12 characters long"	As expected	Pass	

Test Case ID:	12	Test Designed by:	Goh Hong Xiang, Bryan			
Module Name:	Edit Teacher Profile	Test Executed by:	Chong Jing Hong			
Test Title:	Edit Teacher Profile	Test Execution Date:	31/10/2021			
Description	Teachers can edit their profiles					
Pre-conditions:	User must be a teacher and has already been logged in					
Dependencies:						
Post-conditions:	The system notifies the teacher that their profile has been successfully edited					
Step	Test Step	Test Data	Expected Results	Actual Results	Status	Notes
1	Input username	"valid_username"	Input displays in input field	As expected	Pass	
2	Input email	"valid_email"	Input displays in input field	As expected	Pass	
3	Input password	"Valid_password123!"	Input displays in input field	As expected	Pass	
4	Re-enter password	"Valid_password123!"	Input displays in input field	As expected	Pass	
5	Select Edit	-	"Successfully change username, email, and password"	As expected	Pass	
Alternative Flows:						
1	Input username	"valid_username"	Input displays in input field	As expected	Pass	
2	Input email	"valid_email"	Input displays in input field	As expected	Pass	
3	Input password	"Valid_password123!"	Input displays in input field	As expected	Pass	
4	Re-enter password	"Another_password123!"	Input displays in input field	As expected	Pass	
5	Select Edit	-	"Password does not match"	As expected	Pass	
1	Input username	"valid_username"	Input displays in input field	As expected	Pass	
2	Input email	"valid_email"	Input displays in input field	As expected	Pass	
3	Input password	"invalid_pass"	Input displays in input field	As expected	Pass	
4	Re-enter password	"invalid_pass"	Input displays in input field	As expected	Pass	
5	Select Edit	-	"Please ensure that your password containsuppercase, lowercase, number, and symbols"	As expected	Pass	
1	Input username	"valid_username"	Input displays in input field	As expected	Pass	
2	Input email	"valid_email"	Input displays in input field	As expected	Pass	
3	Input password	"<12Chars"	Input displays in input field	As expected	Pass	
4	Re-enter password	"<12Chars"	Input displays in input field	As expected	Pass	
5	Select Edit	-	"Password is less than 12 characters long"	As expected	Pass	