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	student@e.ntu.edu.sg		As expected	Pass	
3	Provide password	admin123		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	student1@e.ntu.edu.sg	-	As expected	Pass	
3	Provide password	helloworld		As expected	Pass	
4	Click login button		"Invalid email/password"	As expected	Pass	Login Credentials is wrong since password does not match with database credentials
1	Start the game	-	Login menu form appears	As expected	Pass	
2	Provide email	student1	-	As expected	Pass	
3	Provide password	admin123		As expected	Pass	
4	Click login button		"Invalid email/password"	As expected	Pass	Login Credentials is wrong since invalid email format
1	Start the game	-	Login menu form appears	As expected	Pass	
2	Provide email	student123@e.ntu.edu.sg	-	As expected	Pass	
3	Provide password	admin123	-	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 appear	As expected	Pass	
3	Provide username	studentrino	-	As expected	Pass	
4	Provide email	student@e.ntu.edu.sg	-	As expected	Pass	
5	Provide password	student	-	As expected	Pass	
6	Provide password again	student	-	As expected	Pass	
7	Click create button	-	Direct user to login menu	As expected	Pass	Email and password are of the correct format and both passwords provided match
Alternate Flows:						
1	Start the game	-	Login menu form appears	As expected	Pass	
2	Click on register button	-	Register menu form appear	As expected	Pass	
3	Provide username	studentrino	-	As expected	Pass	
4	Provide email	student123	-	As expected	Pass	
5	Provide password	student	-	As expected	Pass	
6	Provide password again	student	-	As expected	Pass	
7	Click create button	-	"Invalid email/password"	As expected	Pass	Email is not of the correct format
1	Start the game	-	Login menu form appears	As expected	Pass	
2	Click on register button	-	Register menu form appear	As expected	Pass	
3	Provide username	studentrino	-	As expected	Pass	
4	Provide email	student@e.ntu.edu.sg	-	As expected	Pass	
5	Provide password	student	-	As expected	Pass	
6	Provide password again	student123	-	As expected	Pass	
7	Click create button	-	"Passwords do not match"	As expected	Pass	Password entries do not match each other
1	Start the game	-	Login menu form appears	As expected	Pass	
2	Click on register button	-	Register menu form appear	As expected	Pass	
3	Provide username	studentrino	-	As expected	Pass	
4	Provide email	student@e.ntu.edu.sg	-	As expected	Pass	
5	Provide password	student	-	As expected	Pass	
6	Provide password again	student	-	As expected	Pass	
7	Click create button	-	"Invalid email/password"	As expected	Pass	Email already in use

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	

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	

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	-	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:	Questionaire		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
1	User selects an answer for question 1	-	Answer is highlighted	As expected	Pass	
2	User confirms selection	-	Next question is shown	As expected	Pass	
3	User selects an answer for question 2	-	Answer is highlighted	As expected	Pass	
4	User confirms selection	-	Next question is shown	As expected	Pass	
5	User selects an answer for question 3	-	Answer is highlighted	As expected	Pass	
6	User confirms selection	-	Next question is shown	As expected	Pass	
7	User selects an answer for question 4	-	Answer is highlighted	As expected	Pass	
8	User confirms selection	-	Next question is shown	As expected	Pass	
9	User selects an answer for question 5	-	Answer is highlighted	As expected	Pass	
10	User confirms selection	-	Quiz ends, score is displayed	As expected	Pass	

Test Case ID:	7		Test Designed by:	Goh Hong Xiang, Bryan	
Module Name:	Create Assignment / Challenges		Test Executed by:	Chong Jing Hong	
Test Title:	Create Assignment / Challenges		Test Execution Date:	31/10/2021	
Description	Create new questions for students to solve and challenge themselves				
Pre-conditions:	User must be a teacher and have already been logged in				
Dependencies:					
Post-conditions:	The system notifies the teacher when questions are created already				

Step	Test Step	Test Data	Expected Results	Actual Results	Status	Notes
1	Click on the + icon	-	Popup interface should appear for user input	Popup interface appears	Pass	
2	Input the question	-	User should be able to input text / string	User is able to input text / string	Pass	
3	Input the options	-	User should be able to input text / string	User is able to input text / string	Pass	
4	Input the correct answer	-	User should be able to input text / string	User is able to input text / string	Pass	
5	Input the marks	-	User should be able to input int	User is able to input int	Pass	
6	Click on the done button	-	System should notify the teacher when the questions are created successfully	System notifies the teacher when the questions are created successfully	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:	The system generates a csv file				

Step	Test Step	Test Data	Expected Results	Actual Results	Status	Notes
1	Click on the file icon	-	The csv file should be generated and console logged 'report generated'	The csv file is generated and console logged 'report generated'	Pass	
Alternate Flows: if student did not attempt any challenges / assignment						
1	Click on the file icon	-	The csv file should not be generated and console logged 'no report to be generated'	The csv file is not generated and console logged 'no report to be generated'	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, student's rank is highlighted and score is correctly displayed	Leaderboard page is displayed, student's rank is highlighted and score is correctly displayed	Pass	