# **Use Case Descriptions**

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# Player Use Cases

As a player, I can move around the game to explore the world

Use Case ID:	001	001			
Use Case Name:	World Navigation	World Navigation			
Created By:	Justina	ustina Last Updated By:			
Date Created:	9/9/2021	Date Last Updated:			
Actor:	Player	Player			
Description:	A player icon will be shown explore the game world.	A player icon will be shown in the map representing the user. The player can move around in the map to explore the game world.			
Preconditions:	1. The player must have	1. The player must have registered and logged in			

Description:	A player icon will be shown in the map representing the user. The player can move around in the map to explore the game world.
Preconditions:	<ol> <li>The player must have registered and logged in.</li> <li>The player must actively be in a world</li> </ol>
Postconditions:	The player can see more of the map wherever they go
Priority:	High
Frequency of Use:	Every time the game is being played
Flow of Events:	<ol> <li>The player enters the game world</li> <li>The player uses their direction keys to move left down front back around the game world.</li> </ol>
Alternative Flows:	<ol> <li>O01.1: After a player leaves a minigame and re-enters the game world</li> <li>The player leaves a mini game.</li> <li>The player uses their direction keys/mouse to move left down front back around the game world.</li> </ol>

Exceptions:	<ul> <li>When the user is interacting with an NPC, they will not be able to move</li> <li>When the user is in a mini game, they will not be able to move in the overall game map.</li> <li>When the user is facing an obstacle/terrain, they will not be able to move</li> </ul>
Includes:	
Special Requirements:	
Assumptions:	
Notes and Issues	

- 001.1: Player must be able to move in the northern and southern direction, using the up and down arrow keys respectively
  - 001.1.1: Player must be able to observe an intuitive animation of the avatar moving in the desired direction
- 001.2: Player must be able to move in the eastern and western direction using the left and right arrow keys respectively
  - 001.2.1: Player must be able to observe an intuitive animation of the avatar moving in the desired direction
- 001.3: Player must not be able to walk into terrains, such as walls, NPCs or other inaccessible areas (such as water bodies) as deemed by the map planner.
  - 001.3.1: Player avatar must come to a halt 1 unit away from terrains and inaccessible areas when they are facing the terrain and attempting to travel through/into it
    - 001.3.1.1: If a player tries to travel through terrain and other inaccessible areas, the avatar animation for movement will continue playing, but the avatar will not move until a valid directional command is given

	FR 001.1, FR 001.2	FR 001.3
Movement command given via keyboard input in a valid direction (non-terrain)	Т	F
Outcomes	1	1
Player character moves in specified direction	X	
Player character does not move		X

As a player, I can talk to NPCs to receive tips and tricks

Three times per map

1. The player enters the game world

Frequency of Use:

Flow of Events:

Use Case ID:	002			
Use Case Name:	NPC Interaction			
Created By:	Justina	Justina Last Updated By: Manika		
Date Created:	9/9/2021	Date Last Updated:	9/9/2021	
Actor:	Player			
Description:	As the player is exploring the game world or moving from mini game to mini game, they can interact with various NPCs to learn tips and tricks or fun facts about the subject.			
Preconditions:	The player must have registered and logged in.     The player must be in a world			
Postconditions:	The NPC is faded out to show that it has been interacted with before, but it can still be interacted with again.			
Priority:	Low			

3. The player moves to an NPC, where a speech bubble will pop up.4. The player presses the space bar to start interacting with the NPC.

2. The player uses their direction keys/mouse to move left down front back around the game world.

Alternative Flows:	-
Exceptions:	-
Includes:	World Navigation
Special Requirements:	
Assumptions:	
Notes and Issues	

- 002.1: The player must be able to interact with an NPC by pressing the spacebar when they are 1 unit away from and facing the NPC
  - 002.1.1: The NPC will have a speech bubble appear above his head when the player moves to within 5 units of the NPC
  - 002.1.2: If the player is within 5 units of the NPC and moves to be more than 5 units away from the NPC, the speech bubble must disappear from above the NPC
- 002.2: While interacting with an NPC, speech content should appear at a designated area of the screen, horizontally scrolling onto the screen as the NPC/player speaks
- 002.3: The player must be able to progress the conversation
  - 002.3.1: The player can press the spacebar to immediately force the whole chunk of text to appear on the screen, instead of horizontally scrolling onto the screen
  - 002.3.2: The player can press the spacebar to progress the conversation once all speech content for that segment has appeared on the screen
  - 002.3.3: 1 second after all the speech content has appeared on screen, if the player has not pressed the spacebar, a prompt will appear telling the player to press the spacebar to continue
- 002.4: The player must be able to leave the conversation
  - 002.4.1: The player can press TBD to immediately exit the interaction with the NPC

	FR 002.1.1	FR 002.2	FR 002.3	FR 002.4	FR 002.1.2
Player is near NPC	Т	Т	Т	Т	F
Player enters input to initiate interaction with NPC	F	Т	Т	Т	-
Player enters input to fast-forward conversation	-	F	Т	-	-
Player enters input to 'exit' NPC interaction	-	F	F	Т	-
Outcomes	4	1	1	2	8
Conversation between NPC and player begins		X			
Full conversation is displayed			X		
Conversation ends				X	
Nothing happens	X				X

As a player, I can enter mini-games to assess my learning.

Use Case ID:	003		
Use Case Name:	Mini Games		
Created By:	Justina	Last Updated By:	Manika
Date Created:	9/9/2021	Date Last Updated:	14/9/2021

Actor:	Player
Description:	The player can enter mini games to assess their learning. The games would be categorized by topic, and within each topic, there would be an increasing level of difficulty.
Preconditions:	<ol> <li>The player must have registered and logged in.</li> <li>The player must be in a world</li> </ol>
Postconditions:	The respective mini game will open.
Priority:	High
Frequency of Use:	Every time the app is used
Flow of Events:	<ol> <li>The player enters the game world</li> <li>The player uses their direction keys to move around the game world.</li> <li>The player moves to a mini game, and a bubble appears to ask if the player would like to play this level.</li> <li>The player presses the space bar to start the game.</li> </ol>
Alternative Flows:	-
Exceptions:	-
Includes:	World Navigation
Special Requirements:	
Assumptions:	
Notes and Issues	

003.1: When the player appears within 1 unit of a minigame event trigger, a bubble should appear asking if the player would like to play the game 003.1.1: The player should be able to start playing the game by pressing TBD

003.2: If the player moves away from the minigame event trigger such that he is more than 1 unit away from the event trigger, the bubble should disappear

	FR 003.1	FR 003.2
Player is within Minigame trigger range	Т	F
Outcomes	1	1
Minigame prompt appears	x	
Nothing happens		х

As a player, I can re-attempt the final level of Mini Game to get better scores

Use Case ID:	004		
Use Case Name:	Retry Mini Games		
Created By:	Colin	Last Updated By:	
Date Created:	9/9/2021	Date Last Updated:	9/9/2021

Actor:	Player
Description:	The final level of the mini game will be timed and with a score system. Upon finishing this level, the player's scores will be recorded and uploaded to the leaderboard system. The player has the option to re-attempt the final level of each topic to achieve better scores.
Preconditions:	<ol> <li>The player must have registered and logged in.</li> <li>The teacher must have set the world for the students to be in.</li> <li>The player must have completed all the previous levels of the mini game.</li> </ol>

Postconditions:	Player is able to retry the final level to improve his score
Priority:	Medium
Frequency of Use:	Medium - Only used when students want to retry and submit their score. Otherwise, they can choose to move onto other topics.
Flow of Events:	<ol> <li>After completing the final level, the player's score will be submitted to the leaderboard system.</li> <li>Player will be given the option to re-attempt the final level.</li> </ol>
Alternative Flows:	AF-S3 The player decides not to re-attempt the final level.  1. Player can move on to another tower to do the next topic.
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	
Notes and Issues	-

004.1: After completing the final level of the minigame, a prompt should appear asking the player if he wants to retry the game for a higher score 004.1.1: the user should be able to retry that last level by pressing TBD, to play that level again

	FR 004.1	FR 001.3
Final Minigame of Country completed	Т	F
Outcomes	1	1
Endgame screen displaying option to retry level for high score displayed	Х	
Endgame screen without option to retry level displayed		х

As a player, when I fail a level of the Mini Game, an Educational Video regarding the topic will open for me to view.

Use Case ID:	005		
Use Case Name:	View Educational Video		
Created By:	Colin Last Updated By:		
Date Created:	9/9/2021	Date Last Updated:	9/9/2021
Actor:	Player		
Description:	When a player fails to complete a level of the Mini Game that he is on, there will automatically be a Pop-Up that displays an Educational Video to teach the player more about the Topic. There will be an option for the player to skip the video if he chooses to do so.		
Preconditions:	<ol> <li>The player must have registered and logged in.</li> <li>The player must have entered a tower and started a mini game.</li> <li>The player must have failed to finish the mini game due to too many wrong answers.</li> </ol>		
Postconditions:	After viewing video, player will re-attempt the level that they have failed.		
Priority:	High - There will be many players who have misconceptions of the topic and hence fail the assessment questions.		
Frequency of Use:	Medium - Not all players will fail the mini game.		

Flow of Events:	<ol> <li>The player failed to answer correctly enough questions. As a result, he has failed the Mini Game level.</li> <li>The player will be kicked out of the mini game, and the path to the next level will not be opened for him to advance forward.</li> <li>There will be a pop-up window displaying an Educational Video for the player to watch.</li> <li>Player finishes watching the video and/or clicks the Skip button.</li> <li>Player can now re-attempt the Mini Game level.</li> </ol>
Alternative Flows:	AF-S5 Player chooses not to re-attempt the level  1. The player finishes the video and leaves the area.  2. Topic is left uncompleted.
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues	-

- 005.1: After failing a level of the minigame, the player will be immediately navigated back into the (GAME WORLD) and the path to the next level will not be accessible.
- 005.2: A pop-up window should automatically appear.
  - 005.2.1: The pop-up window will contain an educational video that will be relevant to the topic which the player failed to complete.
  - 005.2.2: The player must be able to click on the embedded video to play the video.
- 005.3: The player must be able to click on the skip button found within the pop-up window to close the pop-up window at any time after the pop-up window first appears.
- 005.4: The player must be able to click [SPACEBAR] to re-enter the mini-game and re-attempt the failed level.
  - 005.4.1: The player must also be able to navigate out of the topic world at any time, leaving the topic uncompleted.
- 005.5: If the player passes the minigame, he is sent back to the game world and is able to proceed to the next level

	FR 005.2	FR 005.5	FR 005.4	FR 005.1
			FR 005.3	
Player fails minigame	Т	F	Т	Т
Player inputs keyboard command /mouse command to skip	F	-	-	Т
Player inputs command to retry level	F	-	Т	F
Outcomes	1	4	2	1
Popup video begins playing	X			
Minigame is reloaded for another attempt			Х	
Player is returned to the game world, and minigame remains incomplete				X
Player is returned to game world, with minigame status is complete		X		

As a player, I can Pause the Game.

Use Case ID:	006	
Use Case Name:	Pause Game	

Created By:	Colin	Last Updated By:		
Date Created:	9/9/2021	Date Last Updated:	9/9/2021	
Actor:	Player			
Description:	The player can choose to pause the gainmediately and nothing will happen u		mini games will be paused	
Preconditions:	<ol> <li>The player must have registered and logged in.</li> <li>The teacher must have set the world for the students to be in.</li> </ol>			
Postconditions:				
Priority:	High - Pausing of the game is a function	onal feature that must not fail		
Frequency of Use:	High			
Flow of Events:	<ol> <li>The player clicks on Esc Button to bring up the Paused Game Menu.</li> <li>All mini games in the background will be paused immediately.</li> <li>The player can click on the Exit Game button, which will extend to UC007 Exit Game</li> <li>The player can click on Esc Button or Resume Game button, deleting the Paused Game Menu and immediately resuming the game.</li> </ol>			
Alternative Flows:	-			
Exceptions:	-			
Includes:	-			
Special Requirements:	-			
Assumptions:	-			
Notes and Issues	-			

006.1: At any time during gameplay, the user must be able to pause the game by pressing the TBD button

006.1.1: The pause menu should appear in the middle of the screen, causing all gameplay to stop

006.1.2: The user must be able to click on the Exit Game Button to be able to quit the game

	FR 006.1	-
Player enters keyboard input command to pause game	Т	F
Outcomes	1	1
Gameplay area is blurred and pause menu appears	Х	
Nothing happens		х

As a player, I can Exit the Game.

Use Case ID:	007	007		
Use Case Name:	Exit Game	Exit Game		
Created By:	Colin	Colin Last Updated By:		
Date Created:	9/9/2021	9/9/2021 <b>Date Last Updated:</b> 9/9/2021		
Actor:	Player	Player		
Description:	The game closes.			

Preconditions:	<ol> <li>The player must have registered and logged in.</li> <li>The teacher must have set the world for the students to be in.</li> <li>The player must have Paused the game.</li> </ol>
Postconditions:	-
Priority:	High - The player must be able to exit the game without failure.
Frequency of Use:	High
Flow of Events:	<ol> <li>The player clicks on Exit Game button in the Paused Game Menu.</li> <li>The game closes itself.</li> </ol>
Alternative Flows:	The user force quits the game using Alt + F4  • We do not override the Operating System's handling of the event
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues	

007.1 At any time during gameplay, the user must be able to exit the game

007.1.1 After entering the pause menu, the user must be able to click the 'Exit Game' button, which will cause the game to return to the starting menu (login screen)

	FR 007.1	-
User clicks on 'Exit game' from within pause menu	Т	F
Outcomes	1	1
Game state is saved and game exits	x	
Pause menu screen remains		Х

As a player, I can navigate between worlds.

Use Case ID:	008			
Use Case Name:	Inter-World Navigation			
Created By:	Colin	Colin Last Updated By:		
Date Created:	9/9/2021	Date Last Updated:	9/9/2021	
Actor:	Player			
Description:	Worlds are representation of different subjects that players can access, i.e. Science World, Math World, etc.  In order to navigate between Worlds, player will approach Portals/Signboards within the current world that they are in, and click on it. Subsequently, a Dialog Box will open, giving the player the option to choose which World they want to teleport to.			
Preconditions:	<ol> <li>The player must have registered and logged in.</li> <li>The teacher must have set the world for the students to be in.</li> <li>There must be more than 1 world present in the game.</li> <li>The player must approach and click the Signboard in order to transport between worlds.</li> </ol>			
Postconditions:	Player teleports to the world that they chose.			

Priority:	High - The player must be able to teleport to different worlds
Frequency of Use:	High - After player finishes all the topic they are assigned in their current world, they will want to change worlds to practice other subjects.
Flow of Events:	<ol> <li>The player approaches the Signboard for inter-world navigation, and clicks on it.</li> <li>A Dialog Box pops up and asks the player to choose the World that they want to go to.</li> <li>Player clicks on the world and teleports to that world.</li> </ol>
Alternative Flows:	AF-S2 Player decides not to go to another World.  1. Player closes the Dialog Box.
Exceptions:	-
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues	-

008.1: The player must be able to close the Dialog Box in the event that they do not wish to teleport to another world.

008.2: The player must be teleported to the world that they chose.

	FR 008.2	FR 008.1	-
User closes navigation dialog box	F	Т	Т
User chooses world to navigate to	Т	-	F
Outcomes	1	2	1
Navigation dialog disappears, player remains		X	
Player is navigated to chosen world	X		
Navigation dialog remains			Х

# Teacher Use Cases

As a teacher, I can assign work to my students through social media

Use Case ID:	009		
Use Case Name:	Work Assignment through Social Media		
Created By:	Min Last Updated By: Manika		
Date Created:	9/9/2021	Date Last Updated:	01/10/2021

Actor:	Teacher
Description:	The teacher can assign work on the available social media platforms, based on unique access codes.
Preconditions:	<ol> <li>Teacher must be logged into "Teacher" account</li> <li>Teacher must be in the Teacher Commands Scene.</li> </ol>
Postconditions:	<ol> <li>Teacher generates an access code for a particular topic (country).</li> <li>Teacher shares the access code to social media by clicking on 'Share on Whatsapp' with an autogenerated message.</li> </ol>
Priority:	High
Frequency of Use:	2 times a week

Flow of Events:	<ol> <li>The teacher clicks on 'Generate Access Code' button in Teacher Commands Page.</li> <li>The teacher then enters the world (subject) and country (topic) that he wants to assign.</li> <li>The teacher confirms his input by clicking on 'Generate', and a unique access code is generated.</li> <li>The teacher clicks on 'Share on Whatsapp' and is directed to Whatsapp Web with an auto-generated message.</li> <li>The teacher can choose to edit the auto-generated message.</li> <li>The teacher chooses a group or individual to send the message to.</li> </ol>
Alternative Flows:	AF-S6 Teacher is not logged into Whatsapp Web  1. The teacher is prompted to login to Whatsapp on web  2. Return to step 6 of normal flow.
Exceptions:	
Includes:	
Special Requirements:	
Assumptions:	
Notes and Issues	

- 009.1: The teacher must be able to generate an access code for a topic
  - 009.1.1: From the teacher commands page, the teacher must be able to click the 'generate access code' button
  - 009.1.2: The teacher must be able to specify a world and country from dropdown
    - 009.1.2.1: When a teacher chooses a world, the country dropdown options will change accordingly.
- 009.2: The teacher shall be able to share the generated access code to social media
  - 009.2.1: After the access code is generated, there will be a button "Share on Whatsapp" where the teacher is directed to Whatsapp Web.
  - 009.2.2: The teacher must be have an auto-generated message when directed to Whatsapp Web.

	FR 009.1	FR 009.2
User clicks on "Generate Access Code" button	Т	Т
User specifies world and country	Т	Т
User clicks on "Share on Whatsapp" button	F	Т
Outcomes	2	1
User navigated to a page to choose class	X	
User navigated to Whatsapp Web with autogenerated message		Х
Country dropdown changes dynamically with world dropdown	Х	

# View Assignment History

As a teacher, I will get summary reports of my students' progress

Use Case ID:	010		
Use Case Name:	Student Progress Summary Reports		
Created By:	Calvin Last Updated By: Min		
Date Created:	9/9/2021	Date Last Updated:	01/10/2021

Actor:	Teacher
Description:	The teacher must be able to view and download a summary report of:  Scores of each student based on selected class, world and country (bar chart)
Preconditions:	The teacher must be logged into a "Teacher" account     Teacher must be in the Teacher Commands Scene.
Postconditions:	The teacher has access to online/offline version of the summary report
Priority:	Medium
Frequency of Use:	Weekly
Flow of Events:	<ol> <li>The teacher clicks on 'Generate Summary Report' button in Teacher Commands Page.</li> <li>The teacher is prompted to enter a class to view summary report.</li> <li>In the next scene, the teacher is prompted to choose a world and country from 2 dropdowns.</li> <li>Bar charts will change accordingly to selected world and country.</li> <li>The teacher can choose to export the bar graph as an image, and a popup containing the image path is displayed.</li> </ol>
Alternative Flows:	
Exceptions:	
Includes:	-
Special Requirements:	-
Assumptions:	-
Notes and Issues	-

- 010.1: Teacher must be able to view and the summary report of an individual student.
  - 010.1.1: Teacher must be able to click on a "Generate Summary Report" button in Teacher Commands Page, and the teacher will be navigated to enter a class in the next page.
  - 010.1.2: The dashboard page will display a bar graph of score vs student name based on the default value in the world dropdown and country dropdown.
    - 010.1.2.1: The teacher can edit the dropdown values based on preference, and the bar graph view will change accordingly.
- 010.2: Teacher must be able to download the summary report of a class.
  - 010.2.1: The teacher must be able to click on the "Download Summary Report" icon and a popup containing the image path where the image is saved to will appear.

	FR 010.1	FR 010.2
User clicks on "Generate Summary Report" button	Т	Т
User specifies world and country	Т	Т
User clicks on "Export" icon	F	Т
Outcomes	3	1
User navigated to a page to choose class	×	
Summary Chart (Bar graphs) generated based on selected world and country on dropdown	X	
Country dropdown changes dynamically with world dropdown	х	
Image saved to computer		X

# User (Teacher/Student)/System Use Cases

As a user, I can log in to the game

Use Case ID:	011			
Use Case Name:	User Login			
Created By:	Jeremy Teo Last Updated By: Manika Hennedige			
Date Created:	9/9/2021 <b>Date Last Updated:</b> 15/9/2021			
Actor:	Users, Database			
Description:	Users will have to login with their account details before they can access any features of the systems.			
Preconditions:	User has a registered account.     User has not logged in.			

# Frequency of Use: Every time user enters the application

Flow of Events:

1. The system request the user to enter their login details such as their user ID and password.

2. User will be able to access all the functionalities of the system.

1. User has successfully logged in to the system.

2. The user enters their login details.

High

3. The system validates the entered login details with the account information stored in the database and logs the user into the system.

Alternative Flows:

# **Exceptions:** 012.0.E.1: In step 3 of the normal flow, if the login details entered is invalid.

- 1. System shall display an error message stating 'Incorrect User ID or Password'.
- 2. User can choose to return to the start of the normal flow to reenter their login details or cancel the login, at which point the use case ends.

Includes:

#### **Special Requirements:**

**Assumptions:** 

Postconditions:

**Priority:** 

**Notes and Issues** 

- 011.1: User must be able to log in to the system if they entered valid account information.
  - 011.1.1: The user must be able to type in their username and password in the respective fields.
  - 011.1.2: The user must be able to click on the "Submit" button to submit their user credentials for validation for login purposes.
- 011.2: User must be able to re-enter their account information should they fail to do so.
  - 011.2.1: The user shall receive an error message on their display above the login fields indicating that the account information is invalid if the user enters incorrect account information.
  - 011.2.2: The user shall now be able to re-enter their account information in the respective fields.

	FR 011.1	FR 011.2
User types in valid username and password	Т	F
User clicks on "Submit" button	Т	Т
User types in invalid username or password	F	Т
Outcomes	1	2

User successfully logs in and directed to another screen	Х	
User cannot log in and stays in current screen		X
Appropriate error message displayed		x

As a user, I can register an account for the game

Use Case ID:	012		
Use Case Name:	User Registration		
Created By:	Jeremy Teo	Last Updated By:	
Date Created:	9/9/21	Date Last Updated:	
Actor:	Users, Database		
Description:	Users will have to create an account before playing the game.		
Preconditions:	-		
Postconditions:	A new account is created and added to the system.		
Priority:	High		
Frequency of Use:	Once, at the first use of the application		
Flow of Events:	<ol> <li>User clicks on the 'Register' button.</li> <li>System shall prompt users to input required information:         <ul> <li>Email address</li> <li>User ID</li> <li>Password</li> </ul> </li> <li>Users clicks on the 'Confirm' button.</li> <li>System creates a new account with the provided details and stores the account information in the database.</li> </ol>		
Alternative Flows:	<ul> <li>013.0.AF.1: In step 2 of the normal flow, if the system determines that the User entered invalid account information the following occurs:</li> <li>1. The system will display error messages describing which of the entered data was invalid. <ul> <li>a. Applies to:</li> <li>i. Missing information Items</li> <li>ii. Username already exists in the system</li> <li>iii. User Account information entered does not comply to its definition in the glossary iv. Invalid email address</li> </ul> </li> <li>2. The system will prompt the user to re-enter the invalid information.</li> <li>3. The user re-enters the information and the system will re-validate the information/</li> <li>4. The use case will resume from step 4 of the normal flow.</li> <li>5. If invalid information is entered, the use case will restart from this alternative flow (013.0.AF.1) to prompt the user to re-enter the account information. This will continue until the user enters valid information, or clicks the 'Cancel' button, at which point the use case ends.</li> </ul>		
Exceptions:			
Includes:			
Special Requirements:			
Assumptions:			
Notes and Issues			

- 012.1: A new user must be able to register for an account by entering valid account information.
  - 012.1.1: Account information shall be validated against a system defined definition for each field.
  - 012.1.2: The password entered must meet complexity requirements by contains characters from the following categories:

#### **Uppercase letters**

#### Lowercase letters

#### Numbers (0-9)

012.1.3: The email address entered must comply with the "local-part@domain" syntax

	FR 012.1	
User types in valid username and password	Т	F
Outcomes	1	2
User successfully registers	x	
User cannot register		x
Appropriate error message is displayed		х

As a user, I can access the leaderboard regardless of my status (teacher/student).

Use Case ID:	013		
Use Case Name:	Viewing Leaderboard		
Created By:	Calvin	Last Updated By:	Manika
Date Created:	9/9/2021	Date Last Updated:	01/10/2021
Actor	User		
Description:	The user must be able to the view the leaderboard of the game		
Preconditions:	The user must be logged in.		
Postconditions:	1. The user is able to see the leaderboard for the chosen world and country.		
Priority:	Medium		
Frequency of Use:	Daily		
Flow of Events:	<ol> <li>User is able to navigate to a leaderboard entering event (for student: clicking on leaderboard signboard in adventure mode, for teacher: "View Leaderboard" button in Teacher Commands Scene)</li> <li>User is prompted to choose a world and country to view the leaderboard for.</li> <li>The leaderboard displays a list of username and score based on selected world and country, sorted in decreasing order of score.</li> </ol>		
Alternative Flows:	N/A		
Exceptions:	N/A		
Includes:	-		
Special Requirements:	N/A		
Assumptions:	N/A		
Notes and Issues	N/A		

- 013.1: After entering the 'leaderboard' section, a dropdown of worlds and countries registered to the user must be displayed; the user must be able to choose any one of them.
  - 013.1.1: When a user edits the world dropdown, the country dropdown has to change its options based on the world dropdown value.
  - 013.1.2: A list of usernames and scores will be displayed in decreasing order of scores on the leaderboard.

User clicks on "View Leaderboard" button	Т
User specifies world and country	Т
Outcomes	2
User navigated to a page to choose world and country	х
Country dropdown changes dynamically with world dropdown	х