
Use Cases

for

LearnEz

Version 1.4 approved

Prepared by

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SSP5 - EIGHT

12/09/2019

Revision History – CHANGE WHEN NEEDED

| Name | Date | Reason For Changes | Version |
|---------------------|------------|--|---------|
| Ong Wei Hua | 07/09/2017 | <ul style="list-style-type: none">• Creation of Use Case Descriptions | 1.0 |
| Ong Wei Qing | 19/09/2019 | <ul style="list-style-type: none">• Format Use Case Descriptions• Partial edits of some Use Case Descriptions• Standardisation of terminologies used | 1.1 |
| Benedict Low Yu | 19/09/2019 | <ul style="list-style-type: none">• Format Use Case Descriptions | 1.2 |
| Benedict Low Yu | 12/11/2019 | <ul style="list-style-type: none">• Update All Use Case Descriptions | 1.3 |
| Marcus Tang Zi Yang | 13/11/2019 | <ul style="list-style-type: none">• Updated some Use Case Descriptions | 1.4 |
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|----------------|-------------|--------------------|---------------------|
| Use Case ID: | 1.0 | | |
| Use Case Name: | Login | | |
| Created By: | Ong Wei Hua | Last Updated By: | Marcus Tang Zi Yang |
| Date Created: | 07/09/2019 | Date Last Updated: | 13/11/2019 |

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| Actor: | <ul style="list-style-type: none"> • Student (initiating actor) • Teacher (initiating actor) |
| Description: | Authentication of users and loading of user data from server to local application. |
| Preconditions: | <ul style="list-style-type: none"> • User launches the application. |
| Postconditions: | <ul style="list-style-type: none"> • User will be logged into the system. User data loaded onto application. |
| Priority: | <ul style="list-style-type: none"> • High |
| Frequency of Use: | <ul style="list-style-type: none"> • Low <ul style="list-style-type: none"> ◦ Once per session. |
| Flow of Events: | <ol style="list-style-type: none"> 1. User enters matriculation number / staff id 2. User enters password. 3. User selects 'Login' button. 4. App will authenticate the account through interfacing with game database. 5. Server sends authentication results back to App. 6. User is logged into the system based on their role after authentication. |
| Alternative Flows: | <u>1.0.AC.1: User forgot password</u> <ol style="list-style-type: none"> 1. User selects forget password option. 2. Go to Use Case 1.1. |
| Exceptions: | <u>1.0.EX.1: Invalid username</u> <ol style="list-style-type: none"> 2. User enters invalid matriculation number / staff id 3. User selects 'Login' button. 4. System will prompt the User with a dialog box: "You do not have an account with LearnEz. Please contact the System Administrator to create an account for you". <u>1.0.EX.2: Invalid password</u> <ol style="list-style-type: none"> 3. User enters invalid password. |

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| | <ol style="list-style-type: none">4. User selects 'Login' button.5. System will prompt the User with a dialog box: "You do not have an account with LearnEZ. Please contact the System Administrator to create an account for you". |
| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | App is connected to game server database. |
| Notes and Issues: | N/A |

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| Use Case ID: | 1.1 | | |
| Use Case Name: | Forget Password | | |
| Created By: | Ong Wei Hua | Last Updated By: | Marcus Tang Zi Yang |
| Date Created: | 07/09/2019 | Date Last Updated: | 13/11/2019 |

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| Actor: | <ul style="list-style-type: none"> • Student (initiating actor) • Teacher (initiating actor) |
| Description: | Allows user to reset his/her account password. |
| Preconditions: | <ul style="list-style-type: none"> • User selects “Forget Password”. |
| Postconditions: | <ul style="list-style-type: none"> • The password is reset. Server-side database updated. |
| Priority: | <ul style="list-style-type: none"> • High |
| Frequency of Use: | <ul style="list-style-type: none"> • Low <ul style="list-style-type: none"> ◦ Once per session. |
| Flow of Events: | <ol style="list-style-type: none"> 1. User is prompted to key in their matriculation number / staff id. 2. System checks that User’s input exists in database. 2. System will send an email containing a new password to the user’s email address. |
| Alternative Flows: | <u>1.1.AC.1 : User exits Forget Password</u> <ol style="list-style-type: none"> 2. User taps on the “X” button. 3. System redirects User to Login (Use case 1.0). |
| Exceptions: | <u>1.1.EX.1 User enters invalid matric number / staff id</u> <ol style="list-style-type: none"> 2. If User enters invalid matric number / staff id. 3. “No User Found!” message appears under input line. 4. System will return to Main Flow of Events Step 1. |
| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | N/A |
| Notes and Issues: | N/A |

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| Use Case ID: | 2.0 | | |
| Use Case Name: | Settings | | |
| Created By: | Ong Wei Hua | Last Updated By: | Benedict Low Yu |
| Date Created: | 07/09/2019 | Date Last Updated: | 12/11/2019 |

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| Actor: | <ul style="list-style-type: none"> • Student (initiating actor) • Teacher (initiating actor) |
| Description: | User Settings of the LearnEz Game App. |
| Preconditions: | <ul style="list-style-type: none"> • User has selected “Settings” in the Main Menu Screen of the System. |
| Postconditions: | <ul style="list-style-type: none"> • User can do any of the following: <ol style="list-style-type: none"> 1. Select “Change Password” to invoke Use Case 2.1 (Change Password) 2. Selects “Change Avatar” to invoke Use Case 2.2 (Change Avatar) 3. Selects “Log Out” to invoke Use Case 2.3 (Log Out) |
| Priority: | <ul style="list-style-type: none"> • High |
| Frequency of Use: | <ul style="list-style-type: none"> • Low <ul style="list-style-type: none"> ○ Upon user’s request |
| Flow of Events: | <ol style="list-style-type: none"> 1. System will retrieve the following information of the user from the database. <ol style="list-style-type: none"> a. Name b. Matriculation Number / Staff ID c. Avatar d. Class (or Classes taught for Teacher) e. Highest Stage Cleared (for Student) f. Total Score 2. System displays the retrieved information to the User. 3. System displays the options “Change Password”, “Log Out” and “Change Avatar”. |
| Alternative Flows: | N/A |
| Exceptions: | N/A |

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| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | N/A |
| Notes and Issues: | N/A |

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| Use Case ID: | 2.1 | | |
| Use Case Name: | Change Password | | |
| Created By: | Ong Wei Hua | Last Updated By: | Benedict Low Yu |
| Date Created: | 07/09/2019 | Date Last Updated: | 12/11/2019 |

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| Actor: | <ul style="list-style-type: none"> • Student (initiating actor) • Teacher (initiating actor) |
| Description: | User can change the password for his/her account. |
| Preconditions: | User has selected 'Change Password'. |
| Postconditions: | <ul style="list-style-type: none"> • User's account password is updated to his/her new password |
| Priority: | <ul style="list-style-type: none"> • High |
| Frequency of Use: | <ul style="list-style-type: none"> • Low <ul style="list-style-type: none"> ◦ Upon User's Request |
| Flow of Events: | <ol style="list-style-type: none"> 1. User enters a new password into the field. 2. User re-enters the new password. 3. User selects 'Change Password'. 4. System updates the password for the user's account. |
| Alternative Flows: | <u>2.1.AC.1 User exits the Change Password page</u> <ol style="list-style-type: none"> 1. User taps on the 'X' button. 2. System redirects User to Settings page. |
| Exceptions: | <u>2.1.EX.1 Mismatch Password</u> <ol style="list-style-type: none"> 3. User enters mismatched password. 4. Error message "Passwords do not match!" will be shown in red font below the input box. 5. User returns to Main Flow of Events Step 1. |
| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | N/A |
| Notes and Issues: | N/A |

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| Use Case ID: | 2.2 | | |
| Use Case Name: | Change Avatar | | |
| Created By: | Ong Wei Hua | Last Updated By: | Benedict Low Yu |
| Date Created: | 07/09/2019 | Date Last Updated: | 12/11/2019 |

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| Actor: | <ul style="list-style-type: none"> • Student (initiating actor) • Teacher (initiating actor) |
| Description: | User can change the avatar for his/her account |
| Preconditions: | <ul style="list-style-type: none"> • User has selected 'Change Avatar'. |
| Postconditions: | <ul style="list-style-type: none"> • User's avatar is redirected to the Settings page which displays the updated avatar. |
| Priority: | <ul style="list-style-type: none"> • Low |
| Frequency of Use: | <ul style="list-style-type: none"> • Low <ul style="list-style-type: none"> ◦ Upon User's request. |
| Flow of Events: | <ol style="list-style-type: none"> 1. User selects an avatar. 2. System displays chosen avatar. 3. User selects "Choose". 4. System prompts the User to confirm the change of avatar. 5. User selects the check mark. 6. System updates the avatar for the User. |
| Alternative Flows: | <p><u>2.2.AC.1 User chooses the same avatar</u></p> <ol style="list-style-type: none"> 1. Return to Flow of Events Step 1. <p><u>2.2.AC.1 User cancels confirmation to change avatar</u></p> <ol style="list-style-type: none"> 4. User selects "X" at Main Flow of Event Step 4 5. Return to Flow of Events Step 1. |
| Exceptions: | N/A |
| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | N/A |
| Notes and Issues: | N/A |

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| Use Case ID: | 2.3 | | |
| Use Case Name: | Log Out | | |
| Created By: | Ong Wei Hua | Last Updated By: | Benedict Low Yu |
| Date Created: | 07/09/2019 | Date Last Updated: | 19/09/2017 |

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| Actor: | <ul style="list-style-type: none"> • Student (initiating actor) • Teacher (initiating actor) |
| Description: | Logging the User out of the System. |
| Preconditions: | <ul style="list-style-type: none"> • User has selected “Log Out” |
| Postconditions: | <ul style="list-style-type: none"> • User is logged out of the System. |
| Priority: | <ul style="list-style-type: none"> • High |
| Frequency of Use: | <ul style="list-style-type: none"> • Low <ul style="list-style-type: none"> ◦ Upon User’s request. |
| Flow of Events: | <ol style="list-style-type: none"> 1. User selects ‘Log Out’. 2. System prompts the user to confirm their decision. 3. User selects the check mark. 4. System logs the User out. |
| Alternative Flows: | <u>2.1.AC.1 User cancels logout</u> <ol style="list-style-type: none"> 3. The user selects ‘X’ at Main Flow of Event Step 2. 4. System returns to the Settings (Use Case 2.0). |
| Exceptions: | N/A |
| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | N/A |
| Notes and Issues: | N/A |

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| Use Case ID: | 3.0 | | |
| Use Case Name: | View Assignment Board | | |
| Created By: | Ong Wei Hua | Last Updated By: | Low Yu Benedict |
| Date Created: | 07/09/2019 | Date Last Updated: | 12/11/2019 |

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| Actor: | <ul style="list-style-type: none"> • Student (initiating actor) • Teacher (initiating actor) |
| Description: | System will display ongoing assignments to the User |
| Preconditions: | <ul style="list-style-type: none"> • User selects “Assignments”. |
| Postconditions: | <ul style="list-style-type: none"> • Assignment board is displayed, including all ongoing assignments, if any. |
| Priority: | <ul style="list-style-type: none"> • High |
| Frequency of Use: | <ul style="list-style-type: none"> • Low Frequency <ul style="list-style-type: none"> ◦ Upon User’s request |
| Flow of Events: | <ol style="list-style-type: none"> 1. System retrieves the information of the ongoing assignments of the User from the database 2. System displays the retrieved information to the User in the form of: <ol style="list-style-type: none"> a. Assignment Title b. Assignment Details c. Posted By d. Due Date and Time 3. System checks the proposed privilege of the User. <ol style="list-style-type: none"> a. If the User is a Teacher, the System displays the “New Assignment” button. 4. User can scroll through ongoing assignments by selecting the “Left Arrow” or “Right Arrow” button. |
| Alternative Flows: | <u>3.0.AC.1 There are no ongoing assignments</u> <ol style="list-style-type: none"> 1. System will display an empty screen with the words “No Ongoing Assignments” |
| Exceptions: | N/A |
| Includes: | N/A |

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| Special Requirements: | N/A |
| Assumptions: | N/A |
| Notes and Issues: | N/A |

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| Use Case ID: | 3.1 | | |
| Use Case Name: | View More | | |
| Created By: | Ong Wei Hua | Last Updated By: | Low Yu Benedict |
| Date Created: | 07/09/2019 | Date Last Updated: | 12/11/2019 |

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| Actor: | <ul style="list-style-type: none"> • Student (initiating actor) • Teacher (initiating actor) |
| Description: | Launches the browser and downloads the pdf file of the Assignment. |
| Preconditions: | <ul style="list-style-type: none"> • User has selected “View More”. |
| Postconditions: | <ul style="list-style-type: none"> • A pdf file is downloaded automatically through the User’s default browser. |
| Priority: | <ul style="list-style-type: none"> • High |
| Frequency of Use: | <ul style="list-style-type: none"> • Low Frequency <ul style="list-style-type: none"> ◦ Upon User’s request |
| Flow of Events: | <ol style="list-style-type: none"> 1. System retrieves the information of the selected assignment from the database. 2. System launches User’s default browser to download Assignment in a pdf file. |
| Alternative Flows: | N/A |
| Exceptions: | N/A |
| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | <ul style="list-style-type: none"> • There are ongoing assignments in the system |
| Notes and Issues: | N/A |

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| Use Case ID: | 4.0 | | |
| Use Case Name: | Post Assignment | | |
| Created By: | Ong Wei Hua | Last Updated By: | Low Yu Benedict |
| Date Created: | 07/09/2019 | Date Last Updated: | 12/11/2017 |

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| Actor: | <ul style="list-style-type: none"> Teacher (initiating actor) |
| Description: | Allows a Teacher to post an assignment. |
| Preconditions: | <ul style="list-style-type: none"> User selects “New Assignment” in Use Case 3.0 (View Assignment Board) |
| Postconditions: | <ul style="list-style-type: none"> Assignment is uploaded to the System. Dialog Box appears “Your assignment has been posted successfully!” <ul style="list-style-type: none"> Select the “Share On Facebook” button to invoke Use Case 4.1 (Share to Facebook) Select the “Share On Twitter” button to invoke Use Case 4.2 (Share to Twitter) Select “Done” to invoke Use Case 3.0 (View Assignment Board) |
| Priority: | <ul style="list-style-type: none"> High |
| Frequency of Use: | <ul style="list-style-type: none"> Medium <ul style="list-style-type: none"> Upon User’s request |
| Flow of Events: | <ol style="list-style-type: none"> System displays the “Create New Assignment” Form Teacher enters the Assignment Title Teacher enters the Assignment Details. Teacher selects the Due Date and Time. Teacher selects the Group to post the Assignment to. Teacher selects the pdf file to attach. Teacher selects “Post”. System prompts the Teacher with a success message, “Assignment has been posted”. System adds the Assignment into the database. |
| Alternative Flows: | <u>4.0.AC.1 Exiting the page before completion</u> <ol style="list-style-type: none"> Teacher exits the post assignment page without selecting “Create” System will not add the assignment into the database./ User is redirected to Use Case 3.0 (View Assignment Board). |

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| | <u>4.0.AC.2 Text Fields not filled</u> 6. Teacher selects “Create” without filling in all the text fields. 7. System displays an error message, “Please input _____”, where the blank indicates the missing field (i.e. Please input assignment title). |
| Exceptions: | N/A |
| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | Teacher has at least one class assigned to him/her. |
| Notes and Issues: | N/A |

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|----------------|-------------------|--------------------|-----------------|
| Use Case ID: | 4.1 | | |
| Use Case Name: | Share to Facebook | | |
| Created By: | Ong Wei Hua | Last Updated By: | Low Yu Benedict |
| Date Created: | 07/09/2019 | Date Last Updated: | 12/11/2019 |

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| Actor: | <ul style="list-style-type: none"> Teacher (initiating actor) |
| Description: | Post the Teacher's assignment in pdf to his/her Facebook. |
| Preconditions: | <ul style="list-style-type: none"> Teacher selects the "Share On Facebook" button in Use Case 4.0 (Post Assignment) |
| Postconditions: | <ul style="list-style-type: none"> Assignment is posted to the Teacher's Facebook |
| Priority: | <ul style="list-style-type: none"> High |
| Frequency of Use: | <ul style="list-style-type: none"> Medium <ul style="list-style-type: none"> Upon Teacher's request. |
| Flow of Events: | <ol style="list-style-type: none"> System launches the user's default browser to a Facebook post page. System shares a link to the pdf file the Teacher has selected. User selects "Post". |
| Alternative Flows: | N/A |
| Exceptions: | N/A |
| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | Teacher has a Facebook Account. |
| Notes and Issues: | N/A |

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| Use Case ID: | 4.2 | | |
| Use Case Name: | Share to Twitter | | |
| Created By: | Ong Wei Hua | Last Updated By: | Low Yu Benedict |
| Date Created: | 07/09/2019 | Date Last Updated: | 12/12/2019 |

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| Actor: | <ul style="list-style-type: none"> Teacher (initiating actor) |
| Description: | Post the Teacher's assignment in pdf to his/her Twitter. |
| Preconditions: | <ul style="list-style-type: none"> Teacher selects the "Share On Facebook" button in Use Case 4.0 (Post Assignment) |
| Postconditions: | <ul style="list-style-type: none"> Assignment is posted to the Teacher's Twitter. |
| Priority: | <ul style="list-style-type: none"> High |
| Frequency of Use: | <ul style="list-style-type: none"> Low <ul style="list-style-type: none"> Upon Teacher's request |
| Flow of Events: | <ol style="list-style-type: none"> System invokes the Twitter API and displays a "Share to Twitter" pop-up box System fills the entered assignment information from Use Case 4.0 (Post Assignment) into the pop-up box User selects "Send". System shares the assignment to Twitter. |
| Alternative Flows: | <u>N/A</u> |
| Exceptions: | <u>4.2.EX.1 Teacher does not have the Twitter installed on his/her device</u> <ol style="list-style-type: none"> System prompts the User with an error message, "Please ensure that Twitter is installed on your device". |
| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | <ul style="list-style-type: none"> Teacher has a Twitter account. |
| Notes and Issues: | N/A |

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| Use Case ID: | 5.0 | | |
| Use Case Name: | View Leaderboard | | |
| Created By: | Ong Wei Hua | Last Updated By: | Benedict Low Yu |
| Date Created: | 07/09/2019 | Date Last Updated: | 12/11/2019 |

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| Actor: | <ul style="list-style-type: none"> Student (initiating actor) |
| Description: | Game displays the top five scoring users within the class, as well as the Student's current ranking. |
| Preconditions: | <ul style="list-style-type: none"> User selects "Leaderboard" from the Main Menu. |
| Postconditions: | <ul style="list-style-type: none"> Leaderboard of the current Student and the Student's top 5 classmates is displayed for the selected World. |
| Priority: | <ul style="list-style-type: none"> High |
| Frequency of Use: | <ul style="list-style-type: none"> High <ul style="list-style-type: none"> Upon User's request. |
| Flow of Events: | <ol style="list-style-type: none"> System fetches data of the top five Students from the User's class. System displays the top five Students, and the current Student's information for the selected World <ol style="list-style-type: none"> Student's rank Student's name Student's score |
| Alternative Flows: | N/A |
| Exceptions: | N/A |
| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | N/A |
| Notes and Issues: | N/A |

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| Use Case ID: | 5.1 | | |
| Use Case Name: | View Global Ranking | | |
| Created By: | Ong Wei Hua | Last Updated By: | Benedict Low Yu |
| Date Created: | 07/09/2019 | Date Last Updated: | 12/12/2019 |

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| Actor: | <ul style="list-style-type: none"> Student (initiating actor) |
| Description: | Game displays the top five scoring users within the cohort. |
| Preconditions: | <ul style="list-style-type: none"> Student selects “Global” from the Leaderboard Page. |
| Postconditions: | <ul style="list-style-type: none"> Leaderboard of the Student and the top five players within the cohort is displayed for the selected World. |
| Priority: | <ul style="list-style-type: none"> High |
| Frequency of Use: | <ul style="list-style-type: none"> High <ul style="list-style-type: none"> Upon Student’s request. |
| Flow of Events: | <ol style="list-style-type: none"> System fetches data of the top five Students and the Student for the selected World. System displays the Student and the top five Students for the selected World along with the following information <ol style="list-style-type: none"> Student’s rank Student’s name Student’s score |
| Alternative Flows: | N/A |
| Exceptions: | N/A |
| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | N/A |
| Notes and Issues: | N/A |

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|----------------|------------------------|--------------------|-----------------|
| Use Case ID: | 6.0 | | |
| Use Case Name: | View Class Performance | | |
| Created By: | Ong Wei Hua | Last Updated By: | Low Yu Benedict |
| Date Created: | 07/09/2019 | Date Last Updated: | 19/09/19 |

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| Actor: | <ul style="list-style-type: none"> Teacher (initiating actor) |
| Description: | Displays the Performance of the Selected Class |
| Preconditions: | <ul style="list-style-type: none"> Teacher selects “Performance Report” from the Main Menu Screen of the System |
| Postconditions: | <ul style="list-style-type: none"> Class’s performance, in the form of a layered/merged line graph for all five worlds (color coded) is displayed. Teacher can do any of the following <ol style="list-style-type: none"> Select “Generate Report” to invoke Use Case 6.1 (Generate Report) Select a Student to invoke Use Case 6.2 (View Student Performance) Select a class |
| Priority: | <ul style="list-style-type: none"> High |
| Frequency of Use: | <ul style="list-style-type: none"> Low <ul style="list-style-type: none"> Upon User’s Request. |
| Flow of Events: | <ol style="list-style-type: none"> System fetches all Classes taught by the Teacher from the database. System displays a list of Classes taught by the Teacher in a dropdown list. User selects a Class from the dropdown list. System displays the list of Students of the Class in a tabular format on the right. System fetches information of all the Students’ play data in the Classes from the database. System displays a layered/merged Line Graph of “Student’s Performance (Average Score) by Chapters” to the Teacher. |
| Alternative Flows: | <u>6.0.AC.1 No Class Performance to Display</u> <ol style="list-style-type: none"> All the Students in the Class has not yet played the game. System is unable to retrieve information of the Students’ play data |

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| | 7. System displays an error message, “No Class Performance to Display”. |
| Exceptions: | N/A |
| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | Teacher has a class assigned to him/her. |
| Notes and Issues: | N/A |

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|----------------|-----------------|--------------------|-----------------|
| Use Case ID: | 6.1 | | |
| Use Case Name: | Generate Report | | |
| Created By: | Ong Wei Hua | Last Updated By: | Low Yu Benedict |
| Date Created: | 07/09/2019 | Date Last Updated: | 12/12/2019 |

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| Actor: | <ul style="list-style-type: none"> Teacher (initiating actor) |
| Description: | Allows the user to generate a performance summary report of a Class. |
| Preconditions: | <ul style="list-style-type: none"> User selects “Generate Report” in Use Case 6.0 (View Class performance) Class performance data is not empty. |
| Postconditions: | <ul style="list-style-type: none"> A performance summary report of the class performance of the students is generated. |
| Priority: | <ul style="list-style-type: none"> High |
| Frequency of Use: | <ul style="list-style-type: none"> Medium <ul style="list-style-type: none"> Upon User’s request. |
| Flow of Events: | <ol style="list-style-type: none"> System compiles the retrieved data into an csv file titled “%s-Performance-Report”, where %s is the Class (i.e. SSP1-Performance-Report). System launches the Teacher’s default browser and downloads the csv file. |
| Alternative Flows: | N/A |
| Exceptions: | N/A |
| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | N/A |
| Notes and Issues: | N/A |

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| Use Case ID: | 6.2 | | |
| Use Case Name: | View Student Performance | | |
| Created By: | Ong Wei Hua | Last Updated By: | Low Yu Benedict |
| Date Created: | 07/09/2019 | Date Last Updated: | 12/12/2019 |

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| Actor: | <ul style="list-style-type: none"> Teacher (initiating actor) |
| Description: | Displays a Student's performance to the User. |
| Preconditions: | <ul style="list-style-type: none"> User must have selected a Student from Use Case 6.0 (View Class Performance) |
| Postconditions: | <ul style="list-style-type: none"> Student's performance is shown in a line graph displaying Score (y-axis) across each level (x-axis). |
| Priority: | <ul style="list-style-type: none"> High |
| Frequency of Use: | <ul style="list-style-type: none"> Low Frequency <ul style="list-style-type: none"> Upon User's request |
| Flow of Events: | <ol style="list-style-type: none"> System displays all Worlds in a dropdown list. User selects a World from the dropdown list. System fetches information of the Student's play data for the selected World from the database. System displays a line graph of "Student's Performance (Score) by World's Topics". |
| Alternative Flows: | <u>6.2. AC.1 User changes the Chapter to display data for</u> <ol style="list-style-type: none"> User selects another Chapter from the dropdown list. System will return to Main Flow of Event Step 3. |
| Exceptions: | N/A |
| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | N/A |
| Notes and Issues: | N/A |

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| Use Case ID: | 7.0 | | |
| Use Case Name: | View User Created Levels | | |
| Created By: | Ong Wei Hua | Last Updated By: | Low Yu Benedict |
| Date Created: | 07/09/2019 | Date Last Updated: | 12/12/2019 |

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| Actor: | <ul style="list-style-type: none"> Student (initiating actor) |
| Description: | Display the student created levels. |
| Preconditions: | <ul style="list-style-type: none"> Students selects “User Creations”. |
| Postconditions: | <ul style="list-style-type: none"> Student is brought to the User Created Levels page. Student can do any of the following: <ol style="list-style-type: none"> Select a User Created Level to invoke Use Case 7.1 (Play User Created Levels) Select “New Level” to invoke Use Case 7.2 (New Level) |
| Priority: | <ul style="list-style-type: none"> High |
| Frequency of Use: | <ul style="list-style-type: none"> High <ul style="list-style-type: none"> Upon Student’s request |
| Flow of Events: | <ol style="list-style-type: none"> User selects “User Creations” from Main Menu. System fetches all User Created Levels from Database. System displays all User Created Levels. |
| Alternative Flows: | <p><u>7.0.AC.1: Student exits the ‘View User Created Levels’ Screen</u></p> <ol style="list-style-type: none"> Student press the ‘Back’ button on the phone. System return Student back to the main menu. <p><u>7.0.AC.2: No User Created Levels yet</u></p> <ol style="list-style-type: none"> View User Created Levels page does not show any titles. |
| Exceptions: | N/A |
| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | N/A |

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| Notes and Issues: | N/A |
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| Use Case ID: | 7.1 | | |
| Use Case Name: | Play User Created Levels | | |
| Created By: | Ong Wei Hua | Last Updated By: | Low Yu Benedict |
| Date Created: | 07/09/2019 | Date Last Updated: | 12/11/2019 |

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| Actor: | <ul style="list-style-type: none"> Student (initiating actor) |
| Description: | Allows the Student to play user created levels in the game application |
| Preconditions: | <ul style="list-style-type: none"> Student must have selected a User Created Level. |
| Postconditions: | <ul style="list-style-type: none"> User enters selected user created level. Winning selected round invokes Use Case 8.1.2.1(Complete Level) and redirects to Use Case 7.0 Losing selected round invokes Use Case 8.1.2.2 (Fail Level) and redirects to Use Case 7.0 |
| Priority: | <ul style="list-style-type: none"> High |
| Frequency of Use: | <ul style="list-style-type: none"> High <ul style="list-style-type: none"> Upon Student's request. |
| Flow of Events: | 1. User enters and plays the level. |
| Alternative Flows: | N/A |
| Exceptions: | N/A |
| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | N/A |
| Notes and Issues: | N/A |

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| Use Case ID: | 7.2 | | |
| Use Case Name: | Create Levels | | |
| Created By: | Ong Wei Hua | Last Updated By: | Low Yu Benedict |
| Date Created: | 07/09/2019 | Date Last Updated: | 12/11/2019 |

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| Actor: | <ul style="list-style-type: none"> Student (initiating actor) |
| Description: | Allows the User to create levels in the game application |
| Preconditions: | <ul style="list-style-type: none"> Student must have selected 'New Level'. |
| Postconditions: | <ul style="list-style-type: none"> User creates a level. |
| Priority: | <ul style="list-style-type: none"> High |
| Frequency of Use: | <ul style="list-style-type: none"> Medium <ul style="list-style-type: none"> Upon Student's request |
| Flow of Events: | <ol style="list-style-type: none"> System directs User to the Create Level page. User enters the Title and Description User sets the question and options. Student selects the correct option for the questions. Return to Flow of Events Step 2, until five questions are created. Student clicks on the 'Create' button. System checks that all fields are entered, and all questions have an answer. System saves the user created level. System redirects the User back to 'View User Created Level' page. |
| Alternative Flows: | <p><u>7.1.AC.1 User selects 'Cancel' at confirmation prompt:</u></p> <ol style="list-style-type: none"> System returns student back to 'Create Level' screen with the questions set. <p><u>7.1.AC.2 Student pressed 'Back' button on phone:</u></p> <ol style="list-style-type: none"> System return student back to main menu <p><u>7.1.AC.3 Student selects "Create" with missing field</u></p> <ol style="list-style-type: none"> System prompts with error message "Missing Fields and/or Answer(s)" |
| Exceptions: | N/A |
| Includes: | N/A |

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| Special Requirements: | N/A |
| Assumptions: | N/A |
| Notes and Issues: | N/A |

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| Use Case ID: | 8.0 | | |
| Use Case Name: | Select World | | |
| Created By: | Ong Wei Hua | Last Updated By: | Marcus Tang Zi Yang |
| Date Created: | 07/09/2019 | Date Last Updated: | 13/11/2019 |

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| Actor: | <ul style="list-style-type: none"> Student (initiating actor) |
| Description: | User selects a world (Chapter) to play. |
| Preconditions: | <ul style="list-style-type: none"> User selected “Play Game”. |
| Postconditions: | <ul style="list-style-type: none"> User enters the selected World. Levels displayed for user selection. |
| Priority: | <ul style="list-style-type: none"> High |
| Frequency of Use: | <ul style="list-style-type: none"> High <ul style="list-style-type: none"> Whenever a Student wishes to play the game. Whenever a Student wishes to change World. |
| Flow of Events: | <ol style="list-style-type: none"> User selects “Play Game” from the Main Menu. User selects World he wishes to play. System checks if User has unlocked the World. User enters World if user has unlocked it. |
| Alternative Flows: | <u>8.0.AC.1 User has not unlocked the World yet:</u> <ol style="list-style-type: none"> Message appears “ World not unlocked yet.” for 1 second. System redirect to Flow of Events Step 1. |
| Exceptions: | N/A |
| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | N/A |
| Notes and Issues: | N/A |

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| Use Case ID: | 8.1 | | |
| Use Case Name: | Select Level | | |
| Created By: | Ong Wei Hua | Last Updated By: | Marcus Tang Zi Yang |
| Date Created: | 07/09/2019 | Date Last Updated: | 13/11/2019 |

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| Actor: | <ul style="list-style-type: none"> Student (initiating actor) |
| Description: | User selects the Level that he/she wishes to play. |
| Preconditions: | <ul style="list-style-type: none"> User has selected a world. |
| Postconditions: | <ul style="list-style-type: none"> User enters selected level and invokes Use Case 8.1.2 (“Play Level”). |
| Priority: | <ul style="list-style-type: none"> High |
| Frequency of Use: | <ul style="list-style-type: none"> High <ul style="list-style-type: none"> Whenever a Student wishes to play a new Level. Whenever Student wishes to change Level. |
| Flow of Events: | <ol style="list-style-type: none"> User selects Level in the level selection screen. System checks if the Level has been unlocked by the User. System fetches level information, including game questions for use in Use Case 8.1.2. Internal Game Model updated with question information. User enters the Level information page. Information page includes several items : <ol style="list-style-type: none"> World-Level (i.e. 2-3, Third Level of Second World) Topic Name Leaderboard Stars unlocked User selects the “Play” button. System enters “Play Level”, invoking Use Case 8.1.2 (“Play Level”) |
| Alternative Flows: | <p><u>8.1.AC.1 User has not unlocked the Level yet:</u></p> <ol style="list-style-type: none"> Message toast appears “ Level not unlocked yet.” for 2 seconds. User selects another Level. <p><u>8.1.AC.2 User selects a different level:</u></p> <ol style="list-style-type: none"> The user exits the information page. User selects a different level. |

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| | 6. Resume to step 3. |
| Exceptions: | N/A |
| Includes: | N/A |
| Special Requirements: | User required to have unlocked the Level. |
| Assumptions: | N/A |
| Notes and Issues: | N/A |

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| Use Case ID: | 8.1.2 | | |
| Use Case Name: | Play Level | | |
| Created By: | Ong Wei Hua | Last Updated By: | Marcus Tang Zi Yang |
| Date Created: | 07/09/2019 | Date Last Updated: | 13/11/2019 |

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| Actor: | <ul style="list-style-type: none"> Student (initiating actor) |
| Description: | <p>User enters the maze for selected Level.</p> <ul style="list-style-type: none"> Failing the Level invokes Use Case 8.1.2.2 (Fail Level). Completing the Level invokes Use Case 8.1.2.1 (Complete Level). |
| Preconditions: | N/A |
| Postconditions: | <ul style="list-style-type: none"> User enters the Maze. |
| Priority: | <ul style="list-style-type: none"> High |
| Frequency of Use: | <ul style="list-style-type: none"> High <ul style="list-style-type: none"> Whenever a User wishes to play a Level. |
| Flow of Events: | <ol style="list-style-type: none"> System creates maze using recursive backtracking. System creates obstacles using random generation. User explores the maze. When user encounters obstacles, questions are posed through interaction with the Game Model. Game ends when user: <ol style="list-style-type: none"> Completes the level by removing all obstacles (Use Case 8.1.2.1) Fails the level by running out of time (Use Case 8.1.2.2). |
| Alternative Flows: | N/A |
| Exceptions: | N/A |
| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | System has already checked previously that the User has already unlocked selected Level. |

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| Notes and Issues: | N/A |
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| Use Case ID: | 8.1.2.1 | | |
| Use Case Name: | Complete Level | | |
| Created By: | Ong Wei Hua | Last Updated By: | Marcus Tang Zi Yang |
| Date Created: | 07/09/2019 | Date Last Updated: | 13/11/2019 |

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| Actor: | <ul style="list-style-type: none"> Student (initiating actor) |
| Description: | User completes a Level and is greeted with a level complete pop up. |
| Preconditions: | <ul style="list-style-type: none"> User has completed a Level successfully. |
| Postconditions: | <ul style="list-style-type: none"> Level complete screen pops up, requiring User acknowledgement. User game data saved to database. |
| Priority: | <ul style="list-style-type: none"> High |
| Frequency of Use: | <ul style="list-style-type: none"> High |
| Flow of Events: | <ol style="list-style-type: none"> User completes a maze successfully. Level complete pops up with two options and information <ol style="list-style-type: none"> Options <ol style="list-style-type: none"> Retry Level Next Level Information <ol style="list-style-type: none"> Stars Achieved Class Ranking Global Ranking User Selects "Return to Island". System invokes Use Case 8.1 (Select Level) for user to select next level. |
| Alternative Flows: | N/A |
| Exceptions: | N/A |
| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | N/A |

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| Notes and Issues: | N/A |
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| Use Case ID: | 8.1.2.2 | | |
| Use Case Name: | Fail Level | | |
| Created By: | Ong Wei Hua | Last Updated By: | Marcus Tang Zi Yang |
| Date Created: | 07/09/2019 | Date Last Updated: | 13/11/2019 |

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| Actor: | <ul style="list-style-type: none"> Student (initiating actor) |
| Description: | Student fails the level as a result of running out of time. |
| Preconditions: | <ul style="list-style-type: none"> User was in the level but ran out of time. |
| Postconditions: | <ul style="list-style-type: none"> User will be shown a level failed screen. User selecting “Back to Island” invokes Use Case 8.1 (Select Level). <ul style="list-style-type: none"> Note: Island refers to the World. User selecting “Get Help” invokes Use Case <ul style="list-style-type: none"> Note: Get Help refers to View Discussion 10.0 (View Discussion Board). |
| Priority: | <ul style="list-style-type: none"> Low |
| Frequency of Use: | <ul style="list-style-type: none"> High <ul style="list-style-type: none"> Fail Level is activated whenever a User loses a level. |
| Flow of Events: | <ol style="list-style-type: none"> User hits the maze boundary. Popup message appears giving three options <ol style="list-style-type: none"> Back to Island Get Help User selects Back to Island. User is redirected to the Select Level page (Use Case 8.1). |
| Alternative Flows: | <u>8.1.2.2.AC.2 User selects Get Help:</u> <ol style="list-style-type: none"> User selects Get Help. User is redirected to the View Discussion page. |
| Exceptions: | N/A |
| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | N/A |

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| Notes and Issues: | N/A |
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| Use Case ID: | 8.2 | | |
| Use Case Name: | Buy Powerup | | |
| Created By: | Ong Wei Hua | Last Updated By: | Marcus Tang Zi Yang |
| Date Created: | 07/09/2019 | Date Last Updated: | 13/11/2019 |

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| Actor: | <ul style="list-style-type: none"> Student (initiating actor) |
| Description: | Allows the Avatar to purchase in-game powerup. |
| Preconditions: | <ul style="list-style-type: none"> User is in Select Level screen and selects the Powerup bar. |
| Postconditions: | <ul style="list-style-type: none"> Powerup is purchased and added to the User's inventory. |
| Priority: | <ul style="list-style-type: none"> Low |
| Frequency of Use: | <ul style="list-style-type: none"> Low <ul style="list-style-type: none"> Only when the User wishes to buy Powerups. |
| Flow of Events: | <ol style="list-style-type: none"> User is redirected to the powerup purchasing menu. User selects powerup to purchase. System checks if the User has sufficient purchasing currency. User successfully purchases the powerup. Powerup is added to the powerup bar and updates the powerup count. |
| Alternative Flows: | <u>8.1.1.AC.1 User does not have sufficient currency:</u> <ol style="list-style-type: none"> The System discovers User has insufficient purchasing currency. Message appears "Insufficient Currency" for 2 seconds. User is returned to the powerup purchasing menu. |
| Exceptions: | N/A |
| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | N/A |
| Notes and Issues: | N/A |

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| Use Case ID: | 8.2.1 | | |
| Use Case Name: | Use Powerup | | |
| Created By: | Ong Wei Hua | Last Updated By: | Marcus Tang Zi Yang |
| Date Created: | 07/09/2019 | Date Last Updated: | 13/11/2019 |

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| Actor: | <ul style="list-style-type: none"> Student (initiating actor) |
| Description: | The User activates a powerup during a quiz. |
| Preconditions: | <ul style="list-style-type: none"> User must be in the middle of a quiz. |
| Postconditions: | <ul style="list-style-type: none"> Powerup is activated. |
| Priority: | <ul style="list-style-type: none"> Low |
| Frequency of Use: | <ul style="list-style-type: none"> Low <ul style="list-style-type: none"> Only activated when User requires the powerup (powerup is not easy to acquire). |
| Flow of Events: | <ol style="list-style-type: none"> User selects powerup from the powerup bar. System confirms User's selected powerup count > 0. Powerup count decreases by 1. Powerup effect is activated. |
| Alternative Flows: | <u>8.2.1.AC.1 User does not have sufficient powerup:</u> <ol style="list-style-type: none"> The System discovers User's selected powerup count is <= 0. Powerup icon shall shake for 0.5 seconds. <ol style="list-style-type: none"> Game screen shall remain on the quiz. |
| Exceptions: | N/A |
| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | N/A |
| Notes and Issues: | N/A |

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|----------------|------------------|--------------------|---------------------|
| Use Case ID: | 9.0 | | |
| Use Case Name: | View Leaderboard | | |
| Created By: | Ong Wei Hua | Last Updated By: | Marcus Tang Zi Yang |
| Date Created: | 07/09/2019 | Date Last Updated: | 13/11/2019 |

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| Actor: | <ul style="list-style-type: none"> Student (initiating actor) |
| Description: | Leaderboard shows the top five Students with the highest Score, within the User's Class, for each of the Worlds and Levels. |
| Preconditions: | <ul style="list-style-type: none"> User selects "View Leaderboard" on the Main Menu screen of the system |
| Postconditions: | <ul style="list-style-type: none"> Leaderboard of the top five Students with the highest score, within the User's class, for the selected world (chapter) is displayed. User can select the "Global" tab to invoke Use Case 9.1 (View Global Ranking) |
| Priority: | <ul style="list-style-type: none"> High |
| Frequency of Use: | <ul style="list-style-type: none"> Medium <ul style="list-style-type: none"> Upon User's request |
| Flow of Events: | <ol style="list-style-type: none"> System retrieves data of the top five Students, within the User's Class, with the highest score for each of the Worlds. User selects a World to view the leaderboard for. System displays the top five Students for the selected World to the User in the form of a leaderboard. System retrieves data of the top five Students, within the User's Class, with the highest score for each of the Levels. User selects a Level to view the leaderboard for. System displays the top five Students for the selected Level to the User in the form of a leaderboard. If user is not in top five, user's score will be displayed at the bottom. |
| Alternative Flows: | <p><u>9.0.AC.1 User changes the World to view leaderboard for.</u></p> <ol style="list-style-type: none"> User select another World to view the leaderboard for. System redisplay the top five Students for the selected World to the User in the form of a leaderboard. If user is not in top five, user's score will be displayed at the bottom. |

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| Exceptions: | N/A |
| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | N/A |
| Notes and Issues: | N/A |

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| Use Case ID: | 9.1 | | |
| Use Case Name: | View Global Ranking | | |
| Created By: | Ong Wei Hua | Last Updated By: | Marcus Tang Zi Yang |
| Date Created: | 07/09/2019 | Date Last Updated: | 13/11/2019 |

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| Actor: | <ul style="list-style-type: none"> Student (initiating actor) |
| Description: | Leaderboard shows the top five Students with the highest score for each of the Worlds. |
| Preconditions: | <ul style="list-style-type: none"> The User has selected the “Global Tab” in Use Case 9.0 (View Class Leaderboard). |
| Postconditions: | <ul style="list-style-type: none"> Leaderboard of the top five Students in the cohort with the highest performance for the selected world is displayed. User can select the “Class” tab to invoke Use Case 9.0 (View Class Ranking) |
| Priority: | <ul style="list-style-type: none"> Low |
| Frequency of Use: | <ul style="list-style-type: none"> Medium <ul style="list-style-type: none"> Upon User’s Request |
| Flow of Events: | <ol style="list-style-type: none"> System retrieves data of the top five the Students with the highest score for each of the Worlds. User selects a World to view the leaderboard for. System displays the top five Students for the selected World to the User in the form of a leaderboard. If user is not in top five, user’s score will be displayed at the bottom. |
| Alternative Flows: | <p><u>9.1.AC.1 User changes the World to view leaderboard for.</u></p> <ol style="list-style-type: none"> User select another World to view the leaderboard for. System redisplay the top five Students for the selected World to the User in the form of a leaderboard. If user is not in top five, user’s score will be displayed at the bottom. |
| Exceptions: | N/A |

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| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | N/A |
| Notes and Issues: | N/A |

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| Use Case ID: | 10.0 | | |
| Use Case Name: | View Discussion Board | | |
| Created By: | Ong Wei Hua | Last Updated By: | Low Yu Benedict |
| Date Created: | 07/09/2019 | Date Last Updated: | 19/09/2019 |

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| Actor: | <ul style="list-style-type: none"> • Student (initiating actor) • Teacher (initiating actor) |
| Description: | Discussion board displays all the user-created discussions |
| Preconditions: | <ul style="list-style-type: none"> • User selects “View Discussion Board” on the Main Menu screen of the system. |
| Postconditions: | <ul style="list-style-type: none"> • All user-created discussions are displayed to the User. • User can do any of the following: <ol style="list-style-type: none"> 1. Select “New Discussion” to invoke Use Case 10.1 (Post Discussion) 2. Select a Discussion to invoke Use Case 10.2 (Viewed Discussion Board) |
| Priority: | <ul style="list-style-type: none"> • High |
| Frequency of Use: | <ul style="list-style-type: none"> • Medium <ul style="list-style-type: none"> ○ Upon User’s Request |
| Flow of Events: | <ol style="list-style-type: none"> 1. System retrieves all users’ discussions from the database. 2. System displays the retrieved users’ discussions to the user.. 3. User select the “Left” and “Right” button to scroll between discussions. |
| Alternative Flows: | <u>10.0.AC.1 No Discussions to display</u> <ol style="list-style-type: none"> 1. System is unable to retrieve any users’ discussions from the database 2. System must display an error message, “No Discussions have been created yet”. |
| Exceptions: | N/A |

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| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | N/A |
| Notes and Issues: | N/A |

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| Use Case ID: | 10.1 | | |
| Use Case Name: | Post Discussion | | |
| Created By: | Ong Wei Hua | Last Updated By: | Ong Wei Hua |
| Date Created: | 07/09/2019 | Date Last Updated: | 18/09/2019 |

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| Actor: | <ul style="list-style-type: none"> • Student (initiating actor) • Teacher (initiating actor) |
| Description: | Allows the student to post a discussion |
| Preconditions: | <ul style="list-style-type: none"> • User selects “New Discussion” in Use Case 10.0 (View Discussion Board) |
| Postconditions: | <ul style="list-style-type: none"> • User successfully posted his/her discussion. |
| Priority: | <ul style="list-style-type: none"> • High |
| Frequency of Use: | <ul style="list-style-type: none"> • Medium <ul style="list-style-type: none"> ◦ Upon User’s Request |
| Flow of Events: | <ol style="list-style-type: none"> 1. User creates a new discussion thread for his/her question. 2. User clicks on ‘Post Discussion’ button. 3. System prompts the User to confirm the choice. 4. Student clicks on ‘Confirm’ button. 5. System posts the discussion thread on the discussion forum. 6. System redirects User to the newly posted discussion thread. |
| Alternative Flows: | <u>10.1.AC.1 Student click on ‘Save Draft’ button:</u> <ol style="list-style-type: none"> 4. System saves a copy of the discussion thread in the draft 5. System redirects student back to the draft discussion thread <u>10.1.AC.2 Student click on ‘Cancel’ button:</u> <ol style="list-style-type: none"> 2. System redirects student back to ‘View Discussion’ screen |
| Exceptions: | N/A |
| Includes: | N/A |
| Special Requirements: | N/A |

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| Assumptions: | N/A |
| Notes and Issues: | N/A |

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| Use Case ID: | 10.2 | | |
| Use Case Name: | View Detailed Discussion | | |
| Created By: | Ong Wei Hua | Last Updated By: | Ong Wei Hua |
| Date Created: | 07/09/2019 | Date Last Updated: | 18/09/2019 |

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| Actor: | <ul style="list-style-type: none"> Student (initiating actor) |
| Description: | Allow students to view details of the discussion thread posted on the discussion board |
| Preconditions: | <ul style="list-style-type: none"> Student selects 'View More'. |
| Postconditions: | <ul style="list-style-type: none"> Detailed discussion of a discussion thread will be displayed when the discussion thread is clicked on |
| Priority: | <ul style="list-style-type: none"> High |
| Frequency of Use: | <ul style="list-style-type: none"> Medium <ul style="list-style-type: none"> Upon Student's request |
| Flow of Events: | <ol style="list-style-type: none"> User selects and click on the discussion thread that User wants to view. System retrieve the details of the discussion thread. System displays the details of the discussion thread on the screen. |
| Alternative Flows: | N/A |
| Exceptions: | N/A |
| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | N/A |
| Notes and Issues: | N/A |

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|----------------|-------------|--------------------|-------------|
| Use Case ID: | 10.2.1 | | |
| Use Case Name: | Comment | | |
| Created By: | Ong Wei Hua | Last Updated By: | Ong Wei Hua |
| Date Created: | 07/09/2019 | Date Last Updated: | 18/09/2019 |

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| Actor: | <ul style="list-style-type: none"> Student (initiating actor) |
| Description: | Allows the student to make comments on the discussion thread |
| Preconditions: | <ul style="list-style-type: none"> Student must be logged into the system Student must be viewing a discussion thread in detail |
| Postconditions: | <ul style="list-style-type: none"> Student makes a comment on the discussion thread successfully. Use Case 10.2 (View Detailed Discussion) is invoked. |
| Priority: | <ul style="list-style-type: none"> High |
| Frequency of Use: | <ul style="list-style-type: none"> Medium <ul style="list-style-type: none"> Upon Student's request |
| Flow of Events: | <ol style="list-style-type: none"> User clicks on 'Comment' button. User types the comment in the text field. User clicks on 'Post Comment' button. System posts the comment onto the discussion thread. System invokes Use Case 10.2 (View Detailed Discussion) and returns the User to the discussion thread with the comment posted. |
| Alternative Flows: | <u>10.2.1.AC.1 Student clicks 'Cancel' button:</u> <ol style="list-style-type: none"> User clicks on 'Cancel' button. Use Case 10.2 (View Detailed Discussion) is invoked, and System redirects User back to discussion thread. |
| Exceptions: | N/A |
| Includes: | N/A |
| Special Requirements: | N/A |
| Assumptions: | N/A |

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| Notes and Issues: | N/A |
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