

# Chinese Learning Platform Project Use Cases

Version 2.0

## Revision History

Date	Version	Description	Author
10/24/2022	2.0	Revision of Version 1.2 and add new Use Cases	Quynh Dong, Chase Lennartson, Vipul Lade, Bao Nguyen
02/03/2023	2.1	Revision of 2.0 and add new Use Cases	Quynh Dong, Chase Lennartson, Bao Nguyen
04/15/23	2.2	Final version with additional Use Cases	Chase Lennartson

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### Create a Section

UC ID and Name:	UC-01: Teacher creates Section																
Created By:	Quynh Dong	Date Created:	02/03/23														
Primary Actor:	Teacher	Secondary Actors:															
Trigger:	The Teacher indicates to create a new section.																
Description:	The Teacher wants to create a new section, so that the teacher can teach course material as well as allow students to enroll in the class.																
Preconditions:	PRE-1. The user is logged into the system as a Teacher.																
Postconditions:	POST-1. The new section is stored in the System. POST-2. Students can join a section with the section code provided.																
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. The User indicates to create a new Section.</li> <li>2. The System asks the Teacher to enter the name of the new Section.</li> <li>3. The Teacher confirms to add the Section.</li> <li>4. The System gives the Teacher the code for the Section.</li> <li>5. The System saves the new Section and informs the Teacher that this Section has been created.</li> <li>6. Use case ends.</li> </ol>																
Extensions:	<b>2a. Input validation rule violation</b> 4a1. The System alerts the Teacher that an input validation rule is violated and displays the nature and location of the error. 4a2. The User corrects the mistake and returns to step 2 of normal flow.																
Priority:	High																
Frequency of Use:	Approximately 20 users, each has 2-3 usages per year.																
Business Rules:	Teacher is the only user allowed to create the section																
Associated Information:	Details: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Property name</th> <th>Data type</th> <th>Editability</th> <th>Validation rule</th> <th>Effect of change</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>Section Name</td> <td>String</td> <td>Yes</td> <td>Required</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> Duplication detection rules: <ul style="list-style-type: none"> <li>• Similar Section name</li> </ul> Notification:           Text: <ul style="list-style-type: none"> <li>• Checks whether the specified section name is a valid section name</li> </ul> Numeric Value: <ul style="list-style-type: none"> <li>• Checks whether the specified section code is a valid section code</li> </ul> The User shall be able to cancel the use case at any time prior to submitting it.					Property name	Data type	Editability	Validation rule	Effect of change	Reference to glossary	Section Name	String	Yes	Required	N/A	N/A
Property name	Data type	Editability	Validation rule	Effect of change	Reference to glossary												
Section Name	String	Yes	Required	N/A	N/A												
Related Use Cases	<u>UC-02: Student joins Section</u>																
Assumptions:	The class is active.																

Open Issues:	
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### Student joins Section

UC ID and Name:	UC-02: Student joins Section																
Created By:	Bao Nguyen	Date Created:	02/05/23														
Primary Actor:	Students																
Trigger:	The Student indicates to join a new section.																
Description:	The Student wants to join a new section so that the student can access the book's material as well as do homework and other related access																
Preconditions:	PRE-1. The user is logged into the system as a Student. PRE-2. Achieve the section code to join the Section which is given by the Teacher or via purchased																
Postconditions:	POST-1. The student's information will be stored in the student list of the joined Section POST-2. The section's data will be stored in the section list of this Student																
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. The User indicates to join a new Section.</li> <li>2. The User inputs the section code into the request field</li> <li>3. The User confirms joining the new section</li> <li>4. The System informs that the user has successfully joined section</li> <li>5. The System redirects the user to the Section's lesson list</li> <li>6. The use case ends</li> </ol>																
Extensions:	<b>7. Input validation rule violation</b> 7a. The System alerts the user if the code is incorrect 7b. The User corrects the mistake and returns to step 2 of normal flow.																
Priority:	High																
Frequency of Use:	Approximately 20 users, each has 1 usage per year.																
Business Rules:	Student is the only user allowed to join the section																
Associated Information:	Details: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Property name</th> <th>Data type</th> <th>Editability</th> <th>Validation rule</th> <th>Effect of change</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>Section-Code</td> <td>String</td> <td>No</td> <td>Required</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p>Notification:</p> <ul style="list-style-type: none"> <li>• Notifies student has joined a section</li> </ul> <p>Numeric Value:</p> <ul style="list-style-type: none"> <li>• Checks whether the specified section code is a valid section code</li> </ul> <p>Text:</p> <ul style="list-style-type: none"> <li>• Checks whether the joined section is correctly shown for the user</li> </ul>					Property name	Data type	Editability	Validation rule	Effect of change	Reference to glossary	Section-Code	String	No	Required	N/A	N/A
Property name	Data type	Editability	Validation rule	Effect of change	Reference to glossary												
Section-Code	String	No	Required	N/A	N/A												
Related Use Cases	<u>UC-06: View a Lesson</u>																
Assumptions:	The class is active.																
Open Issues:																	

### View Student list in Corresponded Section

UC ID and Name:	UC-03: View student list in corresponding section																							
Created By:	Bao Nguyen	Date Created:	02/05/23																					
Primary Actor:	Teacher	Secondary Actors:																						
Trigger:	The Teacher indicates to view the details of students in Section																							
Description:	The Teacher wants to view the details of a student list																							
Preconditions:	PRE-1. The user is logged into the system as a Teacher.																							
Postconditions:	POST-1. The details of the specified classlist are displayed to the Teacher																							
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. The Teacher indicates to view the list of students in a section.</li> <li>2. The Teacher finds a list of a class through the “Classlist” tab in each lesson detail</li> <li>3. The System displays the details of the student list..</li> <li>4. The Teacher views, edits, or sends the email of the student or for everyone.</li> <li>5. Use case ends.</li> </ol>																							
Extensions:																								
Priority:	High																							
Frequency of Use:	Approximately 1-2 teachers, each has 5-6 usages per week.																							
Associated Information:	<table border="1"> <thead> <tr> <th colspan="5">Details:</th> </tr> <tr> <th>Property name</th> <th>Data type</th> <th>Editability</th> <th>Security/access concerns</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>Student’s email</td> <td>String</td> <td>No</td> <td>N/A</td> <td>N/A</td> </tr> <tr> <td>Student’s name</td> <td>String</td> <td>No</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table>				Details:					Property name	Data type	Editability	Security/access concerns	Reference to glossary	Student’s email	String	No	N/A	N/A	Student’s name	String	No	N/A	N/A
Details:																								
Property name	Data type	Editability	Security/access concerns	Reference to glossary																				
Student’s email	String	No	N/A	N/A																				
Student’s name	String	No	N/A	N/A																				
Related Use Cases:	UC6: View a Lesson																							
Assumptions:	Section has students enrolled already																							
Open Issues:																								

### Create a Lesson

UC ID and Name:	UC-04: Create a Lesson		
Created By:	Quynh Dong	Date Created:	02/03/2023

Primary Actor:	Publisher	Secondary Actors:																									
Trigger:	The Publisher indicates to create a new Lesson																										
Description:	The Publisher wants to create a new Lesson, so that Lesson can be added to the System																										
Preconditions:	PRE-1. The Publisher is logged into the system. PRE-2. The Publisher has the “create” privilege. See Business Rules of this use case.																										
Postconditions:	POST-1. The new Lesson is stored in the System.																										
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. The Publisher indicates to create a new Lesson.</li> <li>2. The System asks the Publisher to enter the details of this new Lesson.</li> <li>3. The Publisher enters the details of this new Lesson and confirms she has finished.</li> <li>4. The System validates the Publisher’s inputs according to “Details” defined in Associated Information of this use case.</li> <li>5. The System validates that the creation of the new Lesson will not duplicate any existing Lesson according to “Duplication detection rules” defined in Associated Information of this use case.</li> <li>6. The System saves the new Lesson and informs the Publisher that this Lesson has been created.</li> <li>7. Use case ends.</li> </ol>																										
Extensions:	<p><b>4a. Input validation rule violation</b></p> <p>4a1. The System alerts the Publisher that an input validation rule is violated and displays the nature and location of the error.</p> <p>4a2. The Publisher corrects the mistake and returns to step 4 of normal flow.</p> <p><b>5a. The System finds possible duplicates of existing Lesson number</b></p> <p>5a1. The System alerts the Publisher that the Lesson she is trying to create already exists in the System.</p> <p>5a2. The User either chooses to correct the mistake and returns to step 4 of normal flow or chooses to terminate the use case.</p>																										
Priority:	High																										
Frequency of Use:	Approximately one user, average of 10 usage.																										
Business Rules:	Publisher is the only user allowed to create the Lesson																										
Associated Information:	<p>Details:</p> <table border="1"> <thead> <tr> <th>Property name</th> <th>Data type</th> <th>Editability</th> <th>Validation rule</th> <th>Effect of change</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>Lesson Number</td> <td>Integer</td> <td>Yes</td> <td>Required</td> <td>N/A</td> <td>2.9</td> </tr> <tr> <td>Lesson Name</td> <td>String</td> <td>Yes</td> <td>Required</td> <td>N/A</td> <td>2.9</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>Duplication detection rules:</p> <ul style="list-style-type: none"> <li>● Lesson Number</li> </ul> <p>The User shall be able to cancel the use case at any time prior to submitting it.</p>			Property name	Data type	Editability	Validation rule	Effect of change	Reference to glossary	Lesson Number	Integer	Yes	Required	N/A	2.9	Lesson Name	String	Yes	Required	N/A	2.9						
Property name	Data type	Editability	Validation rule	Effect of change	Reference to glossary																						
Lesson Number	Integer	Yes	Required	N/A	2.9																						
Lesson Name	String	Yes	Required	N/A	2.9																						
Related Use Cases																											
Assumptions:																											
Open Issues:																											

### Create a Lesson Content

UC ID and Name:	UC-05: Create a Lesson Content		
Created By:	Quynh Dong	Date Created:	02/03/2023
Primary Actor:	Publisher	Secondary Actors:	
Trigger:	The Publisher indicates to create a new Lesson Content		
Description:	The Publisher wants to create a new Lesson Content, so that Lesson Content can be added to the System		
Preconditions:	PRE-1. The Publisher is logged into the system.		

	PRE-2. The Publisher has the “create” privilege. See Business Rules of this use case.																		
Postconditions:	POST-1. The new Lesson content is stored in the System.																		
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. The Publisher indicates to create a new Lesson Content.</li> <li>2. The System asks the Publisher to enter the details of this new Lesson.</li> <li>3. The Publisher enters the details of this new Lesson Content and confirms she has finished.</li> <li>4. The System validates the Publisher’s inputs according to “Details” defined in Associated Information of this use case.</li> <li>5. The System saves the new Lesson content and displays vocabulary list that is generated from content.</li> <li>6. Use case ends.</li> </ol>																		
Extensions:	<b>4a. Input validation rule violation</b> 4a1. The System alerts the Publisher that an input validation rule is violated and displays the nature and location of the error. 4a2. The Publisher corrects the mistake and returns to step 4 of normal flow.																		
Priority:	High																		
Frequency of Use:	Approximately one user, average of 10 usage.																		
Business Rules:	Publisher is the only user allowed to create the Lesson content																		
Associated Information:	Details: <table border="1"> <thead> <tr> <th>Property name</th> <th>Data type</th> <th>Editability</th> <th>Validation rule</th> <th>Effect of change</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>Title</td> <td>String</td> <td>Yes</td> <td>Required</td> <td>N/A</td> <td>2.9.1</td> </tr> <tr> <td>Content</td> <td>String (html)</td> <td>Yes</td> <td>Required</td> <td>N/A</td> <td>2.9.1</td> </tr> </tbody> </table> <p>The User shall be able to cancel the use case at any time prior to submitting it.</p>	Property name	Data type	Editability	Validation rule	Effect of change	Reference to glossary	Title	String	Yes	Required	N/A	2.9.1	Content	String (html)	Yes	Required	N/A	2.9.1
Property name	Data type	Editability	Validation rule	Effect of change	Reference to glossary														
Title	String	Yes	Required	N/A	2.9.1														
Content	String (html)	Yes	Required	N/A	2.9.1														
Related Use Cases	<u>UC-09: Integrate Vocabulary</u>																		
Assumptions:																			
Open Issues:																			

### View a Lesson

UC ID and Name:	UC-06: View a Lesson		
Created By:	Quynh Dong	Date Created:	02/03/2023
Primary Actor:	All Users	Secondary Actors:	
Trigger:	The User indicates to view the details of a Lesson.		
Description:	The User wants to view the details of a Lesson, so that she can access all lesson materials.		
Preconditions:	PRE-1. The User is logged into the System. PRE-2. The User has the “view” privilege. See Business Rules of this use case.		
Postconditions:	POST-1. The materials of the specified lesson are displayed to the User.		
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. The User chooses a Lesson to view.</li> <li>2. The System retrieves and displays the Lesson Content according to “Details” defined in Associated Information.</li> <li>3. The User indicates to view the Book tab.</li> <li>4. The User views the Lesson content displayed.</li> <li>5. The User chooses red words indicating a new vocab or goes to Step 7.</li> <li>6. The System shows a pop-up containing the details of the chosen vocab.</li> <li>7. The User indicates to view the Pinyin tab or goes to Step 9.</li> <li>8. The System retrieves and displays the pinyin according to “Details” defined in Associated Information.</li> <li>9. The User indicates to view the Vocab tab or goes to Step 11.</li> <li>10. The System retrieves and displays the vocabs according to “Details” defined in Associated Information.</li> <li>11. The User indicates to view the Grammar tab or goes to Step 13.</li> <li>12. The System retrieves and displays the grammar according to “Details” defined in Associated Information.</li> </ol>		

	13. Use case ends.																																			
Extensions:																																				
Priority:	High																																			
Frequency of Use:	Approximately 1000 users, average of 4,5 usages per week.																																			
Business Rules:																																				
Associated Information:	<table border="1"> <thead> <tr> <th colspan="5">Details:</th> </tr> <tr> <th>Property name</th> <th>Data type</th> <th>Editability</th> <th>Security/access concerns</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>Title</td> <td>String</td> <td>No</td> <td>User</td> <td>2.9.1</td> </tr> <tr> <td>Content</td> <td>String(html)</td> <td>No</td> <td>User</td> <td>2.9.1</td> </tr> <tr> <td>Vocab</td> <td>Object</td> <td>No</td> <td>User</td> <td>2.4.2</td> </tr> <tr> <td>Pinyin</td> <td>String</td> <td>No</td> <td>User</td> <td>2.2</td> </tr> <tr> <td>Grammar</td> <td>Object</td> <td>No</td> <td>User</td> <td>2.4.1</td> </tr> </tbody> </table>	Details:					Property name	Data type	Editability	Security/access concerns	Reference to glossary	Title	String	No	User	2.9.1	Content	String(html)	No	User	2.9.1	Vocab	Object	No	User	2.4.2	Pinyin	String	No	User	2.2	Grammar	Object	No	User	2.4.1
Details:																																				
Property name	Data type	Editability	Security/access concerns	Reference to glossary																																
Title	String	No	User	2.9.1																																
Content	String(html)	No	User	2.9.1																																
Vocab	Object	No	User	2.4.2																																
Pinyin	String	No	User	2.2																																
Grammar	Object	No	User	2.4.1																																
Related Use Cases:	UC: Create a Lesson UC: Change a Lesson UC: Delete a Lesson																																			
Assumptions:																																				
Open Issues:																																				

### Change a Lesson

UC ID and Name:	UC-07: Change a Lesson																																					
Created By:	Quynh Dong	Date Created:	02/03/2023																																			
Primary Actor:	Publisher	Secondary Actors:																																				
Trigger:	The Publisher indicates to change the details of an existing Lesson.																																					
Description:	The Publisher wants to change the details of an existing Lesson.																																					
Preconditions:	PRE-1. The Publisher is logged into the System. PRE-2. The Publisher has the “change” privilege. See Business Rules of this use case.																																					
Postconditions:	POST-1. Changes made to the Lesson are stored in the System.																																					
Main Success Scenario:	<ol style="list-style-type: none"> <li>The Publisher indicates to change the details of an existing Lesson.</li> <li>The Publisher views the details of this Lesson.</li> <li>The Publisher makes changes to this Lesson until confirming that she has finished changing.</li> <li>The System validates the Publisher’s inputs according to “Details” defined in Associated Information of this use case.</li> <li>The System saves the changes and displays the updated details of this Lesson.</li> <li>Use case ends.</li> </ol>																																					
Extensions:	<b>4a. Input validation rule violation</b> 4a1. The System alerts the User that an input validation rule is violated and displays the nature and location of the error. 4a2. The User corrects the mistake and returns to step 3 of normal flow.																																					
Priority:	Medium																																					
Frequency of Use:	Approximately one user, average of 0-1 usage per month.																																					
Business Rules:	Publisher is the only user allowed to change the detail of Lesson																																					
Associated Information:	<table border="1"> <thead> <tr> <th colspan="7">Details:</th> </tr> <tr> <th>Property name</th> <th>Data type</th> <th>Editability</th> <th>Validation rule</th> <th>Effect of change</th> <th>Warning</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>Lesson Number</td> <td>String</td> <td>No</td> <td>Required</td> <td>N/A</td> <td>N/A</td> <td>2.9</td> </tr> <tr> <td>Lesson Name</td> <td>String</td> <td>Yes</td> <td>Required</td> <td>N/A</td> <td>N/A</td> <td>2.9</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>Notification:</p> <ul style="list-style-type: none"> <li>Notifies teacher and students, a lesson has been changed.</li> </ul>			Details:							Property name	Data type	Editability	Validation rule	Effect of change	Warning	Reference to glossary	Lesson Number	String	No	Required	N/A	N/A	2.9	Lesson Name	String	Yes	Required	N/A	N/A	2.9							
Details:																																						
Property name	Data type	Editability	Validation rule	Effect of change	Warning	Reference to glossary																																
Lesson Number	String	No	Required	N/A	N/A	2.9																																
Lesson Name	String	Yes	Required	N/A	N/A	2.9																																

	The User shall be able to cancel the use case at any time prior to submitting it.
Related Use Cases:	The User may first choose to <u>UC-06: View a Lesson</u> , then decide to change it.
Assumptions:	
Open Issues:	

### Delete a Lesson

UC ID and Name:	UC-08: Delete a Lesson		
Created By:	Quynh Dong	Date Created:	02/03/2023
Primary Actor:	Publisher	Secondary Actors:	
Trigger:	The Publisher indicates to delete an existing Lesson.		
Description:	The Publisher wants to delete an existing Lesson.		
Preconditions:	PRE-1. The Publisher is logged into the system. PRE-2. The Publisher has the “delete” privilege. See Business Rules of this use case.		
Postconditions:	POST-1. The Lesson is deleted from the System according to “Deletion strategy” defined in Associated Information of this use case.		
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. The Publisher indicates to delete an existing Lesson.</li> <li>2. The System displays a prompt to confirm Publisher’s intention to delete.</li> <li>3. The Publisher chooses to delete this Book.</li> <li>4. The System validates that the deletion can be carried out according to “Data integrity and deletion rules” and “Referring objects handling strategy” defined in Associated Information of this use case.</li> <li>5. The System alerts the User of the consequences of this deletion according to “Data integrity and deletion rules” defined in Associated Information of this use case, warns the User about the deletion, and asks the User to confirm.</li> <li>6. The User confirms deletion.</li> <li>7. The System deletes Book according to “Deletion strategy” and “Referring objects handling strategy” defined in Associated Information of this use case and alerts the User that this Book has been deleted.</li> <li>8. Use case ends.</li> </ol>		
Extensions:	<b>4a. Data integrity and deletion rule violation</b> 4a1. The System alerts the User that a deletion rule is violated and displays the nature of the violation. 4a2. The System prompts possible actions to resolve the violation. 4a3. Use case terminates.		
Priority:	High		
Frequency of Use:	Approximately one user, average of 1 usage per month.		
Business Rules:	Publisher is the only user allowed to delete the book		
Associated Information:	Deletion strategy: <ul style="list-style-type: none"> <li>● Physical delete: permanently remove the business domain object from the System (cannot be recovered)</li> </ul> Referring objects handling strategy: Specify what action to take in respect of the related objects of Book <ul style="list-style-type: none"> <li>● In case of composition: <ul style="list-style-type: none"> <li>○ Dependent objects are deleted along with Book, aka cascading deletion</li> </ul> </li> </ul> Data integrity and deletion rules: <ul style="list-style-type: none"> <li>● ...Referring objects handling strategy: <ul style="list-style-type: none"> <li>○ Warning 1: Dependent objects will be deleted along with Book</li> </ul> </li> </ul> The User shall be able to cancel the use case at any time prior to submitting it.		
Related Use Cases:			
Assumptions:			



Open Issues:	
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### Integrate the Vocab

UC ID and Name:	UC-09: Integrate vocabulary																												
Created By:	Quynh Dong	Date Created:	02/03/2023																										
Primary Actor:	Publisher	Secondary Actors:																											
Trigger:	A new Lesson Content is created.																												
Description:	Publisher can add Vocab detail to the vocab list generated after Lesson Content is created.																												
Preconditions:	PRE-1: The Publisher is logged into the System. PRE-2: The new Lesson Content is created.																												
Postconditions:	POST-1: The database is updated with changes. POST-2: The content is reflected on the Lesson view..																												
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. The Publisher created a new Lesson Content..</li> <li>2. The System generates a vocab list from the Lesson Content.</li> <li>3. The Publisher adds details to each vocab in the list..</li> <li style="color: red;">Repeat step 3 until finished.</li> <li>4. The Publisher confirms that she has finished.</li> <li>5. The System validates the Publisher's inputs according to "Details" defined in Associated Information of this use case.</li> <li>6. The System saves the changes by sending them to the database.</li> <li>7. The System reloads the Book tab and displays new changes.</li> <li>8. The System displays the Vocab tab with changes.</li> </ol>																												
Extensions:	<b>5a. Input validation rule violation</b> 4a1. The System alerts the Publisher that an input validation rule is violated and displays the nature and location of the error. 4a2. The Publisher corrects the mistake and returns to step 4 of normal flow.																												
Priority:	High																												
Frequency of Use:	Approximately one user, 10 usages																												
Business Rules:	Publisher is the only users allowed to integrate the vocabulary in the Lesson																												
Associated Information	Details: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Property name</th> <th>Data type</th> <th>Editability</th> <th>Validation rule</th> <th>Effect of change</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>Pinyin</td> <td>String</td> <td>Yes</td> <td>Required</td> <td>N/A</td> <td>N/A</td> </tr> <tr> <td>Type</td> <td>String</td> <td>Yes</td> <td>Required</td> <td>N/A</td> <td>N/A</td> </tr> <tr> <td>Meaning</td> <td>String</td> <td>Yes</td> <td>Required</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p>The User shall be able to cancel the use case at any time prior to submitting it.</p>					Property name	Data type	Editability	Validation rule	Effect of change	Reference to glossary	Pinyin	String	Yes	Required	N/A	N/A	Type	String	Yes	Required	N/A	N/A	Meaning	String	Yes	Required	N/A	N/A
Property name	Data type	Editability	Validation rule	Effect of change	Reference to glossary																								
Pinyin	String	Yes	Required	N/A	N/A																								
Type	String	Yes	Required	N/A	N/A																								
Meaning	String	Yes	Required	N/A	N/A																								
Related Use Case	<u>UC-05: Create a Lesson Content</u>																												
Other Information:																													
Assumptions:																													

### Create a Question

UC ID and Name:	UC-10: Create a Question				
Created By:	Quynh Dong	Date Created:	02/07/2023		
Primary Actor:	Teacher	Secondary Actors:			
Trigger:	The Teacher indicates to create a new question in the Question Bank of a lesson.				
Description:	The Teacher wants to create a new question, so that the system shows the prompt to create				

	a new question.																								
Preconditions:	PRE-1. The Teacher is logged into the system. PRE-2. The Teacher has the “create” privilege. See Business Rules of this use case.																								
Postconditions:	POST-1. The new question is stored in the System.																								
Main Success Scenario:	<ol style="list-style-type: none"> <li>1.The Teacher indicates to create a new question.</li> <li>2. The System asks the Teacher to enter the details of this new question according to “Details” defined in Associated Information of this use case.</li> <li>3. The Teacher enters the details of this new question and confirms she has finished.</li> <li>4. The System validates the Teacher’s inputs according to “Details” defined in Associated Information of this use case.</li> <li>5. The System saves the new question and displays the new question list in question bank.</li> <li>6. Use case ends.</li> </ol>																								
Extensions:	<b>4a. Input validation rule violation</b> 4a1. The System alerts the Teacher that an input validation rule is violated and displays the nature and location of the error. 4a2. The Teacher corrects the mistake and returns to step 3 of normal flow.																								
Priority:	High																								
Frequency of Use:	Approximately 1 user, average of 1 usages per week.																								
Business Rules:	<b>Only Teacher has the authority to create a new assignment</b>																								
Associated Information:	Details: <table border="1"> <thead> <tr> <th>Property name</th> <th>Data type</th> <th>Editability</th> <th>Validation rule</th> <th>Effect of change</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>Question</td> <td>String File</td> <td>Yes</td> <td>Required</td> <td>Question is created</td> <td>2.8</td> </tr> <tr> <td>Answer</td> <td>String File</td> <td>Yes</td> <td>Required</td> <td>Answer is created</td> <td>2.8.1</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> Duplication detection rules: <ul style="list-style-type: none"> <li>• N/A</li> </ul> The Teacher shall be able to cancel the use case at any time prior to submitting it.	Property name	Data type	Editability	Validation rule	Effect of change	Reference to glossary	Question	String File	Yes	Required	Question is created	2.8	Answer	String File	Yes	Required	Answer is created	2.8.1						
Property name	Data type	Editability	Validation rule	Effect of change	Reference to glossary																				
Question	String File	Yes	Required	Question is created	2.8																				
Answer	String File	Yes	Required	Answer is created	2.8.1																				
Related Use Cases																									
Assumptions:																									
Open Issues:																									

### Create an Assignment

UC ID and Name:	UC-11: Create a Assignment		
Created By:	Quynh Dong	Date Created:	02/07/2023
Primary Actor:	Teacher	Secondary Actors:	
Trigger:	The Teacher indicates that she want to create a new Assignment		
Description:	The Teacher wants to create a new assignment, so the System shows her all question of the lesson from the Question Bank		
Preconditions:	PRE-1. The Teacher is logged into the System. PRE-2. The Teacher has the “view” privilege. See Business Rules of this use case.		
Postconditions:	POST-1. The details of the specified Assignment are displayed to the Teacher.		
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. The Teacher indicates to create a new assignment.</li> <li>2. The System retrieves and displays the Question Bank of the lesson.</li> </ol>		

	<ol style="list-style-type: none"> <li>3. The Teacher chooses questions that she wants to be included in the assignment and assigns points to them.</li> <li>4. The Teacher confirms that she wants to create a new Assignment.</li> <li>5. The System validates the Teacher’s inputs according to “Details” defined in Associated Information of this use case.</li> <li>6. The User views the details of this assignment.</li> <li>7. Use case ends.</li> </ol>												
Extensions:	<b>5a. Input validation rule violation</b> 5a1. The System alerts the Teacher that an input validation rule is violated and displays the nature and location of the error. 5a2. The Teacher corrects the mistake and returns to step 3 of normal flow.												
Priority:	High												
Frequency of Use:	Approximately 30 user, average of 20 usages per year.												
Associated Information:	Details: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Property name</th> <th>Data type</th> <th>Editability</th> <th>Validation rule</th> <th>Security/access concerns</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>Point</td> <td>Positive Integer</td> <td>Yes</td> <td>Required</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> <p>The Teacher shall be able to cancel the use case at any time prior to submitting it.</p>	Property name	Data type	Editability	Validation rule	Security/access concerns	Reference to glossary	Point	Positive Integer	Yes	Required	N/A	N/A
Property name	Data type	Editability	Validation rule	Security/access concerns	Reference to glossary								
Point	Positive Integer	Yes	Required	N/A	N/A								
Related Use Cases:	<u>UC-12: Create an answer</u>												
Assumptions:													
Open Issues:													

### Create an Answer

UC ID and Name:	UC-12: Create an answer		
Created By:	Quynh Dong	Date Created:	02/07/2023
Primary Actor:	Student, Teacher	Secondary Actors:	
Trigger:	The Student indicates to create a new answer for the question.		
Description:	The Student wants to create a new answer for the question.		
Preconditions:	PRE-1. The Student is logged into the System. PRE-2. The Student has been added to the Section. PRE-3. The assignment is created in that Lesson.		
Postconditions:	POST-1. New answer is stored in the System.		
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. The Student chooses a question from the assignment.</li> <li>2. The Student indicates to create a new answer for the question.</li> <li>3. The System shows a prompt to let the Student choose the answer type and give an answer for such type.</li> <li>4. The Student enters the details of the answer and confirms that he wants to submit the answer.</li> <li>5. The System validates the Student’s inputs according to “Details” defined in Associated Information of this use case.</li> <li>6. The System saves the new answer to the System and displays all answers of the question for him if the private setting is public.</li> <li>7. Use case ends.</li> </ol>		
Priority:	High		
Frequency of Use:	Approximately 100 user, average of 5 usages per week.		
Business Rules:	<b>5a. Input validation rule violation</b> 5a1. The System alerts the Student that an input validation rule is violated and displays the nature and location of the error. 5a2. The Teacher corrects the mistake and returns to step 3 of normal flow.		

Associated Information:	Details:						
	<b>Property name</b>	<b>Data type</b>	<b>Editability</b>	<b>Validation rule</b>	<b>Effect of change</b>	<b>Warning</b>	<b>Reference to glossary</b>
	Answer	String File	Yes	Required	N/A	N/A	2.8.1
	The Student shall be able to cancel the assignment at any time prior to submitting it.						
Related Use Cases:	<u>UC-11: Create an Assignment</u>						
Assumptions:							
Open Issues:							

### Create a Forum

UC ID and Name:	UC-13: Create a Forum					
Created By:	Chase Lennartson	Date Created:	02/19/2023			
Primary Actor:	Teacher	Secondary Actors:				
Trigger:	A teacher wants to create a forum.					
Description:	The teacher accesses the class and chooses to create a new forum.					
Preconditions:	PRE-1. The teacher is logged into the system.					
Postconditions:	POST-1: The database is updated with changes. POST-2: The list of forums is updated to reflect the change.					
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. A student/teacher enters the name of the new forum.</li> <li>2. The student/teacher selects the type of forum: private or public.</li> <li>3. Student/teacher confirms the input.</li> <li>4. System validates the input.</li> <li>5. System creates a new forum using the input.</li> <li>6. System saves the new forum in the database.</li> </ol>					
Extensions:	<b>4a. Input validation rule violation</b> 4a1. The System alerts the User that an input validation rule is violated and displays the nature and location of the error. 4a2. The User corrects the mistake and returns to step 4 of normal flow.					
Priority:	Low					
Frequency of Use:	N/A					
Business Rules:	Only Teacher is able to create a forum					
Associated Information:	Details:					
	<b>Property name</b>	<b>Data type</b>	<b>Editability</b>	<b>Validation rule</b>	<b>Effect of change</b>	<b>Reference to glossary</b>
	Title	String	Yes	Required	Title of forum is created	2.13
	Content of forum	String	Yes	Required	Content of forum is created	2.13
	Duplication detection rules:					
	<ul style="list-style-type: none"> <li>• N/A</li> </ul>					
	The teacher shall be able to cancel the use case at any time prior to submitting it.					
Related Use Cases	Interact with Forum					
Assumptions:	Class is active					
Open Issues:						

### Interact with Forum

UC ID and Name:	UC-14: Comment on Forum																												
Created By:	Chase Lennartson	Date Created:	02/19/2023																										
Primary Actor:	Teacher/student	Secondary Actors:																											
Trigger:	A student or teacher wants to see and post to a forum.																												
Description:	A user accesses a forum and chooses to post.																												
Preconditions:	PRE-1: The student is enrolled in a class that the forum belongs to. PRE-2: The student is eligible to see and reply to the targeted forum.																												
Postconditions:	POST-1: The database is updated with changes. POST-2: The list of replies is updated to reflect the change.																												
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. A student/teacher accesses the forum board section.</li> <li>2. A student/teacher indicates they want to interact with a particular forum.</li> <li>3. System gets forum's information from the database.</li> <li>4. System displays the forum.</li> <li>5. The student/teacher enters the input.</li> <li>6. The student/teacher uploads audio, video or image files to the input.</li> <li style="color: red;">Steps 4-5 can happen in any order.</li> <li>7. User confirms the input.</li> <li>8. System validates the input.</li> <li>9. System saves the input to the database.</li> <li>10. System displays the new reply..</li> </ol>																												
Extensions:	<b>7a. System fails to validate the input: missing input.</b> 7a1. System asks the student/teacher to enter all required inputs.																												
Priority:	Low																												
Frequency of Use:	N/A																												
Business Rules:																													
Associated Information:	Details: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Property name</th> <th>Data type</th> <th>Editability</th> <th>Validation rule</th> <th>Effect of change</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>Title</td> <td>String</td> <td>Yes</td> <td>Required</td> <td>Title of forum is created</td> <td>N/A</td> </tr> <tr> <td>Content of forum</td> <td>String</td> <td>Yes</td> <td>Required</td> <td>Content of forum is created</td> <td>N/A</td> </tr> <tr> <td>Post</td> <td>String</td> <td>Yes</td> <td>Required</td> <td>Post is saved</td> <td>N/A</td> </tr> </tbody> </table> <p>Duplication detection rules:</p> <ul style="list-style-type: none"> <li>• N/A</li> </ul> <p>The teacher/student shall be able to cancel the use case at any time prior to submitting it.</p>					Property name	Data type	Editability	Validation rule	Effect of change	Reference to glossary	Title	String	Yes	Required	Title of forum is created	N/A	Content of forum	String	Yes	Required	Content of forum is created	N/A	Post	String	Yes	Required	Post is saved	N/A
Property name	Data type	Editability	Validation rule	Effect of change	Reference to glossary																								
Title	String	Yes	Required	Title of forum is created	N/A																								
Content of forum	String	Yes	Required	Content of forum is created	N/A																								
Post	String	Yes	Required	Post is saved	N/A																								
Related Use Cases	UC-13: Create a Forum																												
Assumptions:	Class is active																												
Open Issues:																													

### Create an Exam

UC ID and Name:	UC-15: Create an Exam				
Created By:	Chase Lennartson	Date Created:	04/15/2023		
Primary Actor:	Teacher	Secondary Actors:			
Trigger:	The Teacher indicates that she want to create a new Exam				
Description:	The Teacher wants to create a new assignment, so the System shows her all question of the lesson from the Question Bank				

Preconditions:	PRE-1. The Teacher is logged into the System. PRE-2. The Teacher has the “view” privilege. See Business Rules of this use case.												
Postconditions:	POST-1. The details of the specified Assignment are displayed to the Teacher.												
Main Success Scenario:	<ol style="list-style-type: none"> <li>1. The Teacher indicates to create a new exam.</li> <li>2. The System displays the date and length of the exam that should be set.</li> <li>3. The System retrieves and displays the Question Bank of the lesson.</li> <li>4. The Teacher chooses questions that she wants to be included in the exam and assigns points to them.</li> <li>5. The Teacher confirms that she wants to create a new Exam.</li> <li>6. The System validates the Teacher’s inputs according to “Details” defined in Associated Information of this use case.</li> <li>7. The User views the details of this assignment.</li> <li>8. Use case ends.</li> </ol>												
Extensions:	<b>5a. Input validation rule violation</b> 5a1. The System alerts the Teacher that an input validation rule is violated and displays the nature and location of the error. 5a2. The Teacher corrects the mistake and returns to step 3 of normal flow.												
Priority:	High												
Frequency of Use:	Approximately 30 user, average of 20 usages per year.												
Associated Information:	Details: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Property name</th> <th>Data type</th> <th>Editability</th> <th>Validation rule</th> <th>Security/access concerns</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>Point</td> <td>Positive Integer</td> <td>Yes</td> <td>Required</td> <td>N/A</td> <td>N/A</td> </tr> </tbody> </table> The Teacher shall be able to cancel the use case at any time prior to submitting it.	Property name	Data type	Editability	Validation rule	Security/access concerns	Reference to glossary	Point	Positive Integer	Yes	Required	N/A	N/A
Property name	Data type	Editability	Validation rule	Security/access concerns	Reference to glossary								
Point	Positive Integer	Yes	Required	N/A	N/A								
Related Use Cases:	<u>UC-12: Create an answer</u>												
Assumptions:													
Open Issues:													

### Create an Exam Answer

UC ID and Name:	UC-16: Create an Exam answer		
Created By:	Chase Lennartson	Date Created:	04/15/2023
Primary Actor:	Student, Teacher	Secondary Actors:	
Trigger:	The Student indicates to create a new answer for the question.		
Description:	The Student wants to create a new answer for the question.		
Preconditions:	PRE-1. The Student is logged into the System. PRE-2. The Student has been added to the Section. PRE-3. The exam is created in that Lesson.		
Postconditions:	POST-1. New answer is stored in the System.		
Main Success Scenario:	<ol style="list-style-type: none"> <li>8. The Student chooses a question from the exam.</li> <li>9. The Student indicates to create a new answer for the question.</li> <li>10. The System shows a prompt to let the Student choose the answer type and give an answer for such type.</li> <li>11. The Student enters the details of the answer and confirms that he wants to submit the answer.</li> <li>12. The System validates the Student’s inputs according to “Details” defined in Associated Information of this use case.</li> <li>13. The System saves the new answer to the System and displays all answers of the question for him if the private setting is public.</li> <li>14. Use case ends.</li> </ol>		
Priority:	High		

Frequency of Use:	Approximately 100 user, average of 5 usages per week.																					
Business Rules:	<b>5a. Input validation rule violation</b> 5a1. The System alerts the Student that an input validation rule is violated and displays the nature and location of the error. 5a2. The Teacher corrects the mistake and returns to step 3 of normal flow.																					
Associated Information:	<p>Details:</p> <table border="1"> <thead> <tr> <th>Property name</th> <th>Data type</th> <th>Editability</th> <th>Validation rule</th> <th>Effect of change</th> <th>Warning</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>Answer</td> <td>String File</td> <td>Yes</td> <td>Required</td> <td>N/A</td> <td>N/A</td> <td>2.8.1</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>The Student shall be able to cancel the assignment at any time prior to submitting it.</p>	Property name	Data type	Editability	Validation rule	Effect of change	Warning	Reference to glossary	Answer	String File	Yes	Required	N/A	N/A	2.8.1							
Property name	Data type	Editability	Validation rule	Effect of change	Warning	Reference to glossary																
Answer	String File	Yes	Required	N/A	N/A	2.8.1																
Related Use Cases:	<u>UC-15: Create an Exam</u>																					
Assumptions:																						
Open Issues:																						

**View Profile**

UC ID and Name:	UC-17: View Profile																	
Created By:	Chase Lennartson	Date Created:	04/15/2023															
Primary Actor:	All Users	Secondary Actors:																
Trigger:	The User indicates to view the details of their profile.																	
Description:	The User wants to view the details of their profile																	
Preconditions:	PRE-1. The User is logged into the System. PRE-2. The User has the “view” privilege. See Business Rules of this use case.																	
Postconditions:	POST-1. The user information is displayed to the user																	
Main Success Scenario:	<ol style="list-style-type: none"> <li>The User chooses the cogwheel to view their profile.</li> <li>The email, first name, last name is displayed.</li> <li>The profile picture is displayed</li> <li>There is a colored dot that indicates if the user is active or not.</li> <li>Use case ends.</li> </ol>																	
Extensions:																		
Priority:	Low																	
Frequency of Use:	Approximately 50 users, average of 2 usages per week.																	
Business Rules:																		
Associated Information:	<p>Details:</p> <table border="1"> <thead> <tr> <th>Property name</th> <th>Data type</th> <th>Editability</th> <th>Security/access concerns</th> <th>Reference to glossary</th> </tr> </thead> <tbody> <tr> <td>First Name</td> <td>String</td> <td>No</td> <td>User</td> <td>2.10.1</td> </tr> <tr> <td>Last Name</td> <td>String</td> <td>No</td> <td>User</td> <td>2.10.2</td> </tr> </tbody> </table>			Property name	Data type	Editability	Security/access concerns	Reference to glossary	First Name	String	No	User	2.10.1	Last Name	String	No	User	2.10.2
Property name	Data type	Editability	Security/access concerns	Reference to glossary														
First Name	String	No	User	2.10.1														
Last Name	String	No	User	2.10.2														
Related Use Cases:																		
Assumptions:																		
Open Issues:																		