

1st Use Case Name: Select source code

Iteration: Filled.

Summary: The instructor selects source code for inclusion.

Basic Course of Events:

1. The user uploads source code file and The PPLAMS validates the file format

Alternative Paths: None

Exception Paths:

In step 1, if the user uploads any other format of file except .txt/.pdf files then the system will not accept the file and will show an error message. And the system will be ready to accept another file of the required format.

In step 2, if the user chooses to select question type without annotating specific lines in the source code for then the system will show an error message telling the user to select source code.

Extension Points: None

Trigger: The instructor selects the source code for inclusion so that he can make variations in questions.

Assumptions: The user has opened a valid and verified account in the system with their school information and has linked the school credentials with the system.

Precondition: The system has all the information to validate the user's id and access to the system

Postcondition: The user's id and informations have been verified for future operations in the system

Author: Fahia Tabassum

Date: 10/4/2022

2nd Use Case Name: Annotate lines

Iteration: Filled.

Summary: The instructor annotates specific lines for inclusion and exclusion.

Basic Course of Events:

1. The user receives the source code that they inputted to the program.
2. The user is given the option to highlight specific lines of the source code to include. Lines not highlighted are excluded.

Alternative Paths: None

Exception Paths: No exception path.

Extension Points: None

Trigger: User wants to generate questions.

Assumptions: The user has opened a valid and verified account in the system with their school information and has linked the school credentials with the system.

Precondition: The system has all the information to validate the user's id and access to the system.

Postcondition: The user's id and information have been verified for future operations in the system.

Author: AlYaqdhan Al Maawali

Date: 10/4/2022

3rd Use Case Name: Form and order line tuples

Iteration: Filled.

Summary: The user forms and order line tuples for the correct answer of the question.

Basic Course of Events:

1. The user receives the annotated code.
2. The user forms and orders line tuples.

Alternative Paths: None

Exception Paths: No exception path.

Extension Points: None

Trigger: User wants to generate questions.

Assumptions: The user has opened a valid and verified account in the system with their school information and has linked the school credentials with the system.

Precondition: The system has all the information to validate the user's id and access to the system.

Postcondition: The user's id and information have been verified for future operations in the system.

Author: AlYaqdhan Al Maawali

Date: 10/4/2022

4th Use Case Name: Select question type

Iteration: Filled.

Summary: The user selects the question type for the source code inputted.

Basic Course of Events:

1. The user receives the formed and ordered line tuples.
2. The user selects the question type.

Alternative Paths: None.

Exception Paths: No exception path.

Extension Points: None

Trigger: User wants to generate questions.

Assumptions: The user has opened a valid and verified account in the system with their school information and has linked the school credentials with the system.

Precondition: The system has all the information to validate the user's id and access to the system.

Postcondition: The user's id and information have been verified for future operations in the system.

Author: AlYaqdhan Al Maawali

Date: 10/4/2022

5th Use Case Name: Select Intended LMS Target

Iteration: Filled.

Summary: The user selects the intended Learning Management Systems target.

Basic Course of Events:

1. The user receives selected lines of source code with annotations and type of question selected.
2. User selects the LMS target for the selected questions.
3. User selects the type of output file to export to LMS.
4. PPALMS validates that the exported file is suitable for the intended LMS target.

Alternative Paths: None

Exception Paths: None

Extension Points: None

Trigger: User wants to import questions into a Learning Management Systems

Assumptions: The user has opened a valid and verified account in the system with their school information and has linked the school credentials with the system.

Precondition: The system has the selected questions to import into an LMS.

Postcondition: The selected LMS target and corresponding output file are validated and the user can proceed.

Author: Mulki Yusuf

Date: 10/4/2022

6th Use Case Name: Reuse of problems

Iteration: Filled.

Summary: The user can reuse problems that have already been generated.

Basic Course of Events:

1. The user successfully generates a problem through the system
2. The user saves the generated problem in a list of previously used problems
3. The user selects the problem for reuse and generates it

Alternative Paths: None

Exception Paths: None

Extension Points: None

Trigger: The user wants to repeat a problem that was already generated by the system

Assumptions: The user has opened a valid and verified account in the system with their school information and has linked the school credentials with the system.

Precondition: The problem the user wants to reuse has been generated successfully.

Postcondition: The selected problem is automatically reused and exported.

Author: Ahmed Al Raisi

Date: 10/4/2022

7th Use Case Name: Get statistics

Iteration: Filled.

Summary: The user, usually a researcher, can pick a type of question and get back statistics on the type of question picked.

Basic Course of Events:

1. The user selects the type of question.
2. The user receives statistics.

Alternative Paths: None

Exception Paths: None

Extension Points: None

Trigger: The user wants to receive stats about the use of the system

Assumptions: The user has opened a valid and verified account in the system with their school information and has linked the school credentials with the system.

Precondition: The user is already logged into the system and is given the option to pick a question type.

Postcondition: Stats are shown to the user.

Author: AlYaqdhan Al Maawali

Date: 10/17/2022