Google Classroom Integration Specifications

Table of Contents

Table of Figures

Purpose

This documents describes functionality requirements for Google Classroom interfaces with Originality and technical specifications necessary for data exchange.

Google Classroom functional requirements

Google Classroom needs to have these functions as part of its user Interface, according to the user's role and responsibilities.

Student

1. If the assignment has "plagiarism detection" turned on by the teacher:
    a. Display to the student a checkbox with an acknowledgement statement and a link to Originality's terms of use (Figure 1).
    b. Upon attempt to click on the "submit" button, if the checkbox isn't checked, display a message to the student ("please acknowledge submission to plagiarism checker"). Do not let the student submit unless the box is checked.
2. If the assignment's "plagiarism detection" is not turned on, do not change the deault Google Classroom behavior.

Figure 1: Student's Acknowledgement as Implemented in Moodle

Teacher

1. Turn on Originality when creating a new assignment using a pull down (Figure 2)
   a. If the teacher turned on plagiarism detection after one or more submissions have been made, the system needs to inform the teacher that all current submissions will have to be re-submitted by the <u>students</u> (Figure 3)<u>.</u> That's because students must consent to the plagiarism review. Allow the teacher to either "proceed" or "cancel" the request.
2. View Originality reports and percent original once the submission was examined for plagiarism (Figure 4)
3. Be able to click on a PDF icon associated with the report in order to view the actual report (Figure 4)

Figure 2: Teacher Enables Plagiarism for New Assignment Screen as Implemented in Moodle
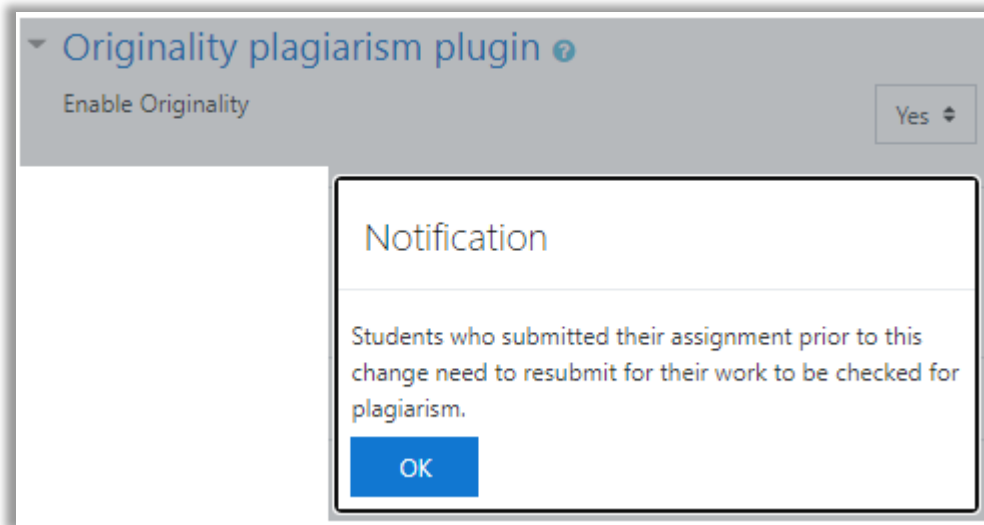
Figure 3: Enable Plagiarism for an Existing Assignment with Submissions as Implemented in Moodle

Figure 4: Percent Originality and Link to Report (PDF)

Google Classroom Administrator

1. Provide an administration screen (Figure 5) that allows the administrator to:
    a. View the plugin's release version and Originality's contact information
    b. Turn off or on the plagiarism feature for Google Classroom instance
    c. Turn off or on the Ghost Writer feature for Google Classroom instance
    d. Accept as input the secret API key Originality provides the school and check its validity using an API provided by Originality.
    e. Select between Originality's test server and Originality's production server
2. All the above data need to be saved by the Google Classroom somewhere.

4

Figure 5: Google Classroom Administrator Plagiarism Screen

REST API Interface with Originality

This part of the document describes essential RESTful APIs for communications between your LMS and the Originality Server.

POST TO https://www.originality.co.il/greekRest/v2/api/documents

Headers

Content-Type	application/json
Authorization	Secret Originality Key

Body raw (application/json) *This is A PARTIAL list. A full list will be provided after contractual agreement*

```
{
        "FileName": "The file name as given by the student, including suffix",
        "SenderIP": "The IP from which the sender submitted the file",
        "FacultyCode": "School Identifier", e.g., 100-9-9082
```

```
       "FacultyName": "School Name", e.g., college of medical studies
       "DeptCode": "Department Code", 100-nur
       "DeptName": "Department Name", e.g., nursing
       "CourseCategory": "if one exists", e.g., lab, practicum, lectures
       "CourseCode": "Course Code",
       "CourseName": "Course Name",
       "AssignmentCode": "Assignment Code",
       "MoodleAssignPageNo": "Reserved for Moodle only",
       "StudentCode": "Student Id generated by the LMS",
       "LecturerCode": "Lecturer Id generated by the LMS ",
       "GroupMembers": "GroupMembers",
       "DocSequence": 1, for assignments with multiple files
       "file": "Q2FwY2hhINeU15nXoNeUINeY15vXoNeV15zXldeS15nXlCDXkdeUINei15wg15nXk9e
ZINep15DXnNeV16o"  File's content using Base64 encoding
```

Bold italic must have meaningful content. For the rest – if you don't have meaningful content merely send a static content. Green comments are just examples for values.

Verify Secret Key

When the administrator enters the secret key (see Figure 5) you must check if it is valid, using this key validation API.

GET from https://www.originality.co.il/greekRest/v2/api/customers/ping

Headers

Content-Type	application/json
Authorization	Secret Originality Key

Body *is empty*

Possible responses (JSON format)

Response (success) (200)	{ "Pong": true}
Response (Failure) (200)	{"Pong": false}
Response (exception) (401)	{"Message": "Wrong or Empty Credentials!"}

Originality to Google Classroom

You need to develop your own RESTful API that will receive the Originality report and percent originality. Originality will send you the following data:

Headers

Content-Type	application/json
Authorization	Secret Originality Key

Body will contain this information in JSON format:

No	Parameter	Data Type
1	Course Id	String
2	Assignment ID	String
3	Student Id	String
4	Sequence Number	Integer
5	Percent Original	Integer
6	Originality Report	Base64 String

Recommended processing:

1. Verify that the secret original key sent to you matches the key in your possession. If there is no match, ignore the transmission but write the event in the Plagiarism log.
2. Use parameters 1 to 4 to locate the correct placement of the Originality data
3. Use parameters 5 to display the percent original
4. Use parameter 6 to store the PDF file in a secure location on your system and provide a link to it (as a PDF icon) on the teacher's screen.