

CSCI 5410: Assignment 5

Part A: Explore and Build a Use Case

Hypothetical Scenario: [2]

The hypothetical scenario that I am considering is an application that is like a one-stop shop for students to attend live video lectures, the lecture recordings, send prompts/notifications to students regarding new assignments or an approaching deadline. The add on feature would be that the application would have in-built plagiarism detecting service which automatically runs the submitted assignments through the plagiarism checker and gives the result in a form of analysis. Another feature that will be provided by the application will be attendance tracking done automatically when the students join the lecture and stays until the end of the lecture (This can be achieved by using AWS Kinesis – that captures the data from live stream and processes it).

Use Case: [2]

The Use Case for the above hypothetical scenario is that the application is basically used by the students and the faculty of any University. The main use of the application is that it is used by students to attend the live streamed lectures and also later view the saved lecture recordings. The students will be notified of the uploaded lecture recordings along with their validity. The application performs plagiarism detection on all the submitted assignments and generates a report based on the analysis that can be viewed by the respective course professors. The application also sends notifications to students when a new assignment is uploaded or if any assignment deadline is approaching. The graded assignment reports are then sent to the respective students. Another exciting feature the application has is to record student attendance for any particular lecture which is then stored and processed and sent to the course's professor in the form of an excel sheet. Various AWS Services will be used for this use case including the AWS Kinesis.

Block Diagram of the above Use Case:

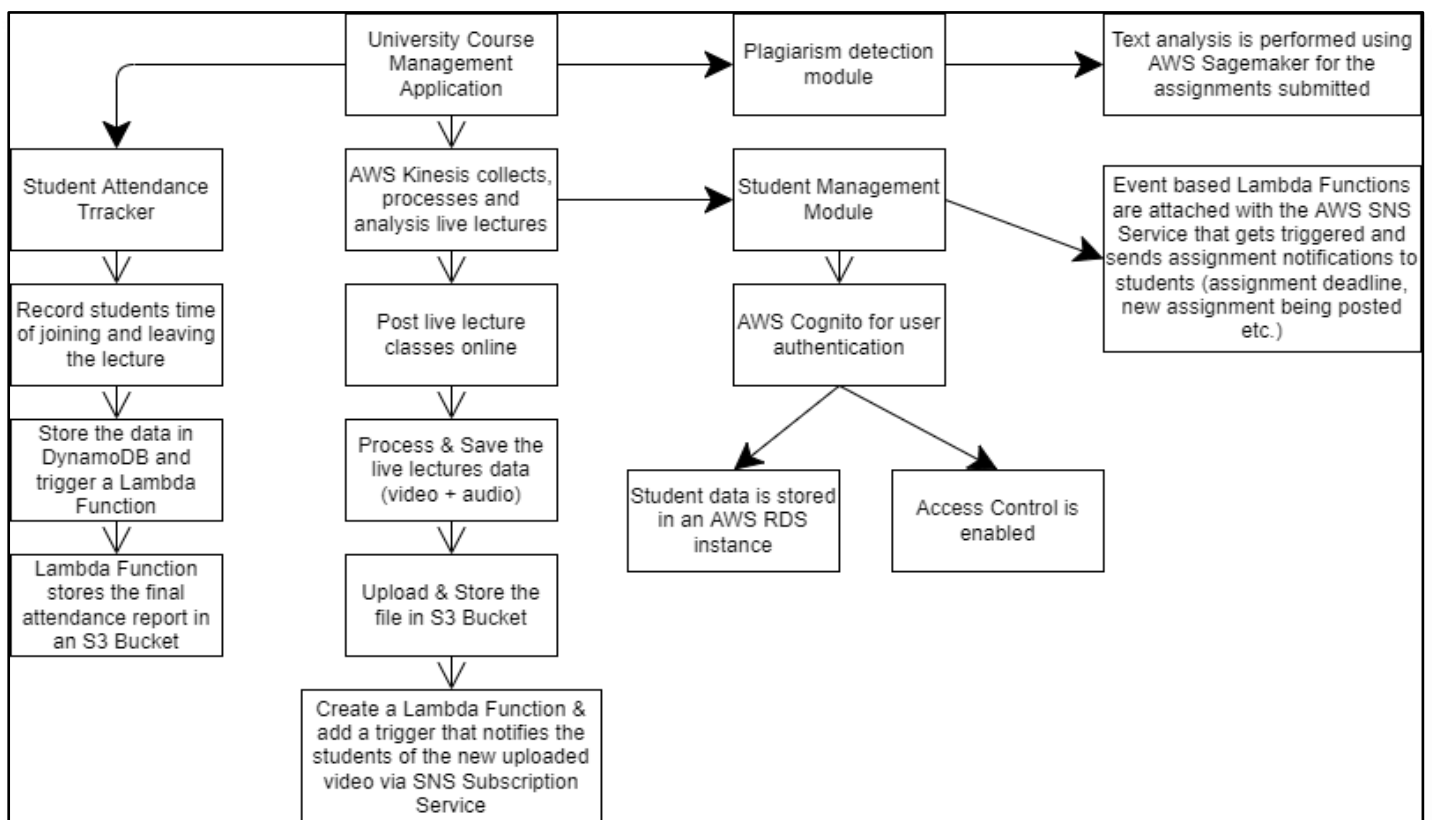


Figure 1: Use Case Block Diagram [1]

References

- [1] "Flowchart Maker & Online Diagram Software," Draw.io, 2021. [Online]. Available: <https://app.diagrams.net/>.
- [2] Amazon, "Amazon Kinesis," Amazon, 2021. [Online]. Available: <https://aws.amazon.com/kinesis/>.