Application Engineering & Development - Spring 2019

Due Date : February 28, 2019 at 11:59 PM

The objective of this assignment is to instill in you the techniques for turning an object model into a machine for information gathering and data aggregation. We want to use software engineering techniques to improve the quality of education anywhere and hold people accountable for improving the quality of life through education, learning to learn, and feedback.

Your task to study ways to create a performance measurement solution to enable universities to measure the quality of the education they deliver to their students. The approach will be to look into how an educational system in terms of faculty and courses contribute to growth of their graduates over a 5-year period. You must figure out ways to track the jobs and promotions graduates get over time and assign rankings accordingly. In addition, track the connection of courses and their relevance to graduates growth. One of your deliverables will be to design a dashboard that enables college and university administrators to compare the performance of their academic units. One additional question, is to consider ways to define your own ranking system for students to decide where they want to go for their studies. The current system is biased toward research.

Deliverables

1. Report outlining your proposed solution.

2. Sequence diagrams showing how to navigate the university object model to deliver performance

metrics needed for performance and feedback.

3. An object model showing the changes to the university model to support the new capabilities. This

must include the additional methods and attributes required to deliver the results.

Your application must enable the creation and update functions for any of the attributes of concern. It will be okay to assume each of these questions are buttons on the left/right side of the screen depending on your design.

Note

There is no need for java implementations, just a report with the specifications of how to implement such a solution.

Grading Criteria:

Report = 30% Sequence Diagram (UML)=40% Object Model (UML)=30% Late =-10