Summer 2019

Enterprise-Level Database Implementation

Brian Grey

Follow this and additional works at: https://digitalcommons.harrisburgu.edu/cisc_pti
Title: Enterprise-Level Database Implementation

Author:
Brian Grey - bgrey@harrisburgu.edu

Difficulty:
Moderate

Specialization:
Software Engineering

If other, please specify:

Most Appropriate Course:
Project II

Brief Description:
The student will design/already have designed an application requiring a robust database solution. This application may be a website, an app, a game, or a traditional application. The student will then design and implement a normalized database to accommodate the application using best practices, including assuring database normalization and designing and implementing appropriate stored procedures and functions.

Number of students needed:
1

Outcomes and Deliverable:
A fully implemented database instance

Skills Required:
Database design skills Experience with a DDL and DML such as SQL

Available Resources:

Program Goal:
CISC 1.2: Sound Reasoning, CISC 1.3: Develop Solution, CISC 1.4: Deploy Solution, CISC 1.5: Secure Solution CISC 2.2: Software Platform CISC 4.1: Written Communication, CISC 4.2: Oral Communications
**Student Learning Outcomes:**

1a: The student should be able to analyze a problem in a manner that facilitates the design of its solution.

1b: The student should be able to apply relevant principles of computing during their analysis of a problem.

1c: The student should be able to apply relevant principles of related, non-computing disciplines during their analysis of a problem.

2a: Student is able to create a formal software design based on a given set of requirements.

2b: Student is able to develop a software solution from a formal design specification.

2c: Student is able to evaluate a software solution to determine its compliance with the specification.

3a: Student will be able write in a standardized format in order to organize their thoughts and deconstruct their ideas at a level appropriate for the desired audience.

3b: Student will be able to verbally communicate effectively with an advisor, group of colleagues or an audience to express a thought or idea at a level appropriate for the desired audience.

6a: Student will be able to produce computer-based solutions by applying applicable computer science theory and software development fundamentals.