|  |  |
| --- | --- |
|  | **ISCG6423 Database Design and Development**  **Semester 2, 2023**  **Database Design Assignment** |
| School of Computing and Information Technology | **Course Weighting:** **40%**  **Due Date: 5th of Nov Week 13 at 8 pm**  **Total Marks:** 100 (70% weight)  **Interview During Week 13 & 14( 30% weight)** |

**Learning outcome:**

4. Develop a physical database design from a given logical design.

**Assignment instructions**:

* This is an individual assignment.
* You will be assigned a case study by the lecturer.
* You will develop a physical database design from a logical design of a database application for a given case study.

**Task**

* You will develop a physical database design from a given logical design of a database application for a business mentioned in the allocated case study.
  1. Write an introduction.

(1 mark)

* 1. Develop a data volume map.

(3 marks)

* 1. Develop two data usage maps for the two most important business processes.

(6 marks)

* 1. Complete the business processes to physical design techniques matrix table using the business processes. You must use “YES’ or “NO” to complete the matrix.

(7 marks)

* 1. Use the information from the matrix that you have completed in question 4 to apply physical design techniques to each of the business processes.

(60 marks)

* 1. Based on your findings in question 4, develop the final physical design (entity relationship diagram and relations, with on delete actions, in standard relation notation) for the business.

(7 marks)

* 1. Redevelop the two data usage maps based on your findings in question 4.

(4 marks)

* 1. Create a physical design data dictionary to reflect your findings from question 4 and 5.

(12 marks)

**Assignment submission instructions:**

* Upload your assignment via the Moodle Link **“Assignment”.**

**Marking Schedule**

Your report should defend the correctness of your solution. Please do not include repeated or unnecessary information in the report. The marking criteria will include correctness of the solution, difficulty of implementation, completeness, accuracy, clarity and good structure of the report.

|  |  |
| --- | --- |
| **Section** | **Maximum Marks Available** |
| Introduction | **1** |
| **Physical Design** |  |
| Data Volume Map | **3** |
| Data Usage Maps | **6** |
| Business function (process) to physical design technique matrix | **7** |
| Physical Design Considerations | **60** |
| Final ERD with relations (and on-delete actions) | **7** |
| Redeveloped Data Usage Maps | **4** |
| Data Dictionary | **12** |
| **Provisional Total** | **100** |
| Administrative Deductions |  |
| **Actual Total** |  |

**Have a query? Want to improve your work?**

You could:

* Visit Student Learning and Achievement for learning advice and support.
* Visit the Pacific Centre.
* Visit Te Puna Ako

Assignment Hand-in

Electronic submission of the assignment is required for ALL assignments (excluding questions). This copy must be submitted on Moodle prior to the due date.

Assignments submitted after the due date and time will be penalised according to the following:

         10% of marks deducted if submitted within 24hrs of the deadline

         20% of marks deducted if submitted after 24hrs and up to 48hrs of the deadline

         30% of marks deducted if submitted after 48hrs and up to 72hrs of the deadline

         No grade will be awarded for an assignment that is submitted later than 72hrs after the deadline.

Affected Performance Consideration (APC)

Students who, due to circumstances beyond their control, miss an assignment deadline or consider their performance in an assignment to have been adversely affected, should complete the form available from any Student Services Office. You need to submit the form and a medical certificate or documentary evidence that shows the circumstances were beyond your control. You have a maximum of five working days to submit the APC application.

When applying for a APC for an extension to an assignment you need to submit the assignment work completed so far on the day that the assignment is due. The extension period for which you are applying cannot be greater than the time frame on the documentation you submit. For example, a Doctor's Certificate stating you are sick for two days will entitle you to a maximum of a two-day extension.

Assistance to other Students

Students themselves can be an excellent resource to assist the learning of fellow students, but there are issues that arise in assessments that relate to the type and amount of assistance given by students to other students. It is important to recognise what types of assistance are beneficial to another’s learning and also what types of assistance are unacceptable in an assessment.

Beneficial Assistance

* Study Groups.
* Discussion.
* Sharing reading material.
* Testing another student’s programming work using the executable code and giving them the results of that testing.

Unacceptable Assistance

* Working together on one copy of the assessment and submitting it as own work.
* Giving another student your work.
* Copying someone else’s work. This includes work done by someone not on the course.
* Changing or correcting another student’s work.
* Copying from books, Internet etc. and submitting it as own work. Anything taken directly from another source must be acknowledged correctly: show the source alongside the quotation.