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College of Science and Technology
Rinchending: Bhutan

DBS101

Database Systems Fundamentals

(SS2024)

Practical Assignment Stage 1: Database Design

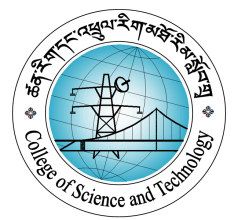


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RUB Wheel of Academic Law: Academic Dishonesty

Section H2 of the Royal University of Bhutan's *Wheel of Academic Law* provides the following definition of academic dishonesty:

Academic dishonesty may be defined as any attempt by a student to gain an unfair advantage in any assessment. It may be demonstrated by one of the following:

1. **Collusion:** the representation of a piece of unauthorized group work as the work of a single candidate.
2. **Commissioning:** submitting an assignment done by another person as the student's own work.
3. **Duplication:** the inclusion in coursework of material identical or substantially similar to material which has already been submitted for any other assessment within the University.
4. **False declaration:** making a false declaration in order to receive special consideration by an Examination Board or to obtain extensions to deadlines or exemption from work.
5. **Falsification of data:** presentation of data in laboratory reports, projects, etc., based on work purported to have been carried out by the student, which has been invented, altered or copied by the student.
6. **Plagiarism:** the unacknowledged use of another's work as if it were one's own.

Examples are:

- verbatim copying of another's work without acknowledgement.
- paraphrasing of another's work by simply changing a few words or altering the order of presentation, without acknowledgement.
- ideas or intellectual data in any form presented as one's own without acknowledging the source(s).
- making significant use of unattributed digital images such as graphs, tables, photographs, etc. taken from test books, articles, films, plays, handouts, internet, or any other source, whether published or unpublished.
- submission of a piece of work which has previously been assessed for a different award or module or at a different institution as if it were new work.
- use of any material without prior permission of copyright from appropriate authority or owner of the materials used".

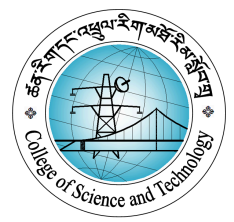


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Instructions For Database Design Assignment

For Stage 1 of the practical assignment, students are required to submit their database design, including:

1. Entity-Relationship Diagram (ERD)
2. Corresponding relational schema

It is recommended that students use a database design tool to create the ERD and relational schema.

Entity-Relationship Diagram (ERD)

The ERD should:

- Visually depict all relevant entities (objects or concepts) in the database as rectangles
- Show attributes within each entity rectangle
- Illustrate relationships between entities using connecting lines, annotated with verbs to describe the relationship type
- Follow standard ERD notation and best practices

Relational Schema

The relational schema should:

- Translate all entities from the ERD into relational tables
- Define columns in each table for each attribute of the corresponding entity
- Use foreign keys to represent relationships between tables
- Ensure proper primary keys are defined to identify rows uniquely
- Apply normalization principles to avoid data redundancy
- Follow naming conventions and documentation standards

Additionally, students should document any assumptions made in their design and ensure their ERD and schema are clear, logically organized, and well-documented.



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The Assignment Document should include the following:

1. Table of Contents
2. ERD
3. Relational Schema
4. Assumptions for the diagrams
5. References: APA 7th Edition Format

Font: Times new roman

Font Size: 12

References: APA 7th Edition format

Document file format : PDF

Note: Only one document from each group should be submitted.

ALL THE BEST!