



Final Evaluation: 40%

Course Identification

Name of program – Code: ACCOUNTING AND MANAGEMENT
TECHNOLOGY/410.B0/CA.71

Course title: **DATABASE MANAGEMENT**

Course number: 410-CT3-AS

Group: 08134

Teacher's name: ADIN ASHBY

Duration: 3 periods (150 minutes)

Semester: Fall 2024

Student Identification

Name: Nicolas Echeverri Student number: 2330270

Date: December 18, 2024 Result: _____

☒ I declare that this is an original work, and that I credited all content sources of which I am not the author (online and printed, images, graphics, films, etc.), in the required quotation and citation style for this work.

Standard of the Evaluated Competency(ies)

Statement of the evaluated competency(ies) – Code(s)

To produce a computer application to meet a need for administrative information. – 01HJ

Evaluated elements of the competency(ies)

1. To identify the need for information.
2. To develop the application and set up an information processing system.
3. To verify the performance of the application.
4. To enter and validate data.

Instructions

- **Internet access and use of AI are not allowed during the exam. However, students are allowed to use their class notes.**
- No break is allowed during this exam. Students are not allowed to exit the examination room before half of the allotted time has passed. Once a student has exited the classroom, he/she may not re-enter (IPEL – Article 5.12.4).
- The teacher will not answer questions during the exam.
- Students must remain silent during the exam.
- It is the teacher's responsibility to identify language errors. If such errors are found, teachers may apply a penalty of up to 20% of the grade (IPEL – Article 5.7).
- Plagiarism, attempts at plagiarism or complicity in plagiarism during a summative evaluation results in a mark of zero (0). In the case of recidivism, in the same course or in another course, the student will be given a grade of '0' for the course in question. (IPEL – Article 5.16)
- Students are responsible to make sure they have their login credentials to submit their solution.
- Students are responsible to make sure they have submitted the correct version of their exam.

Mark Breakdown

This evaluation is on 100 points, distributed as follows:

Question 1	Table Creation	For a total of 25 points
Question 2	Relationship between tables, primary and foreign keys	For a total of 25 points
Question 3	Queries with set criteria	For a total of 20 points
Question 4	Forms with calculated fields	For a total of 10 points
Question 5	Report from a query with calculated fields	For a total of 7.5 points
Question 6	Message box generated using VBA	For a total of 12.5 points
TOTAL: 100 POINTS		

Instructions

You are tasked with creating a simple database for a college. The college keeps track of teachers, the courses they teach, the management staff e.g. deans, directors, etc, and the support staff e.g. administrative assistants, pedagogical counsellors, etc. Your job is to create the database and execute various operations as requested below.

Question 1

Create a minimum of 4 tables with at least 5 records each

Question 2

Correctly identify the primary and foreign keys and establish proper relationship between the tables

Question 3

Create a minimum of 4 queries with different meaningful set criteria with fairly advanced Regular Expressions using Select, Append, Update and Delete query (at least one each)

Question 4

Create two Forms with proper form controls, actions, navigation, search button, and at least one calculated field

Question 5

Generate one Report based on the data from a query with calculated fields

Question 6

Write VBA code in a way that when a new record is added through the form, a message box should appear saying "New Record Added!"

Evaluation grid

Questions 1 (25 points)

Element of competency: To produce a computer application to meet a need for administrative information. – 01HJ	
Performance criteria	weight
1.1 Clear identification of the need.	/10
1.2 Clear and accurate definition of the expected result.	/10
1.3 Determination of an appropriate format for presenting the information.	/5

Questions 2 (25 points)

Element of competency: To produce a computer application to meet a need for administrative information. – 01HJ	
Performance criteria	weight
2.1 Determination of the data that needs to be entered, and their source.	/10
2.2 Logical organization of data.	/15

Questions 3 (20 points)

Element of competency: To produce a computer application to meet a need for administrative information. – 01HJ	
Performance criteria	weight
2.3 Determination of appropriate processing methods.	/10
2.4 Correct choice and use of appropriate software	/5
2.5 Appropriate design of an application with a database.	/5

Questions 4 (10 points)

Element of competency: To produce a computer application to meet a need for administrative information. – 01HJ	
Performance criteria	weight
2.6 Appropriate design of an application without a database.	/5
4.3 Correct application of validation procedure.	/5

Questions 5 (7.5 points)

Element of competency: To produce a computer application to meet a need for administrative information. – 01HJ	
Performance criteria	weight
3.2 Effective application of methods.	/5
3.3 Execution of necessary adjustments and corrections.	/2.5

Questions 6 (12.5 points)

Element of competency: To produce a computer application to meet a need for administrative information. – 01HJ	
Performance criteria	weight
3.1 Selection of appropriate methods.	/10
4.2 Correct application of procedure for entering data.	/2.5

CORRECTION GRID FOR LANGUAGE

Clear Communication	Clear Communication, most of the time	Vague Communication	Unclear Communication
- 0	- 0,5	- 1,5	- 2
(Word Choice) Use of precise and rich vocabulary	(Word Choice) Use of precise vocabulary	(Word Choice) Use of imprecise vocabulary	(Word Choice) Use of inappropriate vocabulary
- 0	- 0,5	- 1,5	- 2
(Format/Type of work) Respect of norms	(Format/Type of work) Respect of most of the norms	(Format/Type of work) Non-respect of the norms	(Format/Type of work) Inappropriate in relation to the required norms
- 0	- 0,5	- 1,5	- 2
(Linguistic Code) (≤2 mistakes / page)	(Linguistic Code) (3-7 mistakes/page)	(Linguistic Code) (8-10 mistakes/ page)	(Linguistic Code) (>10 mistakes/ page)
- 0	- 0,5 - 2.5	- 2.5 - 3.5	- 4