**CL2005 – Database Systems Lab**

**Lab - 2**

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**Sections:** BCS 5F **Due** **Date &** 26-Aug-2024,

**Time:** 11:40 AM

**Expense Tracker** Create an expense tracking application where users can input their expenses and categorize them. The program can then generate monthly or yearly expense reports.

Below are some design lab tasks that you can follow to develop such an application using MS Access:

**Lab Task 1: Project Setup and User Interface**

1. Create a new blank database in MS Access
2. Create a table with following fields:
   1. Input expenses with details (ID, date, category (food, transportation, entertainment, gas bills), amount, description), use appropriate field type.

**Lab Task 2: Implement Adding expenses.**

1. Create and design a FORM to add new expenses to the table.
2. Add at least 25 different records to the table.
3. Save the form with appropriate name.

**Lab Task 3: View expenses.**

1. Implement a SELECT query to display all expenses entered by the user.
2. Implement functionality to filter and display expenses by category/amount (e.g., display all expenses of amount greater than 10,000).
   1. Display relevant query result in a readable report format.
3. Save the query and report with appropriate name.

**Lab Task 4: Update expenses.**

1. Implement an UPDATE query that allows users to update the details of existing expenses (e.g., amount, category).
   1. Ensure that updates are validated and handled properly.
2. Save the query with appropriate name.

**Lab Task 5: Remove expenses.**

1. Implement a DELETE query to remove expenses from the table.
   1. E.g. remove the expenses of “transport” category from the table.
2. Save the query with appropriate name.

**Lab Task 6: Generate expense Reports.**

1. Create following expense reports, such as:
   1. Monthly expense report
      1. Calculate and display the total expenses for that month, broken down by category.
2. Export report in excel file.
3. Save the report with appropriate name.

As you complete each task, test it thoroughly before moving on to the next one. Building an expense tracking application using MS Access will help students to fully understand the benefits of managing data as compared to data management using traditional file management systems.

**Instructions:**

1. Individual lab tasks
2. You are required to do the complete lab tasks by using MS-Access.
3. Submit access database and exported excel file.
4. Deadline = = 24 Aug,2024 till 04:40 Am.
5. Submit Your both files on Google Classroom.

