CSE 302: LAB Exam on Oracle APEX (Sample)
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Instructions:

1. Download the file **Sales_APEX_EXAM.sql** from the Google Classroom or from the Google Drive course folder.
2. Login to your Oracle APEX Workspace.
3. Upload and execute the script Sales_APEX_EXAM.sql
4. Now, you have relevant tables created as per the relational data model shown in Figure 1. Some sample data is also inserted.
5. Create an application. The name of the application must be like **<LABEXAM_your-student-id>**.
6. Create the following pages as per the description given in Table 1.

Table 1: List of Tasks

Page Type/ Component Type	Page Name	Description
Reports with Forms	Company Form & Company Report	Form and report on Company table
	WorksFor Form & WorksFor Report	Form and report on WorksFor table. Create drop-down list (Select List) appropriately to enter the values of foreign keys.
	Employee Report and Employee Form with Image upload	Form and report on Employee table. You must upload the photo of each employee by altering the table and doing other necessary changes accordingly.
Master Detail Form	Sales Information per Employee	Employee (Master) Table – Sales (Child) Table
Reports on Queries	Report on Query I	Find average feedback rating and total sum of sales of each employee. **You must provide the SQL in the submission form accordingly.**
Parameterized Report	Sales Information given a Client	This report takes a client id or name as input and when submit it shows all sales information ordered by that client including SalesID, SalesDate, TotalAmount, Employee ID, Employee Name, Company Name where the employee works and the commission rate of the employee.
Chart	Chart I	Create a chart based on Report on Query I.
Custom Authentication		Create a custom authentication so that you can log in to the application with customer user name and password. There must be one account named 'admin' and the password should be 'admin123'.

Company

P	*	CompanyID	NUMBER (7)
	*	CompanyName	VARCHAR2 (20)
		CompanyAddress	VARCHAR2 (20)

🔑 Company_PK (CompanyID)

WorksFor

PF	*	EmpID	NUMBER (7)
PF	*	CompanyID	NUMBER (7)
	*	JoinDate	DATE
		ResignDate	DATE

🔑 WorksFor_PK (EmpID, CompanyID)

🔑 WorksFor_Employee_FK (EmpID)
🔑 WorksFor_Company_FK (CompanyID)

Employee

P	*	EmpID	NUMBER (7)
	*	EmpName	VARCHAR2 (25)
		EmpSalary	NUMBER (10,2)

🔑 Employee_PK (EmpID)

Feedback

P	*	FeedbackId	NUMBER (7)
	*	Rating	NUMBER (1)
		Comments	VARCHAR2 (20)
PF	*	SalesID	NUMBER (7)

🔑 Feedback_PK (FeedbackId, SalesID)

🔑 Feedback_Sales_FK (SalesID)

Sales

P	*	SalesID	NUMBER (7)
	*	SalesDate	DATE
	*	TotalAmount	NUMBER (12,2)
F	*	ClientID	NUMBER (7)
F	*	EmpID	NUMBER (7)
	*	CommissionRate	NUMBER (4,2)

🔑 Sales_PK (SalesID)

🔑 Sales_Employee_FK (EmpID)
🔑 Sales_Client_FK (ClientID)

Client

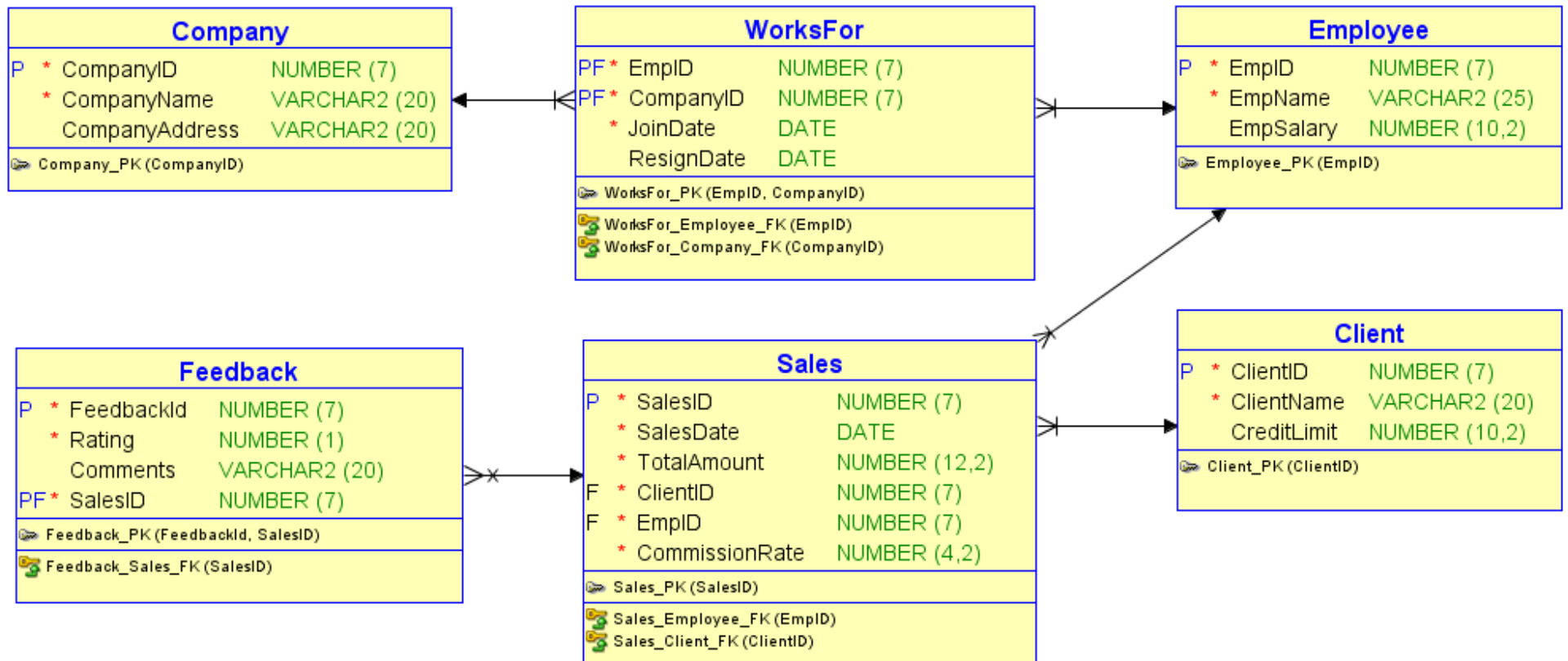|			
P	*	ClientID	NUMBER (7)
	*	ClientName	VARCHAR2 (20)
		CreditLimit	NUMBER (10,2)

🔑 Client_PK (ClientID)

Figure 1: Relational Data Model