



CSE 302: LAB Exam on Oracle APEX [Fall 2020]

Course Instructor: Dr. Mohammad Rezwanul Huq

Instructions:

1. Download the file **LABEXAM_Monthly_Budget.ddl** from the Google Classroom or from the Google Drive course folder.
2. Login to your Oracle APEX Workspace.
3. Upload and execute the script **LABEXAM_Monthly_Budget.ddl**
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 (5 points)	Person Form & Person Report	Create forms and reports on relevant tables: Person, Category and Transaction. Create drop-down list (Select List) appropriately to enter the values of foreign keys.
	Category Form & Category Report	
	Transaction Form & Transaction Report	
	PersonImage Form	Form on PersonImage table. You must upload the photo of each person here.
Master Detail Form (1 point)	Income Information per IncomeSource	IncomeSource (Master) Table – Income (Child) Table
Reports on Queries (3 points)	Report on Query I	Show Person id, name and image of the person. You must provide the SQL in the submission form accordingly.
	Report on Query II	Create a report that shows category-wise expense made by the person with id 1. You must provide the SQL in the submission form accordingly.
Parameterized Report (2 points)	Transaction Information given a Person	This report takes a person id or name as input and when submit it shows all transaction information made by that person including personId, personName, transactionId, transactionDate, categoryName, description and amount.
Chart (2 points)	Chart I	Create a chart that shows maximum, average and minimum expense made by all persons for each category. You must provide the SQL in the submission form accordingly.
Custom Authentication (2 points)		Create a custom authentication so that you can log in to the application with appropriate user name and password. There must be one account named 'admin' and the password should be 'admin123'. Skip this part if you are not sure what to do! Because, incorrect implantation of this part could make the whole application inaccessible.
Trigger (Bonus)		Write a trigger that automatically updates the current balance when a new transaction is inserted. The amount of the new transaction must be subtracted from the current balance to update the balance automatically. You must provide the SQL in the submission form accordingly.

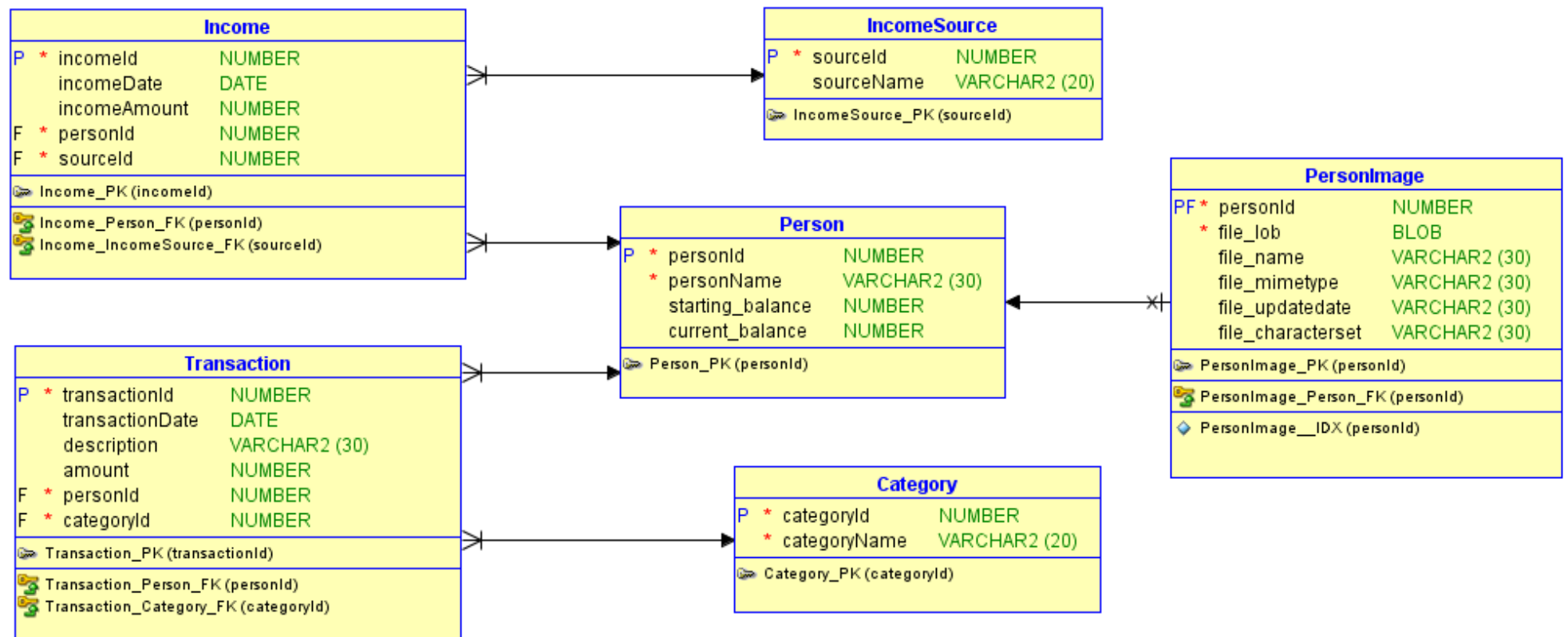


Figure 1: Relational Data Model