Project Name: Smart Expense Tracking System for Companies

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The goal of this project is to design and implement a database for a smart in-company expense tracking system. Expense tracking systems are used for managing different expenses from different employees who works on project(s) with specified customers. The system works as follows:

- An employee working on some project with a customer outside of the company. Customer may be an individual person or a corporation(company).
- During the project, there are some spendings by the employee for the sake of the project. Employee pays the receipt after the spending then stores this receipt data.
- Because the employee pay this receipt out of his/her budget, she/he will need a return payment from the company that he/she is working to.
- Employee will create a receipt form to deliver it to the project manager with following informations: tax, total_amount, date, category(food & drink, road spending, office accessories etc.) and the description. After the creation of the receipt form, employee will create an expense form and add this receipt inside the expense form just created. There are some constraints about Expense-Receipt relationship.
    - A Receipt must have only one payer that is an Employee,
    - An Expense may contain at least one Receipt,

- An Expense will receive to the ProjectManager whom is also an Employee. Project manager will check out the expense coming from the employee, then he/she will either accept or reject the expense. If the expense is accepted, employee will get his/her payment at the end of the month. There are some constraints about Project-Employee-Project-Company manager relationship:
    - An employee can work on many projects,
    - A Project must have only one ProjectManager,
    - A ProjectManager is also an Employee
    - A Company must have at least 3 Employee,
    - A Company may at least one project,

These are the entities from this database:

Employee: Working for the company in a department.

ProjectManager: Controlling the tracking-system for a specified project.

Company: A company, has employees and customers.

Receipt: A receipt paid by an employee.

Expense: Collection of receipt(s), created by employee.

Customer: A company or an individual. A company working with a customer for a project.

Project: A specified project that employees from a company working on.

And there are some associative for controlling the relationship between above entities:

CustomerType: CustomerType indicates if customer is a company or an individual.

Department: The department of the employee. Has id and employee count.

ExpenseType: A category reveals the expense type for the expense created. It can be "Food & Drink", "Gas" or "Office Accessories".

Below you can find the list of the entities with their attributes:

Company
- id
- sector/working_area
- address
- tax_id
- num_of_employees
- num_of_projects

Employee
- id
- ssn
- company_id
- first_name
- last_name
- account_id

Expense
- id
- total_amount
- category_id
- transaction_type
- payee
- creation_date
- from_project

Receipt
- id
- description
- vat
- amount
- payer
- category_id
- consuming_date

Category
- id
- name

Customer
- id
- customer_type
- address

Project
- id
- name
- description
- finished

Department
- id
- name
- working_employees

CustomerType
- id