

Exercise 6 : Consulting firm

A consulting firm carries out projects for its clients. A project must always be associated with a client. During a project, the firm incurs a number of expenses. The firm's employees can work on one or more projects at the same time, and a project usually has more than one employee working on it. The following table is used to calculate the firms expenses and hours rates so it can charge its clients.

Employee Category	Hourly Rate (\$)	Expense Nb	Expense Description
Associate	500	010	Equipment info.
Director	200	020	Restaurant
Senior Analyst	100	030	Car
Programming Analyst	80	040	Secretary
		etc.	

The consulting firm wants you to design a entity-relationship model (in the third normal form) that will produce the report below.

Project Nb:	AB2403	Date :	99/07/07
Name :	Customer order management		
Client Nb :	CL116	Start Date :	99/01/01
Name :	Pharmaplus	End Date:	99/03/38
	5301, Maisonneuve		
	Montréal (Québec) H71 2E3		
	(514) 288-6898		
Consultants			
Mireille Gadbois	Senior Analyst	190 hrs @ 100 \$/h	19 000 \$
Julie Mongrain	Programming Analyst	280 hrs @ 80 \$/h	22 000 \$
		Sup-Total consultants :	41 400 \$
Expenses			
010	Equipment info.	250 \$	
040	Secretary	3 500 \$	
		Sup-Total expenses:	3 750 \$
		Sup-Total project:	45 150 \$
		TPS :	3 161 \$
		TVQ :	3 623 \$
		Grand total :	51 934 \$