

Instituto Superior de Engenharia do Porto
Graduation in Telecommunications and Informatics Engineering

Databases and Data Warehouses

Following Kimball methodology, develop the dimensional analysis process in order to define and create the conceptual schema for a data mart, using the data of customers, products and sales of a household appliance retail company. You must consider the information provided in the next table about the existing files and their attributes.

Attributes		Attributes	
CARD.dat Data concerning the customer based on the company loyalty card	CardID, City, Region, PostalCode, CardStartDate, Gender, DateOfBirth, MaritalStatus, HasChildren, NumChildren, YoungestChild	ITEM.dat Contains all the products that the company sells	ItemCode, ItemDescription, CategoryCode, SubCategoryCode, BrandCode, UpmarketFlag
TRANSACTION.dat Contains the products sold to customers during the period of a year (one transaction can contain several products sold)	Date, TransactionID, CardID	CATEGORY.dat Product category	CategoryCode, CategDescription
TRANSACTION_ITEM.dat Contains the products sold at the level of each transaction	Date, TransactionID, ItemNumber, ItemCode, Amount	SUBCATEGORY.dat Product subcategory	SubCategoryCode, SubCategDescrip
		BRAND.dat Product brand	BrandCode, BrandDescription