# Data Dictionary for the Banking dataset

## bank client data:

age (numeric)

job : type of job (categorical: "admin.","blue-collar","entrepreneur","housemaid","management","retired","self-employed","services","student","technician","unemployed","unknown")

marital : marital status (categorical: "divorced","married","single","unknown"; note: "divorced" means divorced or widowed)

education (categorical: "basic.4y","basic.6y","basic.9y","high.school","illiterate","professional.course","university.degree","unknown")

default: has credit in default? (categorical: "no","yes","unknown")

housing: has housing loan? (categorical: "no","yes","unknown")

loan: has personal loan? (categorical: "no","yes","unknown")

## related with the last contact of the current campaign:

contact: contact communication type (categorical: "cellular","telephone")

month: last contact month of year (categorical: "jan", "feb", "mar", …, "nov", "dec")

dayofweek: last contact day of the week (categorical: "mon","tue","wed","thu","fri")

## other attributes:

campaign: number of contacts performed during this campaign and for this client (numeric, includes last contact)

pdays: number of days that passed by after the client was last contacted from a previous campaign (numeric; 999 means client was not previously contacted)

previous: number of contacts performed before this campaign and for this client (numeric)

poutcome: outcome of the previous marketing campaign (categorical: "failure","nonexistent","success")

## social and economic context attributes

emp.var.rate: employment variation rate - quarterly indicator (numeric)

cons.price.idx: consumer price index - monthly indicator (numeric)

cons.conf.idx: consumer confidence index - monthly indicator (numeric)

euribor3m: euribor 3 month rate - daily indicator (numeric)

nr.employed: number of employees - quarterly indicator (numeric)

## Output variable (desired target):

y - has the client subscribed a term deposit? (binary: "yes","no")

## Missing Attribute Values

There are several missing values in some categorical attributes, all coded with the "unknown" label. These missing values can be treated as a possible class label or using deletion or imputation techniques.