Data Mining Project (MaBAn 2020)

Predicting obesity level according to daily habits

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Introduction

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```
library(pander)
setwd("~/UNIGE/MASTERS/MaBAn/CVTDM/Project (Obesity)")
obesity <- read.csv("Obesity.csv", header=T, sep=",")</pre>
# Small metadata table :
metadata = matrix(NA, nrow = 17, ncol = 1, dimnames = list(c(colnames(obesity)), "Description"))
metadata[1,] = "Gender"
metadata[2,] = "Age"
metadata[3,] = "Height"
metadata[4,] = "Weight"
metadata[5,] = "Has a family member suffered or suffers from overweight?"
metadata[6,] = "Do you eat high caloric food frequently?"
metadata[7,] = "Do you usually eat vegetables in your meals?"
metadata[8,] = "How many main meals do you have daily?"
metadata[9,] = "Do you eat any food between meals?"
metadata[10,] = "Do you smoke?"
metadata[11,] = "How much water do you drink daily?"
metadata[12,] = "Do you monitor the calories you eat daily?"
metadata[13,] = "How often do you have physical activity?"
metadata[14,] = "How much time do you use technological devices such as
cell phone, videogames, television, computer and others?"
metadata[15,] = "How often do you drink alcohol?"
metadata[16,] = "Which transportation do you usually use?"
metadata[17,] = "Obesity level based on calculation of Mass Body Index"
```

For this project we will analyze

	Description
Gender	Gender
${f Age}$	Age
${f Height}$	Height
${\bf Weight}$	Weight
family_history_with_overweight	Has a family member suffered or suffers from
	overweight?
\mathbf{FAVC}	Do you eat high caloric food frequently?
\mathbf{FCVC}	Do you usually eat vegetables in your meals?
NCP	How many main meals do you have daily?
\mathbf{CAEC}	Do you eat any food between meals?
\mathbf{SMOKE}	Do you smoke?
CH2O	How much water do you drink daily?
\mathbf{SCC}	Do you monitor the calories you eat daily?
\mathbf{FAF}	How often do you have physical activity?
TUE	How much time do you use technological
	devices such as cell phone, videogames,
	television, computer and others?
\mathbf{CALC}	How often do you drink alcohol?
MTRANS	Which transportation do you usually use?
NObeyesdad	Obesity level based on calculation of Mass Body Index