Description of R Scripts

Our project consists of 4 script files: project.R, dataload.R, defaultanalysis.R, geographicanalysis.R and schooltypeanalysis.R. To produce our analysis, copy all of the files to the same directory and perform a Source on the project.R file. You will need to install the openxlsx package before running the scripts, and to do so, you can uncomment the first line in the project.R script and run this command. Below is a summary of the contents of the script files.

project.R – This is the main script file and should be the starting point for running functions in the other script files. It sources the other script files to make all functions available in the global environment. Running this file as-is will produce sample analysis plots and tables, but you can modify the contents of this file to produce different outputs by calling functions in different ways.

dataload.R – This script file contains two functions – load.data and unflatten.data. The load.data function loads the data from the sources into data frames. The data from the original sources contains repeating groups of attributes for years 2012 and 2013, and the unflatten.data function turns the repeating groups into two data sets – one for 2012 data and one for 2013 data, then recombines the data into one single data set. All functions used by our group work on the data frame produced by the unflatten.data function. The load.data and unflatten.data functions should be called in that order to generate the data used for analysis.

defaultanalysis.R – This file contains the functions used in our analysis of the question – did the program length influence the overall cost of attendance and what effect did the program length have on the overall default rates?

geographicanalysis.R – This file contains the functions used in our analysis of the question - are there any relationships between the geographic location of institutions and the default rate?

schooltypeanalysis.R - This file contains the functions used in our analysis of the question - did the type of university play a part in the default rates at institutions across America?