

Project Functions

splitColumn

Splits a specified column into two columns using a comma as the separator. The new columns are named after the original with a or b appended to the end.

- data – A data frame.
- column – The index of the column to be split.
- return – A data frame that mirrors the one supplied, but has the specified column removed and the split columns appended to the end.

splitColumns

Splits a series of columns starting and ending at specified indices using the splitColumn function.

- data - A data frame.
- index1 - The index of the first column to be split.
- index2 - The index of the last column to be split.
- return - A data frame that mirrors the one supplied but has the specified series of columns starting at col1Index and ending at col2Index (inclusive) removed and replaced with a pair of split columns for each column in the series.

NAConverter

Checks to see if an object is classified as a missing value if. If it is, the value is replaced with an empty string and returned, if not the value is returned.

- entry - An object.
- return - The object if the object is not a missing value, otherwise an empty string.

formatColumn

Replaces all of the missing values in a specified column in a data frame with an empty string using the NAConverter function.

- data - A data frame.
- index - The index of the column to be formatted.
- return - A data frame that mirrors the one supplied but has the specified column removed and a formatted version of that column appended to the end.

formatColumns

Replaces all of the missing values in a specified series of column in a data frame with an empty string using the formatColumn function.

- data - A data frame.
- index1 - The index of the first column to be formatted.
- index2 - The index of the last column to be formatted.
- return - A data frame that mirrors the one supplied but has the columns starting with the first index and ending with the last index removed and a formatted version of those columns appended to the end.

fixIDColumn

Formats the student IDs in the ID column such that they lack non-numeric characters and such that invalid IDs are replaced with 0 so that the database management system will flag the repeated ID for further evaluation.

- data - A data frame.
- index - The index of the ID column.
- return - A data frame that mirrors the one supplied but has the original ID column removed and a formatted version of the ID column appended to the end.

makeSurveyTable

Takes data from the raw uploaded data frame for this survey and returns an ordered and formatted data frame that can be merged with the database survey table. The returned data frame also has student table information removed.

rawdata - A data frame of the raw survey data.

return - A data frame that has been ordered and formatted and contains information only relevant to the survey table.

createBlankNameCheck

Used to reset the CSV used to track Student IDs already included in the student table in the database.

checkNames

Takes the student table information in the raw survey data and uses an external CSV to check for repeated student IDs. Should IDs be repeated, those entries are excluded from the returned data frame. All used IDs are added to the nameCheck CSV file.

rawdata - A data frame of the raw survey data.

return - A data frame that contains information only relevant to new entries in the student table.

makeStudentTable

Uses the raw survey data to returns an ordered and formatted data frame of new student information that needs to be uploaded to the Student Table in the database. Requires the namecheck CSV file. Should there be no new student information, an empty data frame will be returned, and a message will indicate the lack of new information.

rawdata - A data frame of the raw survey data.

return - A data frame that has been ordered and formatted and contains only new information relevant to the student table, otherwise returns an empty data frame.