# Secret Santa Generator

Design Document

JAvascript Class

**HandleFile**

This class contains all functions related to file handling, such as reading files and validating data. It checks the file in a specific element, **"inputId"**. The functions inside the class are:

### **Functions**

* **readFile**
  + Reads the file from the element **"inputId"**.
  + Splits the data by **\n** (new line).
  + Forms an array by separating the fields using **","** (comma).
* **validityCheck**
  + Uses “emailExt”, a variable that stores the email domain extension to be checked.
  + Example: If emailExt = "acme.com"
    - **Valid email**: xxxy@acme.com
    - **Invalid email**: xxxy@gmail.com
  + If “emailExt” is null, it checks whether the string is a valid email ID.
  + “emailCol” variable contains the column indexes to be checked. It is an array.
  + Returns **false** if there is corrupt data; otherwise, returns **true**.

JAvascript functions

* **handleFileUpload**
  + Creates a new HandleFile object with the called “inputId”
  + Reads the file using readFile class and validates the data using validity check
  + If the called DOM is “employeeFile” the data is stored in “employee” array
  + If the called DOM is “prevSSFile” the data is stored in “prevSS” array
* **shuffleArray**
  + Shuffles the given array
  + Returns the shuffled array (ss)
* **generateSS**
  + Shuffles and creates a copy of the employee array
  + For each employee
    - Gets a employee from the “ss”
    - If the employee is the same as the “ss” OR if the previous year Santa is the same as “ss” , the process is repeated.
    - Generates “ssArray” which has the current secret santa file
    - Generates “testArr” which contains the current secret santa and the previous secret santa.(to check if it is not repeated)
* **displayTable**
  + Displays the given “data” into a table
* **downloadCSV**
  + Creates a csv blob of the given array “data”
  + Creates a downloadable link of the blob
  + Attaches it to the specified DOM