

Requirements Checklist

- ✓ **Requirement 1: As a user, I want to be able to pass a CSV file created from a Google Forms survey, so that the software will have all students that I want to put into groups. (Priority: 1)**

The software must be able to read an input CSV file created from data gathered through a Google Forms survey, passed in as an argument.

- ✓ **Requirement 2: As a user, I want the CSV file in the same directory as the software so that the software will have access to the CSV file. (Priority: 1)**

The user must run software within the same directory as the CSV file.

- ✓ **Requirement 3.1: As a user, I want the software to write a CSV file that contains all groups generated by a single run of the software, with each student's name and each group sorted by numbers. (Priority: 1)**

The software must be able to write an output CSV file with sorted groups numbered and containing the names of the students in each group.

- ✓ **Requirement 3.2: As a user, I want the software to write a CSV file that contains multiple possible sets of groups instead of just one group set. (Priority: 1)**

The software must be able to write an output CSV file with multiple sets of groups. To elaborate, the software will generate one CSV file that will contain multiple groups. For example, one CSV file may contain four groups.

- ✓ **Requirement 3.3: As a user, I want the software to export the CSV file into the same directory as where the original file was, or the directory of my choosing for my convenience. (Priority: 2)**

The software must be able to write the output CSV file into the local storage of the user's machine, into a directory of their choosing.

✓ **Requirement 4: As a user, I want to be prompted to choose available options from the menu so that I can create the most dynamic groups I can. (Priority: 1)**

The software must prompt the user for specific parameters for group making use including but not limited to: group size, number of group sets, randomization, student "blacklists", group generation by similarities or differences, and whether students should be included in more than one group.

✓ **Requirement 5.1: As a user, I want to be able to use the software through the command line as it is straightforward and easy to use. (Priority: 2)**

The software must be utilized through the command line.

✓ **Requirement 5.2: As a user, I want the software to display the prompts for my input through the command line. (Priority: 1)**

The software must display menu options through the command line.

✓ **Requirement 5.3: As a user, I want to specify the size and/or number of groups to create. (Priority: 4)**

The software's menu will display the following questions in this order through the command line: "How many groups will be made?", "How many sets of groups will be made?". If there will be more than one set of groups, software will ask "Will there be repeated members within groups?".

✓ **Requirement 6.1: As a user, I want to be able to look at the generated sets of groups before they are written to make sure that everything looks correct. (Priority: 1)**

The software will allow the generated sets of groups to be shown to user before being written to an output CSV file.

- ✓ **Requirement 6.2: As a user, I want to be able to change the groups if I spot a problem with them before the groups are finalized. (Priority: 4)**

The software will allow the user to make changes to the groups after being shown to the user, but before being written to an output CSV file.

- ✓ **Requirement 7: As a user, I want to receive a clear, informative error message when I enter invalid input into the software, or when something goes wrong with the software. (Priority: 1)**

The software must display an error message when not given the correct information.

- ✓ **Requirement 8: As a user, I want to be able to create groups formed from a metric with similar or different values. (Priority: 1)**

For each metric the user uses to create groups, the software will ask if the groups should be formed by using similar or different values of that metric. If there are not enough people with similar/different values the program will prompt the user that this group making process is not possible.