## Success Criteria

The program should produce a list of matched first and second years. The list should account for every student	File Home Insert Draw Page Layout Formulas Data Review View VTell media 1 Second Year Email Second Year Email Second Year Second Second Year Buddy Second Buddy 2 mpati69@gmail.com asd disadfsaffsaf liuting asd mpati69@gmail.com asd disadfsaffsaf liuting asd mpati69@gmail.com asd disadfsaffsaf liuting asd mpati69@gmail.com asd disadfsaffsaffsaffsaffsaffsaffsaffsaffsaff
The program should allow the user to select an appropriate excel file.	Look In: Documents  Custom Office Templates My Data Sources My Games New Folder Outlook Files  File Name: Files of Type: Excel Files  Open Cancel
Read and write data from/ into the excel file	JXL library implemented as scene in video
The program allows for second years with special privileges	The client also requested that this feature be removed upon citing that this feature is simply not in line with the value's of the school
Considers region balance	This was implemented into the algorithm
Considers gender	The client decided not to include this feature be of how difficult it may be to account for all instances of gender

Produces appropriate data entry errors as opposed to crashing

Select Data Files
First Year Responses

Select File

Second Year Responses

Select File

Please Select a first year response file

Submit

Also seen within the video

Recommendations for further development:

**Introduce statistics to compare multiple solutions:** One could add a fitness function of sorts that evaluates how well a particular solution meets the criteria.

**Design and implement a more effective and efficient algorithm for sorting:** As a potential update, I have been considering developing a genetic algorithm. While this problem may be a little simplistic to warrant a full on genetic algorithm, a more complicated knapsack problem such a class scheduler may warrant such developments.

Give the user the ability to add in more features during run time: Give the user the ability to compare an additional feature not specified during run time.

**Produce a thorough report:** Give the user a detailed report of each second year and how well each of them was paired and who was subject to the worst luck. (Word Count: 276)