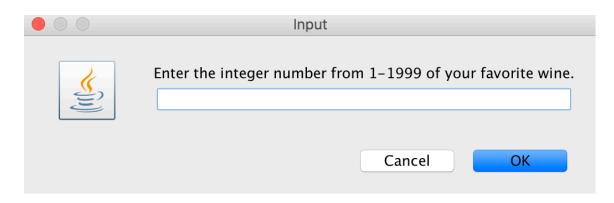
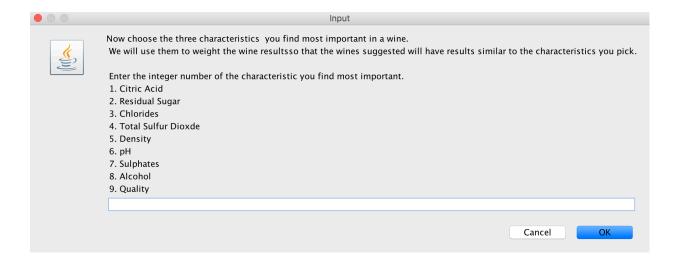
## **User Manual**

1. When the project is first started by running DataParser.java, the following panel pops up, with three various buttons the user can choose from:

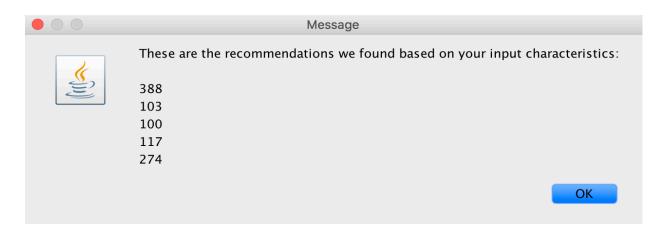


2. The "Instructions..." button produces a pop-up message that simply explains to the user what the two recommendation methods do. Essentially, the "Characteristic Based Recommendations" method prompts the user for 3 of their favorite wines (given as integers) and 3 of the characteristics that the user values most in their wine. These would be the wine qualities that would then be weighted more heavily in our recommendation system. Note that if the user inputs an empty string, values below 1 or values above 1999, the program will continue to prompt the user for valid input. The following images show the prompting process in action:



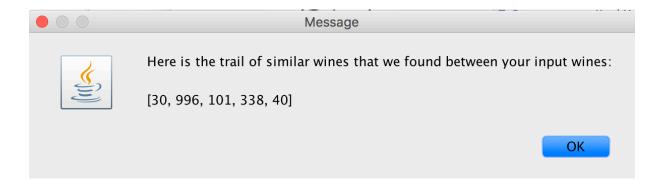


After getting the required user input, our program also asks the user for how many results they want to see, with the higher results more valuable than the ones below.

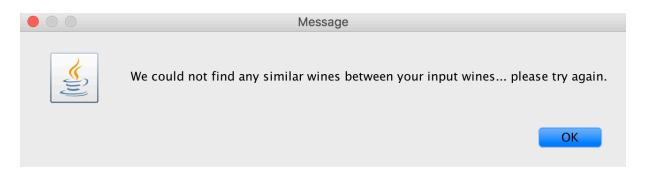


Finally, an important thing to note is that once the user receives one set of recommendations, the program simply takes him back to the main page, from where he could get more recommendations.

3. The "Shortest Path Recommendation" button on the main screen performs the following task: given two wines, it returns a list of wines that represent the spectrum of different wines between these two inputs. A possible situation in which this recommendation is used is the following: you and a friend are in charge of choosing the list of wines for some social event, and you have starkly different choices. Through this recommendation method, you would be able to get a series of wines that are "compromises" between the two endpoints, or a message that your chosen wines are too different.



Note that in this recommendations system, similar to the other, if the user inputs invalid data, the program will keep prompting him for the acceptable inputs. Finally, if the following message appears on the user's screen:



it simply means that the wines are too different for an accurate in-between path to be found (the description of how "accurate" paths are determined is found in the summary.txt file).