**Happiness Rating Report**

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We thought that a ‘happiness’ rating for our app would be a good addition. We thought it would be useful to have some method of finding what the overall ‘happiness’ is with the project allocation and that it would also be useful when tweaking the algorithm as it would allow us to see how the changes affected the allocation.

After doing some research online into trying to find an effective method for testing the efficiency of the Hungarian method algorithm (which we are implementing to allocate the projects), I came to the conclusion that the best method would be to use some sort of numerical value as it would make it easy to see any changes in the score. The method I decided would best would be a score out of 100, as it would be easy to understand for anyone who uses the system. As we may be using this method a lot I decided to code a simple method in Java that would find this score. It’s a very simple method, it’ll take in the strings containing the group number and their preferences, and also a string containing the results of the allocation. It uses some basic math to find out what score to give to each preference and what the total score should be (the total score being the score where every group gets their first preference), and then uses loops and scanners to add up the score. When the adding is completed, it then works out the score as a percentage of the total score and gives that as a final score out of 100 for the allocation.