Keenan Johnson
Shannon Jeffers
Kalie Spurgas
Stephen Townsend

Which design document did your group decide on?

Out of the four designs that were submitted, we ended up deciding to go with Kalie's design document.

What advantages do you think that design document has over the others? (be detailed)

While each design had their positives, we agreed that Kalie's had stronger advantages. Looking at all of the designs:

Keenan's had the only flow chart and it had some very good detail. However, the initial design had the min and max values initiated to zero. We saw this as a red flag because by doing this, any input greater than zero would not trigger a min value change and vise versa for the max. As a result, the min and max would be incorrect. Also, while his tests would have been thorough in a real world situation. A couple of his tests tested for things that were outside of the scope of the rules, which we were told we could ignore.

Stephen had a really solid design, however the pseudocode and design could have used details regarding variable initialization. It did not describe setting the initial min and max until you looked at the code. His use of a while loop worked and was different than other designs. Kalie's pseudocode was definitely more detailed.

Shannon had a great design but by setting the max to -2147483648 and the min to 2147483647 there is a slight risk of outer cases to not come out as desired. This was something that she ended up changing in her final code. Her min and max variables were eventually set by the initial input of the user, which was in Kalie's design.

What improvements do you think could be made to that design document? (be detailed)

The first improvement that could be made to the design is to simplify it so that there would only be one cin statement in her loop. By having the two cin statements, readability is reduced, slightly, but it feels that the code repeats, which after looking at Shannon's design could have been avoided. The user would still need to enter a new integer every time the loop iterates, but it would not repeat the cout statement. The second improvement would be to add another if statement within the loop. This if statement would be used to set the max and min if the user only inputed 1 integer, by checking to see if the current iteration of the loop is equal to 1. Currently Kalie's design has max and min initialized by user input outside of her loop. We feel that it would be best to have the loop and counter control calculations, while not having any repeating code. Kaile's code also did not mention any of the actual operators to increment or test a number against another number. This could have been a little more detailed.