

# How I Used ChatGPT To Improve My Project

Igor Kochanski - 23358459

I began my project by directly asking ChatGPT to write the code for my idea. I did not expect it to write flawless code however I knew it would give me a good starting point. The code ran however not all parts worked as intended and I could immediately see things that could be improved on. I found the way ChatGPT used “apply” to find the sum and min/max values of a list of elements quite useful, so I decided to include it in my final code. I found that ChatGPT used “(newline)” instead of “displayln” and wrote the same code to find the min/max values instead of just using previous variables when finding the range. I ended up not using most of this code. (Figure 1.)

I tried asking ChatGPT to make a filter function to pick out only numbers from 0-100 however it did not account for list elements that were not numbers, therefore I modified its code to include “number?” as one of the requirements in the “and” statement for the filter function. (Figure 2.)

The next challenge I struggled with was using recursion to find the number of students that passed the exam and its percentage. I knew it had to incorporate and “if” statement to check for 0 as you cannot divide by zero. ChatGPT has suggested a clever way to use a “for/sum” loop that automatically summed up all the outputs of the loop. I found this quite useful. (Figure 3.)

Using all these tips from ChatGPT, I have assembled my final code and added a way to display the output of the function. The only thing I wanted to change was the outcome form. Racket defaults to using fractions instead of decimals, so I asked ChatGPT to tell me how to convert fractions to a decimal form. (Figure 4.)

Overall I found ChatGPT very helpful in suggesting ways of doing things however it is not perfect and I ended up mostly writing my own code. The references to the prompts I used are labelled Figures in the other pdf file submitted with my assignment.