

## genetic progress

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we are continuing development of our speed meeting application. it is turning out to be a real gem. this is our first application to integrate a genetic algorithm to minimize duplication in a seating chart. just last week we got the initial population logic completed. i am not sure how many chromosomes the app will need in the initial population so we made it variable. a few days ago we finished the selection process. the system uses a roulette wheel selection process. this makes it so that bad chromosomes are kept around to use in child reproduction. it makes the system converge slower, but all in all it comes to a better solution in the end. we will keep playing with it and see what happens. today we got the crossover function written. we are starting with 70% but we also made this variable to see what happens when we really start to tune the system. we are using a permutation crossover method because encoding the numbers up to 62, which is how many people we could be seating, was just too nasty and it really doesn't buy us anything. traditionally encoding takes the system in and out of binary. needless to say the crossover module is still being tested. one thing i might start to worry about is performance. as we develop these modules we are always thinking about ways to keep it fast. stay tuned cause we're going into the mutation logic which should prove challenging.