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Initial Requirements

The section that I was assigned for our workout mobile application was the part of the system that will be converting and storing initial input data from the user, to be applied to certain aspects of what we will have the user do in a day-to-day workout routine.

User Requirements-

The user requirements for this section will be fairly brief. What the user will be expecting from this program is to be able to input different data about themselves such as bodyweight, experience lifting, their overall goals for their workouts and their initial maxes for certain core lifts. This will then allow the program to sculpt a workout routine that best fits the user’s goals and current standing in activity level and fitness shape.

System Requirements-

For the system requirements, we will want the system to be able to give the user the best workout experience possible. To do this we will have to come up with an algorithm that can take bodyweight and the user’s maxes and be able to output certain weights and sets for different workouts. We want this application to be able to also adjust the algorithm based on how heavy or light the user feels the weight was, which will then have to be another input feature of the system that takes this hard-coded algorithm of initially adjusting their weights, and adjusting that number to give a more accurate and suitable weight for the user. This means that there will have to be several different equations that convert weights of certain workouts, so if it is more of a leg exercise it will have to take the squat max of the user and plug it in to this equation to give a proper weight for the set and reps. These equations will most likely have to be mapped out in a hashmap in Java that can link a keyword such as “leg-workout” to a value which would be the proper conversion equation.