**Criterion E: Evaluation**

**Evaluation of the product**

The program implements every objective specified in the program criteria listed in Criterion A.

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| **Success Criterion** | **Classes** | **Methods** |
| Enter player names and their current weight maxes for the 4 basic lifts - power clean, squat, bench, and incline. | WeightTraining MaxDatabase | addPlayer()  addPlayer(Player player) |
| View a list of all players in the database in alphabetical order. | WeightTraining MaxDatabase  Player | viewAllPlayers()  sortPlayersByName()  getName()  getClassification() |
| View a single player’s weight lifting data. | WeightTraining  MaxDatabase | searchForPlayer()  searchByName(String name) |
| Make changes to the maxes of all players. | WeightTraining  MaxDatabase  Player | updatePlayers(), updateAllMaxes()  getPlayers()  setBenchMax(int bench);  setSquatMax(int squat);  setInclineMax(int incline);  setPowerMax(int power);  toString(); |
| Make changes to the maxes for a specific player. | WeightTraining  MaxDatabase  Player | updatePlayers()  searchByName(name)  setBenchMax(int bench);  setSquatMax(int squat);  setInclineMax(int incline);  setPowerMax(int power);  toString(); |
| Printout workout cards for a single player or the entire database of players that includes the number of reps and amount of weight they should be lifting for that week. | WeightTraining  PrintWeightProgram  WeightLiftingProgram | print() printWeightLiftingProgram()  initTextLines()  print()  calculateBench(int b, int w)  calculateSquat(int s, int w)  calculateIncline(int i, int w)  calculatePowerClean(int pc, int w) |
| Printout a list of players organized into groups of four according to their bench press max. | WeightTraining  PrintGroups | print()  initTextLines()  print() |
| Use menu system that will allow users to navigate the program simply by typing numbers. | WeightTraining | mainMenu() |
| Include data validation so that program does not crash if a user enters invalid data. | WeightTraining | validateIntegerInput(String prompt) |
| Delete a single student or clear the entire database. | WeightTraining  MaxDatabase | delete()  searchByName(String name)  clearDatabase() |
| Include File I/O so that the data can be stored and reloaded into the program each time it is launched. | WeightTraining  MaxDatabase | saveDataFile()  saveFile()  readFile() |
| Make a backup file of the database each time the program is launched. | MaxDatabase | makeBackupFile() |

When I showed the final product to my client Coach Scales he was very pleased. He wanted to start using it right away, so I created a batch file so that he could execute the program by clicking on its shortcut. I showed him where the backup file was located along with the instructions file I made that contained instructions for reverting to the backup file if the main data file became corrupted.

**Recommendations for the future development of the product**

When I asked my client if there was anything he would add or change about the program he said it might be easier to use if it were a GUI program. I do think selecting players from a list would be easier than having to type in the name each time. The program is structured using a model/view architecture so converting it to a GUI program would be fairly straightforward.

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