

## **Criterion A: Planning**

### **1. Defining the Problem**

Client Coach x, is a local soccer coach of a youth league. Him and his manager has the job of keeping track of the players and the team's housekeeping items. These are, having a record of all the players names, their jersey sizes, jersey number, short sizes, jacket sizes etc. Then with all this information, the coach is able to calculate the number of each item (jerseys, jackets etc.) he will need and the cost of buying these from the companies or sponsors he orders them from.

Each year, with a team of 20 players, the Coach and his manager records player information by hand without any aid from technology. But, with the advancements in programming it should be easier for the Coach to just input all the information into the computer. In discussion with the coach(Appendix II), he also has a problem sending all this information to the companies by mail. This is because the coach has to put each player's name and sizes into the mail manually, which is a tedious job. The coach will require a program that would help be more efficient in the process.

### **2. Solution**

The solution to this problem is to make a program that gets the names of all the players from the client(Coach) as well as their jersey sizes, jersey numbers, short sizes, jacket sizes. Also, this program will allow the coach to input their names and jacket sizes if they desire to buy jackets from the company. Then, once these are inputted, they can be transferred onto two files, one that can be used for reading the coaches and players back into the program and the other for sending off to companies. The benefit of reading back into the program is that the user can put the persons into the file and then edit it later. Also, with add and delete functions, the coach can input or delete a person at any time (ex. if player leaves) persons can be written to file again. The file sent off to companies will aid them to formulate total cost for the team. Being provided the cost for the team, the coach can calculate the average cost per player. This implementation of directly sending a pre-made file to the companies will produce efficiency for the coach. He will be able to manage his team very easily without having to put much time into the housekeeping items.

### **3. Criteria for Success**

- Create an Object Oriented Program that will have different classes to improve organization(such as Coach class, Player class etc.).
- Create a menu that will direct the client to the various operations (add, delete, printout, writetofile etc.)
- Create conditional operators that will direct to a coach or a player
- Client will input names, jersey numbers, jersey, jacket and short sizes
- Client will be able to add/ delete players or coaches allowing them to come back and change players any time.

- Client will see all the inputted information throughout the program with a printout function.
- The program will write to a file all the information entered in the program( one file for sending and the other for reading back in).
- Contain a readfile through which the user can access the persons written already to file, and thus be able to modify this file in the program at a later time. Creates the ability to retain previously entered information.
- Make a Calendar class that will have the dates of the practices and games.

Word Count: 570