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### Final Write Up

I have finally completed my final project. I decided to do a database because of my appeal to fantasy football. Sports are a huge part of my life, primarily football. I eat, sleep, and breathe the sport and that is why i continue to play it. I also watch it religiously and take part in fantasy football with a group of my friends and family in a league that we have been in for about years. We look forward to it every year and love to play it. It is very cool how the fantasy football database works. It is constantly updated every 30 seconds and takes in massive amount of data every day. Including, trades within millions of leagues across the world, trades from teams in real life, roster updates, scheduling updates, and biggest of all statistics and player and team news. The app ESPN has created is very complex and very cool which always intrigued me so i wanted to venture into the world of databases to see how they are created and to see if i could possibly create my own fantasy league.

Creating my database I ran into a few problems. The biggest was getting connected to a database itself. I first started on Eclipse and tried numerous times to connect to mySQL which did not work, so i moved on to try others as well that did not seem to work either. I had to outsource and get a tutor to help me connect to a database. He found it was much easier to download the program intellij and connect to a database program called pgAdmin 4. Of course another issue was throughout the project i had to fix small lapses in the code and typos that set

me back. Eventually i was able to overcome the obstacles to create a database that was able to create, read, update, and destroy. The save or create part of the database is probably what took up majority of the project. I had to look up numerous amounts of ways to make the code render on w3, github, youtube, stackoverflow, google, MySQL, and lucid charts. Once i was able to get the execute update orders and the insert to work it was easy because i was able to put that code in the other classes and just manipulate the integer and string names to the desired class.

This project was primarily directed at making a database for people who need one in sports. This database will be for leagues who need to organize their players and keep track of information and stats. This will be used by fans or league managers who want to keep themselves updated on the newest acquisitions and news surrounding that league. It will keep track of where players, coaches, and organizations have moved too. This would be useful if someone wanted to make a highschool football fantasy league or, if a father wanted to keep track of a youth baseball league through the years, etc. I have multiple classes, player, coach, sport, team, and person that all will be apparent for the user in the database to sort through to see what team or player they are searching for. This can tremendously help a league that is trying to keep track of player's stats and what teams they move around too. For example if there is a youth baseball league for the town of poughkeepsie, they have a draft every year across 10 teams. From 1st to 8th grade they can keep stats of every player in the league to see how they progress and what coach or team they play best for so that they could use this to strategically draft the following year. It would give information of every team, what color they wear, who their coach is, their wins and losses, what players are on their team, the players stats, and possibly a small

bio about them or how well they work with others. This databases will be for the coaches to strategize.

The way the database works is quite simple. There are 5 classes: Sport, Team, Person, Coach, and player. In the presentation i gave in your office i started with sport. You simply enter: Sport *nameOfFile* = new Sport(); then below it will be *nameOfFile.saveSport()*; within the parenthesis the program will tell you to enter a sportId, which is a number of the user's choice that corresponds to the sport so it is easier to find within the database. Then it will enter to ask you the name of the sport. Then you run this code and once that happens it will be entered into the database. And will look something like: *sportName: Football, sportId: 1*. Now you do this for all 5 classes to enter a player or coach etc. you just change out the name of the class of where it says sport. FOr example if you wanted to add a coach it would look like: Coach *nameOfFile* = new Coach(); *nameOfFile.saveCoach()*; it would not look like: Sport *nameOfFile* = new Sport(); *nameOfFile.saveSport()*; unless of course adding a new sport. Every sport needs team, which is what you would add next in progression, then coaches, and players. Now the person class is for any PERSON you add into the database with a name. With the person class you would still go through the steps above and also add in a playerId at the end so it can correspond with the coaches and players since they will also have a playerId and not names. This is how you will find player names in the database. They will have matching player IDs but stats and bios will be located in different columns. Lastly if there is any mistake you can also update and or delete on the fly.

Finally what this program does, is it allows any user who needs to keep people or players organized and opportunity to do so. They are able to add people while also updating names and

stats and deleting people if need be all while it appears on a live feed for them to look at after they run it. This can solve the issue of using paper spreadsheets that need to be manually written. Despite numerous times i was stressed and frustrated, I had a fun time with this project and creating this database. It is crazy to see how much work went into this project and still go no where close to ESPN's fantasy app which makes me respect it and enjoy it that much more.