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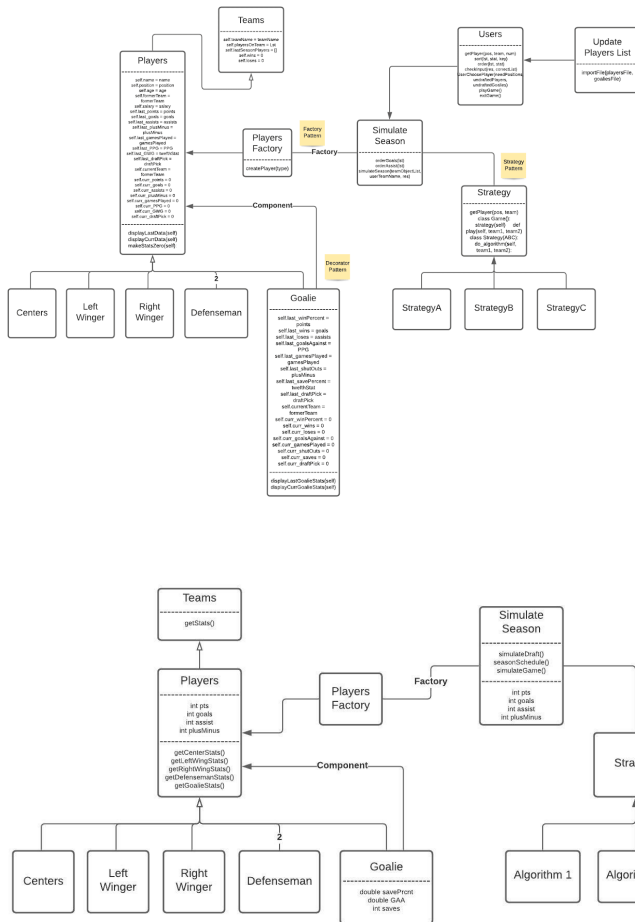
Jacob Reynolds

## Be A GM

### Final State of the system statement:

The final state of the system reflects closely what we said was going to be done by the end of the second sprint. We were able to implement a factory pattern, a strategy pattern, and a graphical interface. A Memento pattern that was planned was not implemented for the reason of it being obsolete/not useful for the finished product.

### Final Class Diagram and Comparison Statement:



The primary changes that were made from project 4 to project 6 were the adding of more individual statistics and the adding of more helper functions around all aspects of the project. As we worked on this project we realized that we had completely underestimated the number of statistics that we would need to keep track of in order for the simulation to run effectively and have a certain level of depth and complexity that a simulation should have. This is the same reason why we needed so many additional helper functions. The addition of the “Users” file and class was added in order to organize the code better and to more efficiently utilize object-oriented practices. The

addition of the "Update Players List" file was added to specifically deal with the excel files that are being read in and to organize/format that data into something usable.

### Third-Party code vs. Original code Statement:

The Tkinter GUI toolkit(<https://docs.python.org/3/library/tkinter.html>) was used in the Users.py file to create the graphical window, and <https://tkdocs.com/> was used as a reference to write the code handling the graphical window. All other code is original.

### Statement on the OOAD process for your overall Semester Project:

Three key design process elements that our team experienced throughout the OODA semester-long project were brainstorming, sketching, and concept development. Throughout the brainstorming step in this process as a whole, we had a great time thinking about ideas that were different from each other. We were all very respectful to each other and liked all of the ideas that were on the table, but ultimately we decided to go with the Be A GM game idea. We decided to do the Be A GM because it was the most feasible to conceptualize and develop through the given time period. The sketching process was a bit of a challenge for our group because we usually had Jacob Reynolds doing the UML diagrams. But this time we all had to make diagrams for what we were going to develop. We spent a lot of time on this step of development because it would be the foundation for the concept development. The diagrams that we had made were used as guidelines for the project. In the end, we created many well-developed diagrams that were the basis for our development. Lastly, our last key design process

was concept development. This step in the development process was probably the most seamless of all the rest. Concept development worked like a well-oiled machine because our diagrams were a perfect base for what we needed to do. Once we knew what had to be done it was super easy to implement and develop.