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CS 611: Object-Oriented Software Principles and Design

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Legends of Valor Design Documentation

After initially looking at both of our codebases for the Legends: Heroes and Monsters assignments, we ultimately decided to build off of David's implementation. This was due to the fact that it already had functional forms of the Market User Interface as well as the Battle User Interface, whereas Manish's implementation had some noticeable gaps in it. It was also evident that David's codebase had broken down the class structure in a much more optimal manner (in terms of Object-Oriented Design). This led us both to think that it would be much simpler to extend David's existing code for a new game.

With implementing Legends of Valor, we first looked through each other's entire codebases so that even if we didn't use a certain part of the code, we knew how it worked and we could use it as inspiration for this assignment. Next, we made a list of features that would need to be added in order to have a working version of this game based on the new set of requirements and style of gameplay. From there, we were able to each setup branches on a new Github repository (that contained David's existing codebase for LHM) and work together without getting in each other's way. We frequently communicate with each other over text in order to give each other updates as well as ask any questions about implementation. This allowed for a smooth workflow that made sure each of us knew what we would be working on and the timelines for each of our tasks.

As we sit typing this after finishing our implementation of Legends of Valor, we are both very pleased with the final result. It is fully functional without any compromises made to the specifications we were given. The code we built off of made it very straightforward to implement the new specifications without having to change much (if any) of what was already there. This is why we now feel like we made the correct decision in choosing David's implementation to work off of. We certainly achieved our expectations that we started with. Additionally, while it was not a requirement for this assignment, both Heroes and Monsters and Legends of Valor are playable from the same codebase which is an achievement in making our code as reusable as possible.*
Overall, we are both satisfied with our project and had a great time working on it together!

*We did not implement the ability to switch games through user input (when run, the code automatically starts Legends of Valor), however, if added there would be no issue switching between games