Team 11 Design Paradigm Write-Up

We used a combination of Object-Oriented and Even Driven design paradigms in our implementation of project three. When we first got down to planning out our project, we did not know what design paradigm would be the best. We figured that since we all came from learning C++ in previous programming courses and that C++ uses object-oriented design, we should use object oriented design for the implementation of this project. The first thing we started out with was a class diagram of our whole project. We created our class diagram using the online software drawio. Our class diagram consisted of all the classes for the project and all the attributes we wanted to implement in each class. It also showed how the classes interacted with one another through the use of arrows drawn between the class cards. This was very useful when we were writing the implementation because we could refer to it to see what we had finished so far and what we still needed to do. The Event Driven design paradigm was used because we made a game and we needed to handle a lot of user events when a user plays our game. We have several event listeners and click listeners to update both the UI of the game and our backend logic that keeps track of the game state. For example, when a card is clicked on in our game, we highlight all the cells that the card can move to in red. We have to listen for the click from the user in order to update the UI to show the user where they can move. This is why we elected to use both Object-Oriented and Event Driven design.