Summary and Discussion:

Prior to the development of our application, our group sat down and went over possible use cases for users of the application. This allowed us to develop our application around the use cases we came up with. The main difference from our original vision was how our application’s GUI was designed. Prior to our development phase we designed what we thought our GUI would look like. Instead of making multiple windows we decided to use views to switch between when choosing which action we would like to do.

Our database design changed quite a bit more than our application design did. Originally, we planned on having data on each movie for parental ratings. We changed our database from using parental rating to use a star rating (1.0 to 10.0) because we believed it would me more useful. We also changed the movie title and year to be a composite unique key. We originally had just the movie title as unique but changed this to allow multiple movies with the same title that were released in separate years. Bothe genre ID and duration of the movie were changed to be nullable. This is because the data we pulled from the database that we used had movies without genres listed or durations listed. Lastly we changed the release year data from type DATE to and integer because it allowed use to more easily integrate the C# side with the SQL stored procedures.

We learned that version control becomes much more difficult to work with on large teams. We kept having issues with syncing our projects. We started using branches on GitHub and splitting the development by each class. A big thing that we would change if we had to do this project over again would be to find a better data set. The data set we used had certain rows with columns that were null. If we made our own dataset or found another dataset, we would ensure that there isn’t any null data. We would make sure that the data is fully sanitized and fulfill our requirements.

In future development we would like to make our project be customer facing rather than employee facing. Our program is currently made for an employee to work with in a physical storefront. As we’ve seen with the closings of Blockbusters across the country this business model is no longer viable. We could easily change our program to a customer facing program that will allow customers to be the user. This will allow customers to rent movies themselves at kiosks placed in shopping malls, grocery stores, etc. We also thought of adapting our system implemented in an online format that allowed users to ‘rent’ movies online that will add them to their account and allow users to stream the movies they rented. The system would then auto-return when the movie is due back. The users would no longer to be able to stream the movie after the due date. We also thought of expanding the possible inventory types for our system. This could include CDs, books, vinyl records, and more. If we adapted for an online store, we could also rent out e-books and music.