Challenges and Lessons Learned

Challenges that I faced while working on this project mostly came from working with NHibernate in my data persistence layer. I feel it is somewhat difficult to use and configure correctly. However, despite the fact that it was somewhat difficult to use, it saved me a great deal of time. I did not need to write custom SQL queries for persisting the data within the application. Overall, the time saved by using NHibernate greatly outweighed the issues that I encountered.

Another challenge that I faced during the application development was determining the correct architecture and relationships between the models within the application. I found myself having to think through the logical architecture and relationships quite a bit. As the application progressed and more artifacts were developed, I was able to identify the architecture that needed to be implemented in order to create the application.

One of the most important lessons that I learned throughout the development of this application was that unit tests lead to better coding implementations. I am able to create a unit test, code a working implementation, then refactor the implementation at a later time, ensuring that the application still maintains correct functionality. In terms of software maintenance, the value that unit tests provide is unmatchable.

Another lesson learned while working on this project was that iterative development is very beneficial in handling changes in requirements. In most real-world projects, requirements change. The iterative development process allows for change and it is much easier to incorporate changes compared to other processes such as the Waterfall Lifecycle. It is great that I am able to code an implementation in one iteration, then modify it in a later iteration in order to facilitate the change in requirements. Along with unit tests, iterative development is of great benefit when it is likely that requirements will change.

Lastly, the final lesson learned that comes to mind is the importance of the modeling diagrams and artifacts that were produced for this project. There were times where I found it rather difficult to determine the design and architecture that was needed to create an implementation for certain functionality. The modeling and generation of the artifacts for this project helped me to understand the requirements in greater detail and also guided me through the thinking process necessary to come up with a viable design.