System Limitations and Potential Improvements (Deliverable #8)

This project has taught me quite a bit about SQL Developer. I have mainly learned that SQL Developer has quiet a few large potential improvements that could be made.

One glaring system limitation issue our group had when creating our database was creating the relationships between the tables. We could have saved so much time if SQL Developer provided the ability to create relationships based on diagram. I have worked with Microsoft’s SQL Server before, and I know that there is a relationships tab that does exactly that. You can open a dialog box in the relationships tab that allows you to input the primary and foreign keys of each table. I was extremely disappointed to see that this was not a feature in SQL Developer. This was a problem that my group experienced; I can’t even imagine how bad it would have been if our database had been larger. I know for a fact most enterprise databases are much larger than ours, but I also infer that they probably are not using SQL Developer to create their databases. Perhaps as students, we have a basic package, and more advanced packages of this product include this feature. Perhaps it simply isn’t included at all in SQL Developer.

Another system limitation issue our group encountered was SQL Developer seemed to always have referential integrity turned on. We really would have liked to have turned this off temporarily when creating the relationships between our tables. Having referential integrity constantly on caused us to have to create the relationships in a specific order so that we didn’t violate integrity constraints and encounter parent key not found errors.

Another system limitation issue our group had was SQL Developer not saving our data models when we created them. A potential improvement for this issue is SQL Developer to save the models under the corresponding tabs (relational or logical).

The final main system limitation that my group had issues with was the errors that SQL Developer showed. Although the error message did state the line of the issue, it didn’t state the exact location of the issue. It would have been great if SQL Developer provided suggestions on how to fix the syntax, rather than just displaying an angry error message. If I were to suggest an improvement for this, I would say that SQL Developer should underline the **exact** location of the error and display a list of fixes for the error. I would also suggest that next to the error, SQL Developer further defined what the error meant. For example, rather than state “parent key not found,” state, “you are missing a foreign key in a table.”