**A brief explanation of the changes made to the Phase 1 submission:**

1. We will use MySQL to code this project.

2. Information Flow Diagram

* We have updated the Information Flow Diagram and changed the arrows for ‘Report 3 – Store Revenue by Year by State’ and ‘Report 5 - State with Highest Volume for each Category’ to two-way arrows. We should allow users to pick the year or other variable they specifically want to see, so there will be information flow both to and from the database, so they should be two-way arrows.

3. EER Diagram

* We have removed surrogate ID's for City, Date, Discount, and choose other attribute as the primary key;
* We removed year, month and date attributes for holiday and use MySql’s datatype ‘date’ as the datatype for holiday attribute. Holiday is a subclass of Date;
* City has composite Name/State as identifier;
* We removed DiscountRate; it is unnecessary;
* We have simplified the part for product and discount, now Discount is an M:N relationship between Date and Product.

4. Data Types

* We have updated the data type table
* We have carefully checked the naming of all fields of the whole project; now it should be consistent across all four documents: EER, Mapping, Schema and report.

5. Constraints

* We removed the old paragraph and added ‘Discount prices should not be higher than retail prices’. Other constraints are sentences like ‘non-zero’, ‘not null’, etc., which are either stated in datatype or schema, so are not listed again.

6. Task Decomposition

* Report 5, we remove one subtask and access construct BelongTo
* Report 6, we remove all of the subtasks and access Discount construct

7. Abstract Code

* We updated the population form, now it will retrieve data based on both city name and state
* The Holiday table allows user’s input, user can create any holiday they want and designate a date for it, and this date can be any value existed in the DateYMD table and can be same as another holiday (i.e. no need to be constrained with one holiday for particular date)
* In Report 3, we retrieved the dropdown list of states from City.
* In Report 4, we removed the $siginificance.
* In Report 5, we use the Left Join to satisfy the specs special attention to the case where two or more states are tied with respect to some category.
* We remove the calculation for the number of cities within each category in Report 6