

Group D
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Grading criteria that were used for part I of the assignment

The number between brackets represents the relative importance of this criterion. For every criterion 0, 0.25, 0.5, 0.75, or 1 was given, depending on the severity of the error (if any). All issues were penalized under only one category.

1. Dimensional fact model
 - a. Surrogate keys should not be included into the conceptual model as they concern implementation details. Similarly, start and end should not be included in the DFM.
 - b. Foreign keys should not be included in the fact. The fact should only contain measures.
 - c. The different levels in the hierarchy should respect the roll-up order; that is, if a level A is connected to level B (A is on the path from the fact to B), then there should be a functional dependency from A to B.
 - d. Implementation details such as the use of a mini-dimension should not be reflected in the conceptual schema because the conceptual schema has as goal to represent the data to be stored in the data warehouse as-is, not how it will be implemented.
 - e. Correctly model “you change your model considering that all the information in the OLTP database should go into the OLAP data warehouse.”
 - f. How the payment status is modeled? One solution is an attribute in the fact table
It should be included in the fact table [0.5]
2. Logical model
 - a. Dimensions that are versioned should have start-end: customer, staff and store.
 - b. Versioned dimensions need to have surrogate keys because the OLTP keys are no longer a key in the dimension table (for instance: the same customer can have multiple versions which are stored as different tuples, but with the same OLTP key).
 - c. If a mini-dimension is used, the key of the table containing the rapidly changing attributes that are taken out of the dimension table should be included in the fact table, NOT into the dimension table.
 - d. All dimension tables should contain attributes besides the key. Otherwise the dimension is a degenerate dimension and no table should have been made for it; the key should be included into the fact table.

Payment_status?

- e. Date dimension should have different date options.

Grading 9.5/10