

# VHT2 – VHT2 TASK 1: NORMALIZATION AND DATABASE DESIGN

DATA MANAGEMENT - APPLICATIONS – C170

PRFA – VHT2

TASK OVERVIEW

SUBMISSIONS

EVALUATION REPORT

## EVALUATION REPORT – ATTEMPT 1 – REVISION NEEDED

### Overall Evaluator Comments

#### EVALUATOR COMMENTS

This submission includes a detailed walkthrough of the database design for Nora's Bagel Bin and database development for Jaunty Coffee Co, including appropriate screenshots of the functioning SQL code. The 2NF and 3NF relationship and data type aspects need revision. Please see included comments.

### A1a. 1NF Table Attributes to 2NF Table

**Approaching Competence** The submission assigns *at least* 1 but not *all* attributes from the 1NF table into the correct 2NF table.

#### EVALUATOR COMMENTS: ATTEMPT 1

Most of the attributes are assigned into the correct 2NF table. The "Bagel Quantity" and "Delivery Fee" attributes are not correctly assigned.

### A1b. Relationships Between 2NF Tables

**Approaching Competence** The submission does not correctly describe the relationship between the 2 pairs of 2NF tables by indicating their cardinality in *each* of the dotted cells.

#### EVALUATOR COMMENTS: ATTEMPT 1

The relationships between the 2NF tables are not correctly described.

### A1c. Explanation of Attributes and Cardinality of 2NF Tables

**Approaching Competence** The submission illogically explains how the attributes were assigned to the 2NF tables or how the cardinality of the relationships was determined between the 2NF tables.

EVALUATOR COMMENTS: ATTEMPT 1

A discussion of the assignment of the attributes is present. However, the explanation of the relationship cardinality between the tables is incorrect.

## A2a. 2NF Table Attributes to 3NF Table

**Approaching Competence** The submission does not assign 1 or more attributes from the 2NF "Bagel Order" table into one of the new 3NF tables or copies only *some* of the other information from the 2NF diagram into the 3NF diagram.

EVALUATOR COMMENTS: ATTEMPT 1

Most of the attributes are assigned into the correct 3NF table. The "Bagel Quantity" and "Delivery Fee" attributes are not correctly assigned.

## A2b. Naming of Tables

**Competent** The submission provides a name for *each* 3NF table that reflects its contents.

There are no comments for this aspect.

## A2c. 3NF Keys Between Tables

**Competent** The submission creates a new field that will be used as a key linking the 2 3NF tables. The PK and FK fields are in the correct locations in the 3NF diagram.

There are no comments for this aspect.

## A2d. Relationships Between 3NF Tables

**Approaching Competence** The submission does not correctly describe the relationships between the 3NF tables by indicating their cardinality in *each* of the dotted cells.

EVALUATOR COMMENTS: ATTEMPT 1

The submission provides the cardinality between the 3NF tables. The relationship between the Bagel Order and the Bagel Order Line Item and the relationship between the customer and bagel order tables do not indicate the appropriate relationships.

## A2e. Explanation of Attributes and Cardinality of 3NF Tables

**Competent** The submission logically explains how the attributes were assigned to the 3NF tables and how the cardinality of the relationships was determined between the 3NF tables.

There are no comments for this aspect.

## A3a. Copying Information and Renaming Attributes

**Approaching Competence** The submission incorrectly copies 1 or more table names or cardinality information from the 3NF diagram into the “Final Physical Database Model” or incorrectly renames 1 or more attributes.

### EVALUATOR COMMENTS: ATTEMPT 1

The final physical database model is observed. However, adjustments will be necessary once corrections have been made.

## A3b. Five Data Types

**Approaching Competence** The submission assigns 1 of the 5 data types to *at least* 1 of the attributes in the 3NF tables, but a data type is not assigned to *each* of the attributes. Or *each* data type is not used *at least* once.

### EVALUATOR COMMENTS: ATTEMPT 1

Data type assignments are present. However, several char, varchar and numeric definitions are incomplete. Char and Varchar types do not specify the maximum length for each attribute and the numeric types do not include the precision and scale parameters. numeric is not the best choice for phone numbers.

## B1a. SQL Code: Tables

**Competent** The submission provides accurate and logical SQL code written for *all* the tables.

There are no comments for this aspect.

## B1b. Tables: Screenshot Of SQL Code Results

**Competent** The submission demonstrates that the code was tested by providing a screenshot showing the SQL commands and the database server's response.

There are no comments for this aspect.

## B2a. SQL Code: Data Population

**Competent** The submission provides accurate and logical SQL code written to populate the tables with *at least* 3 rows of data in *each* table.

There are no comments for this aspect.

## B2b. Data: Screenshot of SQL Code Results

**Competent** The submission demonstrates that the code was tested by providing a screenshot showing the SQL commands and the database server's response.

There are no comments for this aspect.

## B3a. SQL Code: View for Employee Information

**Competent** The submission provides accurate and logical SQL code written to create the view. The view shows *all* of the information from the "Employee" table and concatenates *each* employee's first and last name, with a space between the first and last name, into an attribute called `employee_full_name`.

There are no comments for this aspect.

## B3b. View: Screenshot of SQL Code Results

**Competent** The submission demonstrates that the code was tested by providing a screenshot showing the SQL commands and the database server's response.

There are no comments for this aspect.

## B4a. SQL Code: Index of Coffee Information

**Competent** The submission provides accurate and logical SQL code written to create the index for the coffee\_name field of the “Coffee” table.

There are no comments for this aspect.

### B4b. Index: Screenshot of SQL Code Results

**Competent** The submission demonstrates that the code was tested by providing a screenshot showing the SQL commands and the database server’s response.

There are no comments for this aspect.

### B5a. SQL Code: SFW Queries

**Competent** The submission provides accurate and logical SQL code written to create the SFW query on *any* of the tables or views.

There are no comments for this aspect.

### B5b. SFW Queries: Screenshot of SQL Code Results

**Competent** The submission demonstrates that the code was tested by providing a screenshot showing the SQL commands and the database server’s response.

There are no comments for this aspect.

### B6a. SQL Code: Join Query

**Competent** The submission provides accurate and logical SQL code written to create the table joins query. The query joins together 3 different tables and includes attributes from *all* 3 tables in its output.

There are no comments for this aspect.

### B6b. Join Query: Screenshot of SQL Code Results

**Competent** The submission demonstrates that the code was tested by providing a screenshot showing the SQL commands and the database server’s response.

There are no comments for this aspect.

### C. PDF Submission

**Competent** The submission provides a PDF of parts A and B with *each* part clearly labeled.

There are no comments for this aspect.

### D. Professional Communication

**Competent** Content reflects attention to detail, is organized, and focuses on the main ideas as prescribed in the task or chosen by the submission. Terminology is pertinent, is used correctly, and effectively conveys the intended meaning. Mechanics, usage, and grammar promote accurate interpretation and understanding.

There are no comments for this aspect.