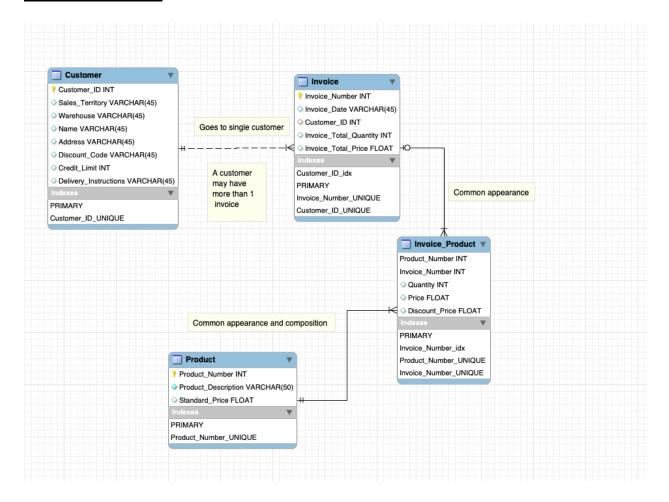
Homework 2: Data Modeling

Data Model:



CODE PORTION:

- -- MySQL Script generated by MySQL Workbench
- -- Sat Oct 13 22:36:58 2018
- -- Model: New Model Version: 1.0
- -- MySQL Workbench Forward Engineering

SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0; SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS, FOREIGN_KEY_CHECKS=0; SET @OLD_SQL_MODE=@@SQL_MODE, SQL_MODE='TRADITIONAL,ALLOW_INVALID_DATES';

```
-- Schema ZormeneKinanee Homework2
-- Schema ZormeneKinanee Homework2
  _____
CREATE SCHEMA IF NOT EXISTS 'ZormeneKinanee Homework2' DEFAULT CHARACTER SET utf8
USE `ZormeneKinanee Homework2`;
-- Table `ZormeneKinanee Homework2`.`Product`
-- -----
CREATE TABLE IF NOT EXISTS `ZormeneKinanee Homework2`.`Product` (
 `Product Number` INT NULL AUTO INCREMENT,
`Product_Description` VARCHAR(50) GENERATED ALWAYS AS (),
 `Standard Price` FLOAT UNSIGNED NULL,
PRIMARY KEY ('Product Number'),
UNIQUE INDEX 'Product Number UNIQUE' ('Product Number' ASC))
ENGINE = InnoDB;
-- Table `ZormeneKinanee Homework2`.`Customer`
-- -----
CREATE TABLE IF NOT EXISTS `ZormeneKinanee Homework2`.`Customer` (
 `Customer ID` INT NULL AUTO INCREMENT,
 'Sales Territory' VARCHAR(45) NULL,
 `Warehouse` VARCHAR(45) NULL,
 'Name' VARCHAR(45) NULL,
 `Address` VARCHAR(45) NULL,
 `Discount_Code` VARCHAR(45) NULL,
 `Credit Limit` INT NULL,
 `Delivery Instructions` VARCHAR(45) NULL,
PRIMARY KEY ('Customer ID'),
 UNIQUE INDEX 'Customer ID UNIQUE' ('Customer ID' ASC))
ENGINE = InnoDB;
-- Table `ZormeneKinanee Homework2`.`Invoice`
-------
CREATE TABLE IF NOT EXISTS 'ZormeneKinanee Homework2'.'Invoice' (
```

```
'Invoice Number' INT NULL,
 'Invoice Date' VARCHAR(45) NULL,
 `Customer ID` INT NULL AUTO INCREMENT,
 'Invoice Total Quantity' INT NULL,
 'Invoice Total Price' FLOAT NULL,
 INDEX 'Customer ID idx' ('Customer ID' ASC),
 PRIMARY KEY ('Invoice Number'),
 UNIQUE INDEX 'Invoice Number UNIQUE' ('Invoice Number' ASC),
 UNIQUE INDEX 'Customer ID UNIQUE' ('Customer ID' ASC),
CONSTRAINT 'Customer ID'
  FOREIGN KEY ('Customer ID')
 REFERENCES 'ZormeneKinanee Homework2'.'Customer' ('Customer ID')
 ON DELETE NO ACTION
 ON UPDATE NO ACTION)
ENGINE = InnoDB;
-- Table `ZormeneKinanee Homework2`.`Invoice Product`
CREATE TABLE IF NOT EXISTS 'ZormeneKinanee Homework2'.'Invoice Product' (
 `Product Number` INT NULL AUTO INCREMENT,
 'Invoice Number' INT NULL,
 `Quantity` INT UNSIGNED NULL,
 `Price` FLOAT UNSIGNED NULL,
 `Discount_Price` FLOAT UNSIGNED NULL,
 PRIMARY KEY ('Product Number', 'Invoice Number'),
 INDEX 'Invoice Number idx' ('Invoice Number' ASC),
 UNIQUE INDEX 'Product Number UNIQUE' ('Product Number' ASC),
 UNIQUE INDEX 'Invoice Number UNIQUE' ('Invoice Number' ASC),
 CONSTRAINT 'Product Number'
 FOREIGN KEY ('Product Number')
  REFERENCES 'ZormeneKinanee Homework2'.'Product ('Product Number')
 ON DELETE NO ACTION
 ON UPDATE NO ACTION,
 CONSTRAINT 'Invoice Number'
  FOREIGN KEY ('Invoice Number')
  REFERENCES 'ZormeneKinanee Homework2'.'Invoice' ('Invoice Number')
 ON DELETE NO ACTION
 ON UPDATE NO ACTION)
ENGINE = InnoDB;
SET SQL MODE=@OLD SQL MODE;
```

SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS; SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS;

Assumptions:

It was to my understanding that foreign keys were to be made to match commonalities between entities.