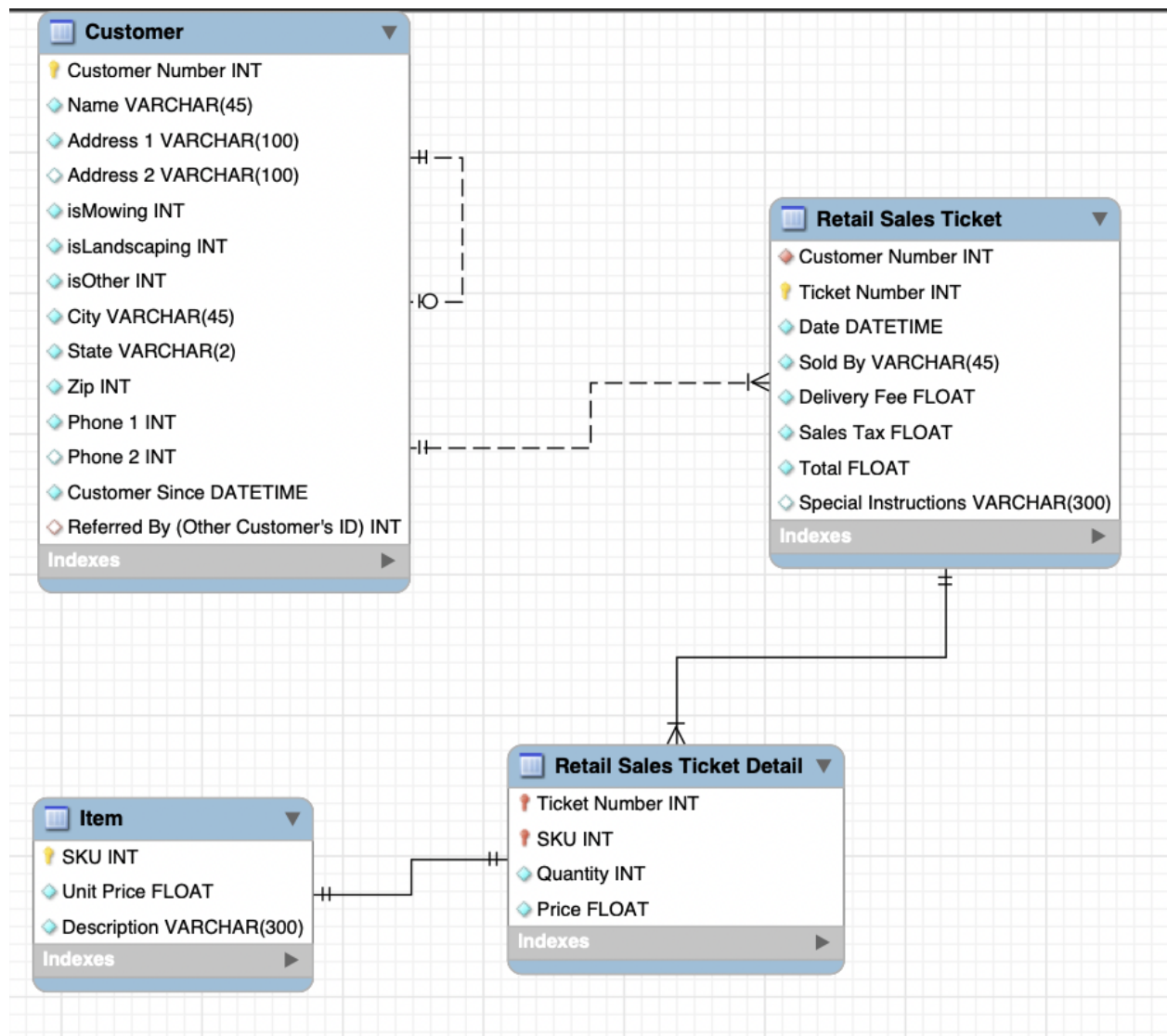


Data Model:



DDL:

-- 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='ONLY_FULL_GROUP_BY,STRICT_TRANS_TABLES,NO_ZERO_IN_DATE,NO_
ZERO_DATE,ERROR_FOR_DIVISION_BY_ZERO,NO_ENGINE_SUBSTITUTION';
```

-- Schema mydb

-- Schema mydb

```
CREATE SCHEMA IF NOT EXISTS `mydb` DEFAULT CHARACTER SET utf8 ;
USE `mydb` ;
```

-- Table `mydb`.`Customer`

```
CREATE TABLE IF NOT EXISTS `mydb`.`Customer` (
  `Customer Number` INT NOT NULL AUTO_INCREMENT,
  `Name` VARCHAR(45) NOT NULL,
  `Address 1` VARCHAR(100) NOT NULL,
  `Address 2` VARCHAR(100) NULL,
  `isMowing` INT NOT NULL,
  `isLandscaping` INT NOT NULL,
  `isOther` INT NOT NULL,
  `City` VARCHAR(45) NOT NULL,
  `State` VARCHAR(2) NOT NULL,
  `Zip` INT NOT NULL,
  `Phone 1` INT NOT NULL,
  `Phone 2` INT NULL,
  `Customer Since` DATETIME NOT NULL,
  `Referred By (Other Customer's ID)` INT NULL,
  PRIMARY KEY (`Customer Number`),
  UNIQUE INDEX `Customer Number_UNIQUE` (`Customer Number` ASC) VISIBLE,
  INDEX `fk_Customer_Customer_idx` (`Referred By (Other Customer's ID)` ASC) VISIBLE,
  CONSTRAINT `fk_Customer_Customer`
    FOREIGN KEY (`Referred By (Other Customer's ID)`)
      REFERENCES `mydb`.`Customer` (`Customer Number`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;
```

-- Table `mydb`.`Retail Sales Ticket`

```
CREATE TABLE IF NOT EXISTS `mydb`.`Retail Sales Ticket` (
  `Customer Number` INT NOT NULL,
  `Ticket Number` INT NOT NULL,
```

```

`Date` DATETIME NOT NULL,
`Sold By` VARCHAR(45) NOT NULL,
`Delivery Fee` FLOAT NOT NULL,
`Sales Tax` FLOAT NOT NULL,
`Total` FLOAT NOT NULL,
`Special Instructions` VARCHAR(300) NULL,
INDEX `fk_Retail Sales Ticket_Customer1_idx` (`Customer Number` ASC) VISIBLE,
UNIQUE INDEX `Customer Number_UNIQUE` (`Customer Number` ASC) VISIBLE,
PRIMARY KEY (`Ticket Number`),
UNIQUE INDEX `Ticket Number_UNIQUE` (`Ticket Number` ASC) VISIBLE,
CONSTRAINT `fk_Retail Sales Ticket_Customer1`
  FOREIGN KEY (`Customer Number`)
    REFERENCES `mydb`.`Customer` (`Customer Number`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;

```

```

-----
-- Table `mydb`.`Item`
-----
CREATE TABLE IF NOT EXISTS `mydb`.`Item` (
  `SKU` INT NOT NULL,
  `Unit Price` FLOAT NOT NULL,
  `Description` VARCHAR(300) NOT NULL,
  PRIMARY KEY (`SKU`))
ENGINE = InnoDB;

```

```

-----
-- Table `mydb`.`Retail Sales Ticket Detail`
-----
CREATE TABLE IF NOT EXISTS `mydb`.`Retail Sales Ticket Detail` (
  `Ticket Number` INT NOT NULL,
  `SKU` INT NOT NULL,
  `Quantity` INT NOT NULL,
  `Price` FLOAT NOT NULL,
  INDEX `fk_Retail Sales Ticket Detail_Retail Sales Ticket1_idx` (`Ticket Number` ASC)
  VISIBLE,
  PRIMARY KEY (`Ticket Number`, `SKU`),
  INDEX `fk_Retail Sales Ticket Detail_Item1_idx` (`SKU` ASC) VISIBLE,
  CONSTRAINT `fk_Retail Sales Ticket Detail_Retail Sales Ticket1`
    FOREIGN KEY (`Ticket Number`)
      REFERENCES `mydb`.`Retail Sales Ticket` (`Ticket Number`)

```

```
ON DELETE NO ACTION
ON UPDATE NO ACTION,
CONSTRAINT `fk_Retail Sales Ticket Detail_Item1`
FOREIGN KEY (`SKU`)
REFERENCES `mydb`.`Item` (`SKU`)
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:

- Customer Number and Ticket Number are surrogate keys.
- Customer Number was created to serve as a primary key and uniquely identify each Customer.
- Ticket Number was created to serve as a primary key and uniquely identify each Retail Sales Ticket.
- Customer Number and Ticket Number are both assumed to be auto incremented.
- Each Item is assumed to already have its own SKU