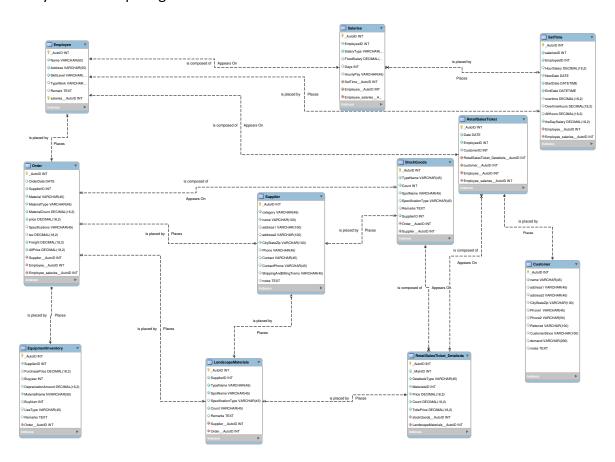
CSCI 3287 Extra Credit Haotian Zheng Jun Sheng Approved by Professor Alan Paradise

Entity Relationship Diagram



Physical Data Model (SQL create statements)

- -- MySQL Script generated by MySQL Workbench
- -- Thu 13 Dec 2018 11:16:17 PM MST
- -- 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 mydb
DROP SCHEMA IF EXISTS 'mydb';
-- Schema mydb
CREATE SCHEMA IF NOT EXISTS 'mydb' DEFAULT CHARACTER SET utf8;
USE 'mydb';
-- Table `mydb`.`Employee`
DROP TABLE IF EXISTS 'mydb'. 'Employee';
CREATE TABLE IF NOT EXISTS 'mydb'. 'Employee' (
 ` AutoID` INT NOT NULL AUTO INCREMENT,
 'Name' VARCHAR(50) NOT NULL,
 'Address' VARCHAR(50) NOT NULL,
 `SkillLevel` VARCHAR(45) NOT NULL,
 `TypeWork` VARCHAR(45) NULL,
 'Remark' TEXT NULL,
 `salaries AutoID` INT NOT NULL,
 PRIMARY KEY (`_AutoID`, `salaries__AutoID`))
ENGINE = InnoDB;
-- Table `mydb`.`SetTime`
DROP TABLE IF EXISTS 'mydb'. 'SetTime';
CREATE TABLE IF NOT EXISTS 'mydb'. 'SetTime' (
 ` AutoID`INT NOT NULL AUTO INCREMENT,
 `salariesID` INT NOT NULL,
 `EmployeeID` INT NOT NULL,
 'HourSalary' DECIMAL(18,2) NULL,
 'NowDate' DATE NOT NULL,
 `StartDate` DATETIME NOT NULL,
 `EndDate` DATETIME NOT NULL,
 `overtime` DECIMAL(18,2) NULL,
 `OvertimeHours` DECIMAL(18,2) NULL,
 `AllHours` DECIMAL(18,2) NULL,
 `theDaySalary` DECIMAL(18,2) NOT NULL,
 `Employee AutoID` INT NOT NULL,
 `Employee salaries AutoID` INT NOT NULL,
 PRIMARY KEY (` AutoID`),
```

```
UNIQUE INDEX 'salariesID UNIQUE' ('salariesID' ASC),
 UNIQUE INDEX 'EmployeeID UNIQUE' ('EmployeeID' ASC),
 INDEX `fk SetTime Employee1_idx` (`Employee__AutoID` ASC,
`Employee_salaries__AutoID` ASC),
 CONSTRAINT 'fk SetTime Employee1'
  FOREIGN KEY ('Employee AutoID', 'Employee salaries AutoID')
  REFERENCES `mydb`.`Employee` (`_AutoID`, `salaries__AutoID`)
  ON DELETE NO ACTION
  ON UPDATE NO ACTION)
ENGINE = InnoDB;
-- Table `mydb`.`Salaries`
DROP TABLE IF EXISTS 'mydb'. 'Salaries';
CREATE TABLE IF NOT EXISTS 'mydb'. 'Salaries' (
 ` AutoID` INT NOT NULL AUTO INCREMENT,
 `EmployeeID` INT NOT NULL,
 `SalaryType` VARCHAR(50) NOT NULL,
 `FixedSalary` DECIMAL(18,2) NULL,
 'Days' INT NULL,
 'HourlyPay' VARCHAR(45) NULL,
 `SetTime AutoID` INT NOT NULL,
 `Employee AutoID` INT NOT NULL,
 `Employee salaries AutoID` INT NOT NULL,
 PRIMARY KEY (` AutoID`),
 UNIQUE INDEX 'EmployeeID UNIQUE' ('EmployeeID' ASC),
 INDEX 'fk salaries SetTime1 idx' ('SetTime AutoID' ASC),
 INDEX 'fk salaries Employee1 idx' ('Employee AutoID' ASC,
`Employee salaries AutoID` ASC),
 CONSTRAINT 'fk salaries SetTime1'
  FOREIGN KEY ('SetTime AutoID')
  REFERENCES 'mydb'. 'SetTime' ('_AutoID')
  ON DELETE NO ACTION
  ON UPDATE NO ACTION,
 CONSTRAINT 'fk salaries Employee1'
  FOREIGN KEY (`Employee__AutoID`, `Employee_salaries__AutoID`)
  REFERENCES 'mydb'. 'Employee' (' AutoID', 'salaries AutoID')
  ON DELETE NO ACTION
  ON UPDATE NO ACTION)
ENGINE = InnoDB;
-- Table `mydb`.`Supplier`
```

```
DROP TABLE IF EXISTS 'mydb'. 'Supplier';
CREATE TABLE IF NOT EXISTS 'mydb'. 'Supplier' (
 ` AutoID` INT NOT NULL AUTO INCREMENT,
 `category` VARCHAR(45) NOT NULL,
 'name' VARCHAR(100) NOT NULL,
 `address1` VARCHAR(100) NULL,
 `address2` VARCHAR(100) NULL,
 `CityStateZip` VARCHAR(100) NOT NULL,
 'Phone' VARCHAR(45) NULL,
 `Contact` VARCHAR(45) NULL,
 `ContactPhone` VARCHAR(45) NULL,
 `ShippingAndBillingTrems` VARCHAR(45) NULL,
 'notes' TEXT NULL,
 PRIMARY KEY (` AutoID`))
ENGINE = InnoDB;
-- Table `mydb`.`Order`
DROP TABLE IF EXISTS 'mydb'. 'Order';
CREATE TABLE IF NOT EXISTS 'mydb'. 'Order' (
 `_AutoID` INT NOT NULL AUTO_INCREMENT,
 `OrderDate` DATE NULL,
 'SupplierID' INT NOT NULL,
 'Material' VARCHAR(45) NOT NULL,
 `MaterialType` VARCHAR(45) NOT NULL,
 `MaterialCount` DECIMAL(18,2) NOT NULL,
 'price' DECIMAL(18,2) NOT NULL,
 `Specifications` VARCHAR(45) NULL,
 'tax' DECIMAL(18,2) NULL,
 `Freight` DECIMAL(18,2) NOT NULL,
 `AllPrice` DECIMAL(18,2) NOT NULL,
 'Supplier AutoID' INT NOT NULL,
 `Employee AutoID` INT NOT NULL,
 `Employee salaries AutoID` INT NOT NULL,
 PRIMARY KEY (` AutoID`),
 UNIQUE INDEX 'SupplierID' UNIQUE' ('SupplierID' ASC),
 INDEX 'fk Order Supplier1 idx' ('Supplier AutoID' ASC),
 INDEX 'fk Order Employee1 idx' ('Employee AutoID' ASC, 'Employee salaries AutoID'
ASC),
 CONSTRAINT 'fk Order Supplier1'
  FOREIGN KEY ('Supplier AutoID')
  REFERENCES 'mydb'. 'Supplier' (' AutoID')
```

```
ON DELETE NO ACTION
  ON UPDATE NO ACTION,
 CONSTRAINT 'fk Order Employee1'
  FOREIGN KEY (`Employee__AutoID`, `Employee_salaries__AutoID`)
  REFERENCES 'mydb'. 'Employee' (' AutoID', 'salaries AutoID')
  ON DELETE NO ACTION
  ON UPDATE NO ACTION)
ENGINE = InnoDB;
-- Table `mydb`.`EquipmentInventory`
DROP TABLE IF EXISTS 'mydb'. 'EquipmentInventory';
CREATE TABLE IF NOT EXISTS 'mydb'. 'EquipmentInventory' (
 ` AutoID` INT NOT NULL AUTO INCREMENT,
 'SupplierID' INT NOT NULL,
 `PurchasePrice` DECIMAL(18,2) NULL,
 `Buyyear` INT NULL,
 `DepreciationAmount` DECIMAL(18,2) NULL,
 `MaterialName` NVARCHAR(50) NOT NULL,
 `BuyNum` INT NULL,
 `UseType` VARCHAR(45) NULL,
 `Remarks` TEXT NULL,
 `Order AutoID` INT NOT NULL,
 PRIMARY KEY (` AutoID`),
 UNIQUE INDEX 'SupplierID' UNIQUE' ('SupplierID' ASC),
 INDEX 'fk EquipmentInventory Order1 idx' ('Order AutoID' ASC),
 CONSTRAINT 'fk EquipmentInventory Order1'
 FOREIGN KEY ('Order AutoID')
  REFERENCES 'mydb'.'Order' (' AutoID')
  ON DELETE NO ACTION
  ON UPDATE NO ACTION)
ENGINE = InnoDB;
-- Table `mydb`.`StockGoods`
DROP TABLE IF EXISTS 'mydb'. 'StockGoods';
CREATE TABLE IF NOT EXISTS 'mydb'. 'StockGoods' (
 ` AutoID`INT NOT NULL AUTO INCREMENT,
 'TypeName' VARCHAR(45) NOT NULL,
 'Count' INT NOT NULL,
 `SpotName` VARCHAR(45) NOT NULL,
```

```
`SpecificationType` VARCHAR(45) NULL,
 'Remarks' TEXT NULL,
 `SupplierID` INT NOT NULL,
 `Order AutoID` INT NOT NULL,
 'Supplier AutoID' INT NOT NULL,
 PRIMARY KEY (` AutoID`),
 UNIQUE INDEX 'SupplierID UNIQUE' ('SupplierID' ASC),
 INDEX 'fk stockGoods Order1 idx' ('Order AutoID' ASC),
 INDEX `fk_stockGoods_Supplier1_idx` (`Supplier__AutoID` ASC),
 CONSTRAINT 'fk stockGoods Order1'
  FOREIGN KEY ('Order AutoID')
  REFERENCES 'mydb'.'Order' (' AutoID')
  ON DELETE NO ACTION
  ON UPDATE NO ACTION,
 CONSTRAINT 'fk stockGoods Supplier1'
  FOREIGN KEY ('Supplier AutoID')
  REFERENCES 'mydb'. 'Supplier' (' AutoID')
  ON DELETE NO ACTION
  ON UPDATE NO ACTION)
ENGINE = InnoDB;
-- Table `mydb`.`LandscapeMaterials`
  _____
DROP TABLE IF EXISTS 'mydb'.'LandscapeMaterials';
CREATE TABLE IF NOT EXISTS 'mydb'.'LandscapeMaterials' (
 ` AutoID` INT NOT NULL AUTO INCREMENT,
 `SupplierID` INT NOT NULL,
 'TypeName' VARCHAR(45) NOT NULL,
 `SpotName` VARCHAR(45) NOT NULL,
 `SpecificationType` VARCHAR(45) NULL,
 'Count' VARCHAR(45) NOT NULL,
 `Remarks` TEXT NULL,
 `Supplier AutoID` INT NOT NULL,
 'Order AutoID' INT NOT NULL,
 PRIMARY KEY (` AutoID`),
 UNIQUE INDEX 'SupplierID UNIQUE' ('SupplierID' ASC),
 INDEX `fk LandscapeMaterials Supplier1 idx` (`Supplier AutoID` ASC),
 UNIQUE INDEX 'Supplier AutoID UNIQUE' ('Supplier AutoID' ASC),
 INDEX 'fk LandscapeMaterials Order1 idx' ('Order AutoID' ASC),
 CONSTRAINT 'fk LandscapeMaterials Supplier1'
  FOREIGN KEY ('Supplier AutoID')
  REFERENCES 'mydb'. 'Supplier' (' AutoID')
  ON DELETE NO ACTION
  ON UPDATE NO ACTION,
```

```
CONSTRAINT 'fk LandscapeMaterials Order1'
  FOREIGN KEY ('Order AutoID')
  REFERENCES `mydb`.`Order` (` AutoID`)
  ON DELETE NO ACTION
  ON UPDATE NO ACTION)
ENGINE = InnoDB;
-- Table `mydb`.`Customer`
_____
DROP TABLE IF EXISTS 'mydb'. 'Customer';
CREATE TABLE IF NOT EXISTS 'mydb'. 'Customer' (
 ` AutoID` INT NOT NULL AUTO INCREMENT,
 'name' VARCHAR(45) NOT NULL,
 `address1` VARCHAR(45) NULL,
 `address2` VARCHAR(45) NULL,
 `CityStateZip` VARCHAR(100) NULL,
 'Phone1' VARCHAR(45) NULL,
 `Phone2` VARCHAR(50) NULL,
 'Referred' VARCHAR(100) NULL,
 'CustomerSince' VARCHAR(100) NULL,
 `demand` VARCHAR(200) NULL,
 'notes' TEXT NULL,
 PRIMARY KEY (` AutoID`))
ENGINE = InnoDB;
-- Table `mydb`.`RetailSalesTicket Detaileds`
DROP TABLE IF EXISTS 'mydb'. 'RetailSalesTicket Detaileds';
CREATE TABLE IF NOT EXISTS 'mydb'. 'RetailSalesTicket Detaileds' (
 `AutoID`INT NOT NULL AUTO INCREMENT,
 ` MainID` INT NOT NULL,
 `DetailedsType` VARCHAR(45) NOT NULL,
 'MaterialsID' INT NOT NULL,
 'Price' DECIMAL(18,2) NOT NULL,
 `Count` DECIMAL(18,2) NOT NULL,
 `TotlePrice` DECIMAL(18,2) NOT NULL,
 `stockGoods AutoID` INT NOT NULL,
 `LandscapeMaterials AutoID` INT NOT NULL,
 PRIMARY KEY (` AutoID`),
 UNIQUE INDEX ' MainID UNIQUE' (' MainID' ASC),
 INDEX 'fk RetailSalesTicket Detaileds stockGoods1 idx' ('stockGoods AutoID' ASC),
```

```
INDEX `fk RetailSalesTicket Detaileds LandscapeMaterials1 idx`
(`LandscapeMaterials AutoID` ASC),
 CONSTRAINT `fk RetailSalesTicket Detaileds stockGoods1`
  FOREIGN KEY ('stockGoods__AutoID')
  REFERENCES 'mydb'. 'StockGoods' (' AutoID')
  ON DELETE NO ACTION
  ON UPDATE NO ACTION,
 CONSTRAINT 'fk RetailSalesTicket Detaileds LandscapeMaterials1'
  FOREIGN KEY (`LandscapeMaterials AutoID`)
  REFERENCES 'mydb'.'LandscapeMaterials' (' AutoID')
  ON DELETE NO ACTION
  ON UPDATE NO ACTION)
ENGINE = InnoDB;
-- Table `mydb`.`RetailSalesTicket`
DROP TABLE IF EXISTS 'mydb'.'RetailSalesTicket';
CREATE TABLE IF NOT EXISTS 'mydb'. 'RetailSalesTicket' (
 ` AutoID` INT NOT NULL AUTO_INCREMENT,
 'Date' DATE NOT NULL,
 `EmployeeID` INT NOT NULL,
 `CustomerID` INT NOT NULL,
 `RetailSalesTicket Detaileds AutoID` INT NOT NULL,
 `customer AutoID` INT NOT NULL,
 `Employee AutoID` INT NOT NULL,
 `Employee salaries__AutoID` INT NOT NULL,
 PRIMARY KEY (`_AutoID`),
 INDEX 'fk RetailSalesTicket RetailSalesTicket Detaileds1 idx'
(`RetailSalesTicket Detaileds AutoID` ASC),
 INDEX 'fk RetailSalesTicket customer1 idx' ('customer AutoID' ASC),
 UNIQUE INDEX 'EmployeeID UNIQUE' ('EmployeeID' ASC),
 UNIQUE INDEX 'CustomerID UNIQUE' ('CustomerID' ASC),
 INDEX `fk RetailSalesTicket Employee1 idx` (`Employee AutoID` ASC,
`Employee salaries AutoID` ASC),
 CONSTRAINT 'fk RetailSalesTicket RetailSalesTicket Detaileds1'
  FOREIGN KEY ('RetailSalesTicket Detaileds AutoID')
  REFERENCES 'mydb'. 'RetailSalesTicket Detaileds' (' AutoID')
  ON DELETE NO ACTION
  ON UPDATE NO ACTION,
 CONSTRAINT 'fk RetailSalesTicket customer1'
  FOREIGN KEY ('customer AutoID')
  REFERENCES 'mydb'. 'Customer' (' AutoID')
  ON DELETE NO ACTION
  ON UPDATE NO ACTION,
```

```
CONSTRAINT `fk_RetailSalesTicket_Employee1`
FOREIGN KEY (`Employee__AutoID`, `Employee_salaries__AutoID`)
REFERENCES `mydb`.`Employee` (`_AutoID`, `salaries__AutoID`)
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;