CS 4400 Train System Alaap Murali Alan Chiang Arthi Nithi Anjani Agrawal

CREATE TABLE USER (Username VARCHAR (50) NOT NULL, Password VARCHAR (50) NOT NULL, PRIMARY KEY (Username));

CREATE TABLE MANAGER (Username VARCHAR (50) NOT NULL, Password VARCHAR (50) NOT NULL, PRIMARY KEY (Username)), FOREIGN KEY (Username) REFERENCES TABLE USER (Username));

CREATE TABLE CUSTOMER (Username VARCHAR (50) NOT NULL, Password VARCHAR (50) NOT NULL, Email VARCHAR (50) NOT NULL, Is_student BOOLEAN NOT NULL PRIMARY KEY (Username)); FOREIGN KEY (Username) REFERENCES TABLE USER (Username));

CREATE TABLE RESERVATION (ReservationID INT NOT NULL,
Is_cancelled BOOLEAN NOT NULL,
Username VARCHAR (50),
Card_Number INT,
PRIMARY KEY (ReservationID),
FOREIGN KEY (Username) REFERENCES TABLE CUSTOMER (Username),
FOREIGN KEY (Card_Number) REFERENCES TABLE PAYMENT_INFO (Card_Number));

CREATE TABLE PAYMENT_INFO (Card_Number INT NOT NULL,
CVV TINYINT NOT NULL,
Exp_Date DATE NOT NULL,
Name_on_card VARCHAR (50) NOT NULL,
Username VARCHAR (50),
PRIMARY KEY (Card_Number),
CHECK (Exp_Date > CURDATE()),
FOREIGN KEY (Username) REFERENCES TABLE CUSTOMER (Username));

CREATE TABLE REVIEW (Review_Number INT NOT NULL, Comment VARCHAR (150) NOT NULL, Rating INT NOT NULL, Username VARCHAR (50),

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Train_Number INT,
PRIMARY KEY (Review_Number)
FOREIGN KEY (Username) REFERENCES TABLE CUSTOMER (Username)
FOREIGN KEY (Train Number) REFERENCES TABLE TRAIN ROUTE (Train Number));

CREATE TABLE RESERVES (ReservationID INT, Train_Number INT,

Class INT NOT NULL,

Departure Date DATE NOT NULL,

Passenger_Name VARCHAR (50) NOT NULL,

Number of Bags INT NOT NULL,

Departs_From VARCHAR (100),

Arrives_At VARCHAR (100),

PRIMARY KEY (ReservationID),

FOREIGN KEY (ReservationID) REFERENCES TABLE RESERVATION (ReservationID),

FOREIGN KEY (Train Number) REFERENCES TABLE TRAIN ROUTE (Train Number)

FOREIGN KEY (Departs From) REFERENCES TABLE STATION (Name)

FOREIGN KEY (Arrives At) REFERENCES TABLE STATION (Name));

CREATE TABLE TRAIN_ROUTE (Train_Number INT NOT NULL,

First_Class_Price INT NOT NULL, /* Is stored as an integer, will be divided by 100 to /* represent money

Second_Class_Price INT NOT NULL, /* Is stored as an integer, will be divided by 100 to /* represent money

PRIMARY KEY (Train Number));

CREATE TABLE STOP (Arrival Time TIME NOT NULL,

Departure_Time TIME NOT NULL,

Train Number INT,

Name VARCHAR (100),

PRIMARY KEY (Train Number, Name),

FOREIGN KEY (Train_Number) REFERENCES TABLE TRAIN_ROUTE (Train_Number),

FOREIGN KEY (Name) REFERENCES TABLE STATION (Name));

CREATE TABLE STATION (Name VARCHAR(100) NOT NULL, Location VARCHAR (50) NOT NULL,

PRIMARY KEY (Name));

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CREATE TABLE SYSTEM_INFO (Max_baggage INT NOT NULL, Num_free_baggage INT NOT NULL, Student_Discount INT NOT NULL, /* Is a percent stored as an integer Change_fee INT NOT NULL, PRIMARY KEY (Max_baggage));