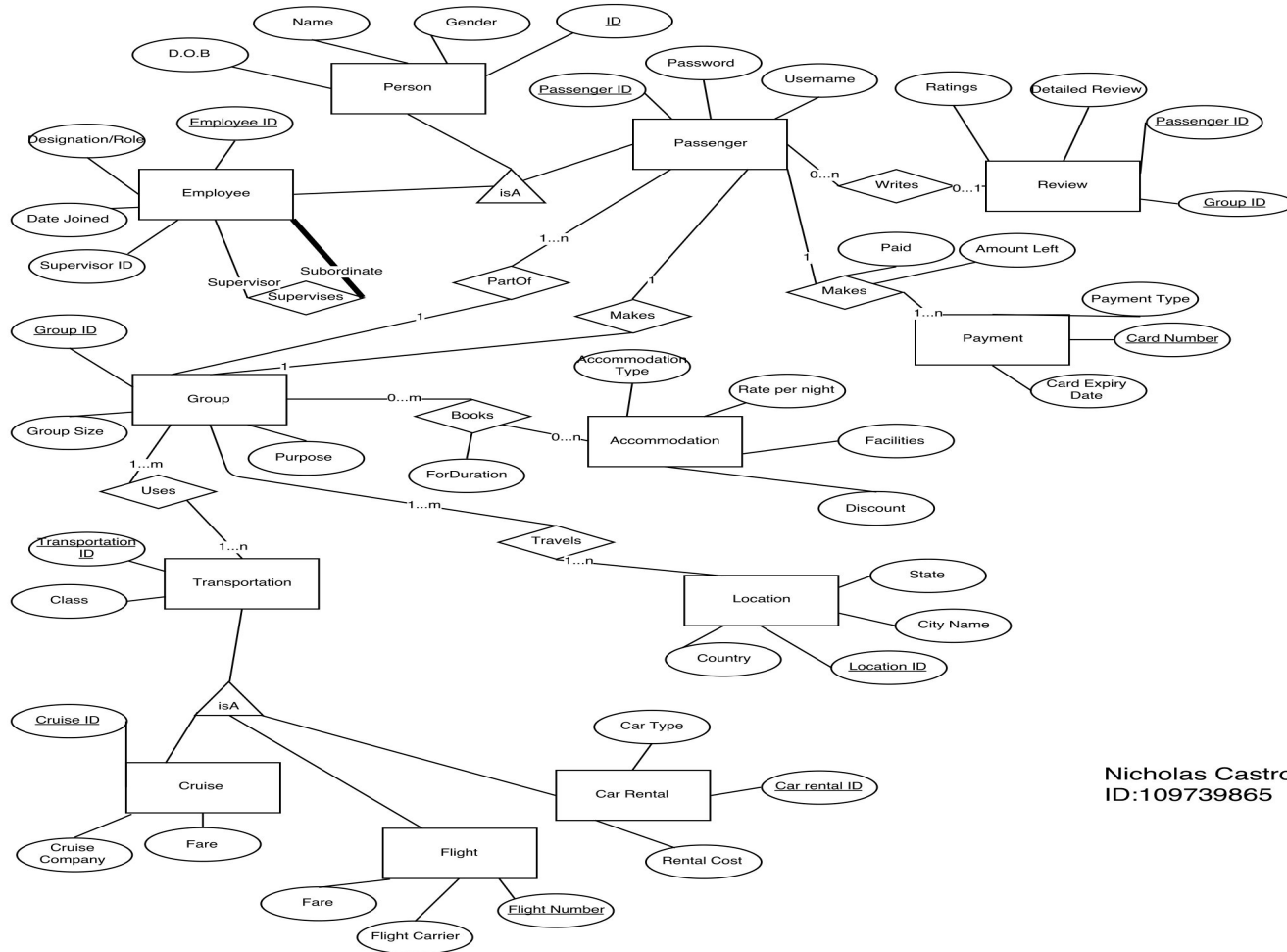# CSE 305 Final Project: Travel305

Group: Allan Lee and Nicholas Castro

ER Diagram

Nicholas Castro
ID:109739865

Mapping to SQL

```
initUserTable = "CREATE TABLE Users (ID int not null auto_increment,"\
"Email varchar(100),"\
"Name varchar(30),"\
"Password varchar(20),"\
"Gender char(1),"\
"DateOfBirth date,"\
"primary key (ID));"
```

```
CREATE TABLE Passengers (
    PassengerID INTEGER,
    PaymentID INTEGER,
    PassengerName VARCHAR(255),
    Gender VARCHAR(255),
    Age INTEGER,
    PRIMARY KEY (PassengerID)
    FOREIGN KEY(PassengerID) REFERENCES PartOf(PassengerID)
    FOREIGN KEY(PaymentID) REFERENCES Makes(PaymentID)
)
```

```
CREATE TABLE Location (
    LocationID INTEGER,
    CityName VARCHAR(255),
    Country VARCHAR(255),
    State VARCHAR(255),
    PRIMARY KEY(LocationID)
```

```
CREATE TABLE Group (
    GroupID INTEGER,
    TravelID INTEGER,
    GroupSize INTEGER,
    SourceLocation INTEGER,
    DestinationLocation INTEGER,
    ModeOfTranport VARCHAR(255),
    Purpose VARCHAR(1000),
    PRIMARY KEY (GroupID)
    FOREIGN KEY(SourceLocation) REFERENCES Location(LocationID),
    FOREIGN KEY(DestinationLocation) REFERENCES Location(LocationID),
    FOREIGN KEY(GroupID) REFERENCES Books(GroupID)
    FOREIGN KEY(TravelID) REFERENCES Travel(TravelID)
```

```
CREATE TABLE Transportation (
    TransportationID INTEGER,
    TransportationType VARCHAR(255),
    ClassType VARCHAR(255),
    PRIMARY KEY(TransportationID)
)
```

Mapping to SQL cont.

```sql
CREATE TABLE Accommodation (
        AccommodationType VARCHAR(255),
        Facilities VARCHAR(255),
        RatePerNight INTEGER,
        Discount INTEGER,
        PRIMARY KEY(AccommodationType, Facilities)
)

CREATE TABLE CarRental (
        CarRentalConfirmationID INTEGER,
        CarType VARCHAR(255),
        Rent INTEGER,
        PRIMARY KEY(CarRentalConfirmationID)
        FOREIGN KEY(CarRentalConfirmationID) REFERENCES
        Transportation(TransportationID)
)

CREATE TABLE Flight (
        FlightNumber INTEGER,
        FlightCarrier VARCHAR(255),
        SourceLocation VARCHAR(255),
        DestinationLocation VARCHAR(255),
        Class VARCHAR(255),
        Fare INTEGER,
        PRIMARY KEY(FlightNumber)
        FOREIGN KEY(FlightNumber) REFERENCES
        Transportation(TransportationID)
)
```

```sql
CREATE TABLE Cruise (
        CruiseNumber INTEGER,
        SourceLocation VARCHAR(255),
        DestinationLocation VARCHAR(255),
        Fare INTEGER,
        PRIMARY KEY(CruiseNumber)
        FOREIGN KEY(CruiseNumber) REFERENCES
        Transportation(TransportationID)
)

CREATE TABLE PartOf (
        PassengerID INTEGER,
        GroupID INTEGER,
        PRIMARY KEY(PassengerID),
        FOREIGN KEY(GroupID) REFERENCES Group(GroupID)
)
```

Transaction: Displaying General Information

Apartment

Cost: $120

Select Accommodation

Apartment

Cost: $200

Select Accommodation

Bed and Breakfast

Cost: $80

Select Accommodation

Tokyo, Kanto

List cost of flights here

Make Source Location

Make Destination Location

Kuala Lumpur, Kuala Lumpur
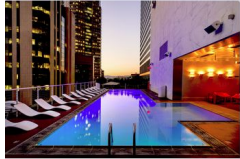
List cost of flights here
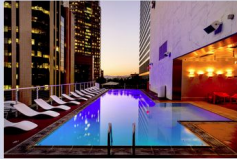
Make Source Location

Make Destination Location

New York City, New York

List cost of flights here

Make Source Location

Make Destination Location

Hotel

Cost: $100

Hotel

Cost: $200

Motel

Cost: $65

Miami, Florida

Boston, Massachusetts

Hamburg, Hamburg

Mini-van

Rent: $200

Select Car Rental

Coupe

Rent: $300

Select Car Rental

Convertible

Rent: $250

Select Car Rental

Sports

Rent: $500

Select Car Rental

Transaction: Signing Up and Logging In

Sign Up

Full Name

Allan

Date of Birth

1997-04-04

Gender

Male

Email

hi@email.com

Password

••••••••

Sign Up

Congratulations! You have successfully signed up!

Log In

Email

hi@email.com

Password

••••••

Login

Click on the sign-up page and enter data in the format shown in the slides. Once done, it'll redirect you telling you that sign up is successful. Login with the same information and it'll redirect you to home with a welcome to <your name>. Errors can be detected!

Transaction: Making a Group/Joining a Group

Create Group

Email

hi@email.com

Name (must match signup name)

Allan

Enter a travel ID to identify your group

43

Submit

To create a group, enter information you used during sign-up and enter an integer to identify the group. Once the group is made, it will be listed in the "Join Group" page along with your current group status (whether you are in a group or not). It does dynamically check if you are in a group or not along with whether or not you are joining a valid group.

Current Group Status

You are in group: 43

Enter the travel ID of the group you wish to join: [   ] Submit Leave Current Group

Group Travel ID	Group Size	Source Location	Destination Location
43	1	None	None

Transaction: Booking a Trip

Accommodation Type	Facilities	Rate Per Night	Discount
None	None	None	None

Group Travel ID	Group Size	Source Location	Destination Location	Mode of Transport
43	1	None	None	None

`3` Enter Duration (In Days)

Book This Trip

Accommodation Type	Facilities		Rate Per Night	Discount
Apartment	1 Bedroom, 2 Beds, 1 Bathroom, Kitchen, Living Room		200	20

Group Travel ID	Group Size	Source Location	Destination Location	Mode of Transport
43	1	Tokyo	Kuala Lumpur	Flight

When you try to book a trip, you must be in a group or it won't work. You can navigate around the pages and book the appropriate information for location, transport, and accommodation. Once you are done, you select the number of days the trip is for and book it!

Transaction: Displaying your cost

View your booked trips and cost

Your receipt

Accommodation Cost: $65

The accommodation is being rented for 3 days.

Total accommodation cost: $195

Discount for accommodation: $0

Cost for Transportation: $1000

Total Cost of Trip: $1195

After booking your trip, it will redirect you to a page displaying your receipt and total cost of the trip!

Contribution

Front End Development: Nicholas Castro

Back End Development: Allan Lee and Nicholas Castro

Database Initialization and Scripting: Allan Lee