48th Street Watersports

Company Database Reference Manual

Dominic Oertel
Uyen Tang
Kayla Carter

TABLE OF CONTENTS

1. Team Members

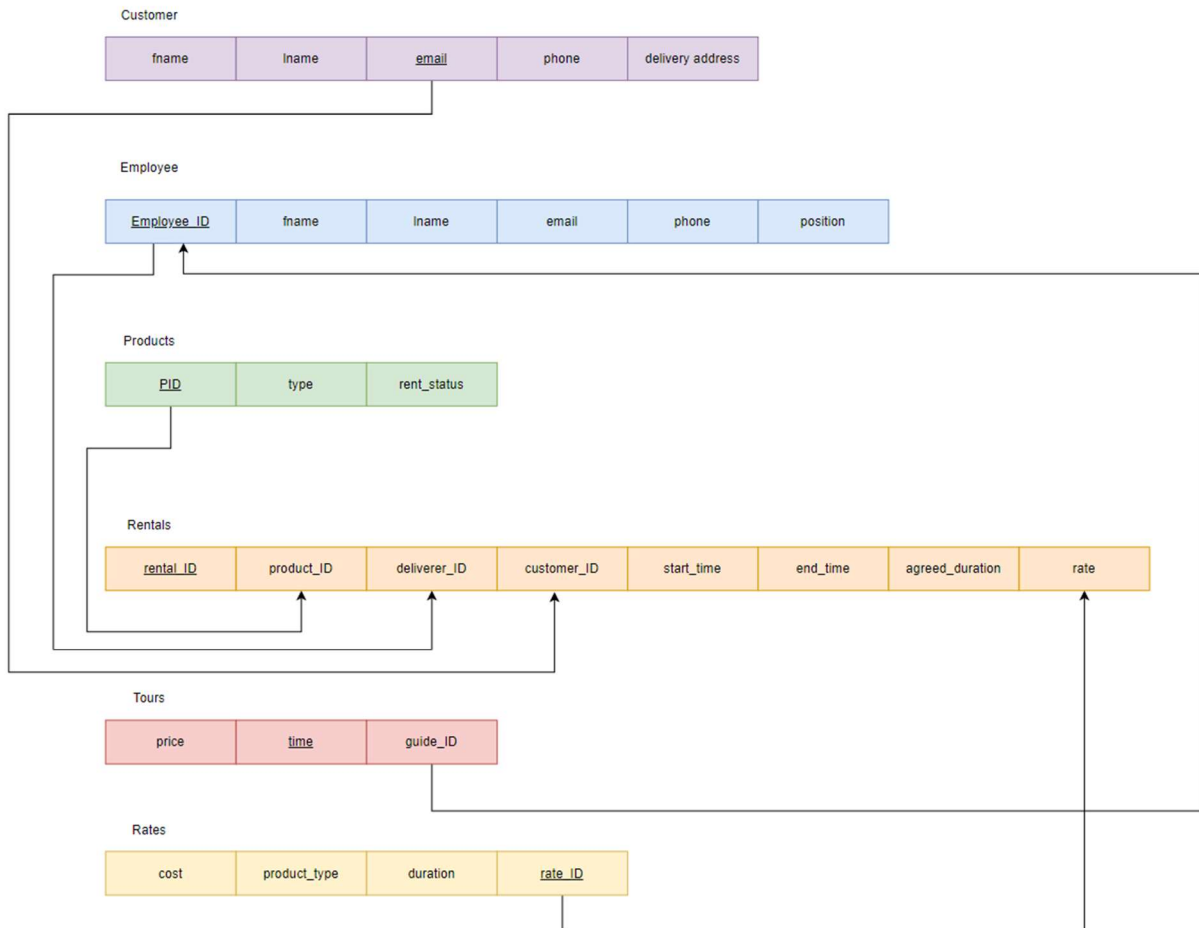Dominic Oertel

Uyen Tang

Kayla Carter

2. Overview

The subject of this Reference manual is the online database of 48th Street Watersports, Ocean City. As a rental business, 48th Street Watersports needs to keep constant track of the products it is releasing to customers, including details such as pricing, customer contact information, customers who need to sign the safety waiver, which customer has which equipment, and more.

While the company does not need a virtual database to function on a fundamental level, implementation of this concept would nonetheless offer a range of benefits. From reduction of paperwork and clutter to increases in time efficiency. Modernization of information tracking offers a quick and convenient way for administrators to search for and view high-level information tables.

The company database will provide an interface from the admin perspective. Administrators may use the essential functions provided. Entering and updating data, searching, deleting entries, all this and more will be possible with the 48th Street Watersports database developed by our group.

Database Schema

Customer

fname	lname	email	phone	delivery address

Employee

Employee_ID	fname	lname	email	phone	position

Products

PID	type	rent_status

Rentals

rental_ID	product_ID	deliverer_ID	customer_ID	start_time	end_time	agreed_duration	rate

Tours

price	time	guide_ID

Rates

cost	product_type	duration	rate_ID

3. Set Up

Get authorization - In order to maintain data integrity, only authorized users have access to the database. Our authorization process requires your IP address to be added to our list of authorized users.

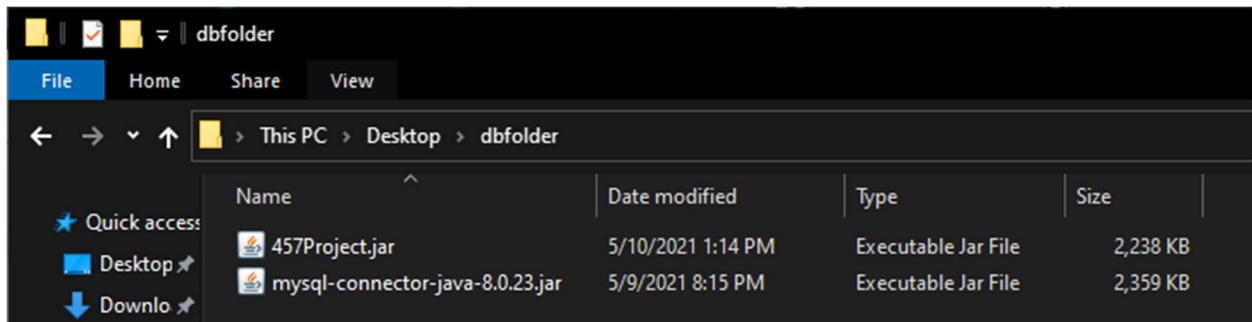Tip: you can quickly find your IP address by navigating to http://ip4.me/

Computer Requirements -

Your computer must have Java 8 installed. https://www.java.com/en/download/help/java8.html

As well as MySQL https://www.mysql.com/downloads/

Users who wish to access the company database will need a dedicated directory containing two files:

1. 457Project.jar

2. Mysql-connector-java-8.0.23*

    Public download link: https://github.com/Nachtwind1100011/457GroupProject

Access Command Prompt

Our interface can be accessed using your computer's terminal. You can locate your terminal by using your taskbar's search feature and type in "command prompt" or terminal. The terminal should pop up once you've selected it from the search results.

4. Interface

Once you have your terminal open, you should type in the directory of the file containing 457Project.jar and Mysql-connector-java-8.0.23*. Now, type in **: java -jar 457project.jar** and hit enter. If the terminal displays the word "username" you have successfully accessed the interface.

```
C:\Users\Dominic\Desktop\COSC 457\Project\Interface>java -jar 457Project.jar
Username:
```

If you are not able to access the interface, please check that you have the correct directory or revisit the Set Up instructions.

4.1 Login

The first prompt will ask you to enter the username, the second will ask you for the password.

Enter these exactly as below and you will see the message "Connected to database"

```
C:\Users\Dominic\Desktop\COSC 457\Project\Interface>java -jar 457Project.jar
Username: a57group_user
Password: password
Connected to database
```

4.2 Logout

You can logout of the program anytime by

1. Typing "exit"

2. Closing the terminal window

3. You may also be automatically logged out after a long period of inactivity if timed logout
    is enabled.

5. Operations

The operations of this program are built off of MySQL queries. There are a variety of useful commands available for you to use to interact with the database.

- Print
- Search
- Insert
- Delete
- Update

5.1 Print

In the menu, you will see:

```
C:\Users\Dominic\Desktop\COSC 457\Project\Interface>java -jar 457Project.jar
Username: a57group_user
Password: password
Connected to database

print *category* to show contents
search *category* *primary key value* to search database
insert *category* to add to database
delete *category* *primary key value* to delete entry from database
update *category* *primary key value* to change entry from database
help to print this menu

For more information, see tutorial manual

What operation would you like to carry out?
```

5.1.1 Print all tables in the database

This is a quick way to get a macro view of the database. When the program asks "What operation would you like to carry out?" simply type "print all" and all the tables will be displayed in the terminal.
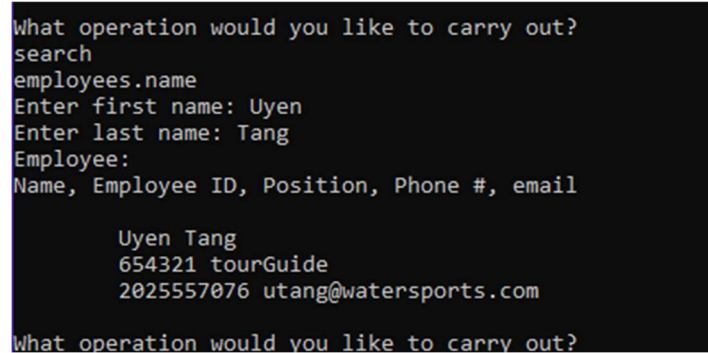
5.1.2 Print a specified table

7

To customize which table you would like to view, simply follow the command format described in the menu for your convenience. Type print. Then the category you want displayed. E.g. print Rates.

5.2 Search

In order to search, you need to specify what category you want to search such as employees, customers, and products.

The proper way to search would be *category*.name

```
What operation would you like to carry out?
search
employees.name
Enter first name: Uyen
Enter last name: Tang
Employee:
Name, Employee ID, Position, Phone #, email

        Uyen Tang
        654321 tourGuide
        2025557076 utang@watersports.com

What operation would you like to carry out?
```
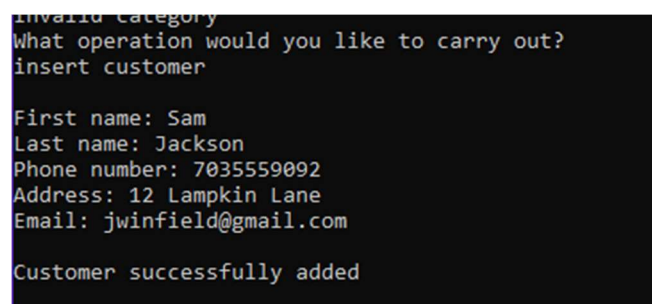
As you can see in this screenshot, the search is employee.name and then it will prompt you to enter in the name of the category.

If you do not put in the correct information, nothing will be printed, but if it is entered correctly it will print out the item or person you are searching for.

5.3 Insert

First you need to pick the category you need to add an entry to and when that is chosen you will type insert *category*.

```
Invalid category
What operation would you like to carry out?
insert customer

First name: Sam
Last name: Jackson
Phone number: 7035559092
Address: 12 Lampkin Lane
Email: jwinfield@gmail.com

Customer successfully added
```

It will then prompt you to enter all of the necessary information in order to store the information in the database.

After you have successfully entered in the information, you can print the category and see that the entry has been added.

```
What operation would you like to carry out?
print customers
Customers:
Name, Phone #, email, Address

        Leo DiCaprio
        2025558988 ldc@gmail.com
        7800 York Rd

        Willem Defoe
        7035551012 wd@gmail.com
        10 Downing St

        Stacy Abrams
        3015558844 sa4p@gmail.com
        1600 Penn Ave NW

        Robin Williams
        7035552024 rwill@hotmail.com
        Heaven

        Sam Jackson
        7035559092 jwinfield@gmail.com
        12 Lampkin Lane

What operation would you like to carry out?
```

5.4 Delete

First, you want to print out all of the entries for the category because in order to delete an entry

you need the primary key.

After printing the products this is the result:

```
What operation would you like to carry out?
print products
Products:
Product ID, Type, Availability

        0000 Kayak available

        0001 Kayak available

        0002 Kayak available

        1000 Board available

        1001 Board available

        2000 Sailboat available

        2001 Sailboat available

        2002 Sailboat available
```

Then you want to use the delete method and in this case you will put delete *category*

It will then ask you for the primary key in order to figure out the actual thing you want to delete

```
What operation would you like to carry out?
delete product
Enter product ID
0002
Product deleted
```

Then, when you print out the category you will see that the entry is deleted off of the list

```
What operation would you like to carry out?
print products
Products:
Product ID, Type, Availability
        0000 Kayak available

        0001 Kayak available

        1000 Board available

        1001 Board available

        2000 Sailboat available

        2001 Sailboat available

        2002 Sailboat available
```

5.5 Update

First, you want to print all the entries of the category you want to update because again you

need the primary key.

For example, after printing the customers, this is the result:

```
What operation would you like to carry out?
print customers
Customers:
Name, Phone #, email, Address
        Leo DiCaprio
        2025558988 ldc@gmail.com
        7800 York Rd

        Willem Defoe
        7035551012 wd@gmail.com
        10 Downing St

        Stacy Abrams
        3015558844 sa4p@gmail.com
        1600 Penn Ave NW
```

Then you will have to type update *category* in order to update one of the entries.

You will then enter in the information it asks for which is the primary key.

```
What operation would you like to carry out?
update customer
Enter customer email
sa4p@gmail.com

First name: Stacy
Last name: Abrams
Phone number: 3015558844
Address: 1600 Penn Avenue
Email: stabr@gmail.com
Customer with email sa4p@gmail.com updated
```

After you type in the primary key that it asks for, it will ask you to enter in all of the information again just in case something has to be changed.

Once you have entered in all of the old and new information, you can print the category again and you will see that the entry has been changed and updated.

```
What operation would you like to carry out?
print customers
Customers:
Name, Phone #, email, Address

        Leo DiCaprio
        2025558988 ldc@gmail.com
        7800 York Rd

        Willem Defoe
        7035551012 wd@gmail.com
        10 Downing St

        Stacy Abrams
        3015558844 stabr@gmail.com
        1600 Penn Avenue
```

6. List of Possible Commands

- print
    - all
    - employees
    - customers
    - rentals
    - products
    - rates

- search
    - employees
    - employees.name
    - customers
    - customers.name
    - rentals
    - products
    - products.type
    - rates

- insert

    - employee
    - customer
    - rental
    - product
    - rate

- delete

    - employee
    - customer
    - rental
    - product
    - rate

- update

    - employee
    - customer
    - rental
    - product
    - rate

All commands are case sensitive.