# MP3 readme

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Date: 11/24/2013

To Run

test\_mp3.bat located in test folder.

## **Project description:**

Project loads the data from MySQL database in to the application and provides user with following options:

- To load the Database Data into the application
- To add a new Order File to the Database.
- Retrieve (view) or Delete any Employee by PrimaryKey.
- Retrieve (view) or Delete any Customer by PrimaryKey.
- view all Employees
- view all Customers
- View all orders

MainDriver class has the main method and is used to launch the application. Test cases are written to cover the positive, negative and exception behavior of the application.

# <u>Installation</u>, compile and run-time requirements:

**Installation requirements**: MySQL Workbench 6.0 Build 6.0.7.11215

IDE: Eclipse

**IDEVersion**: Kelpler Version

Java JDK 7 version

Compile time requirements: Jar required: opencsv-2.4jar

**Run time requirements for batch file**: Runnable file requires the MySQL database instance to be created for BIRT sample database scripts found at <a href="http://www.eclipse.org/birt/phoenix/db/-mysql">http://www.eclipse.org/birt/phoenix/db/-mysql</a>.

Connect to database using below credentials:

```
Database Url = "jdbc:mysql://localhost:3306/MP2";
```

**User Name** = "root";

Password = "password";

### **User quide information on the dialogs:**

Run the MainDriver class in iit.itm.pru.mp2.driver package and verify that console window is opened with below options:

#### Main Menu:

- 1. Load the Database into the application
- 2. Add a new Order File to the Database
- 3. Retrieve (view) or Delete any Employee by PrimaryKey
- 4. Retrieve (view) or Delete any Customer by PrimaryKey
- 5. View all Employees
- 6. View all Customers
- 7. View all Orders

### **Load database in to application:**

Enter "1" and press enter to load a database into the application.

Database should be successfully loaded in to the application and below message should be displayed.

"Database loaded into application successfully!"

Error message is thrown when User enters invalid username, password or URL.

**Error message** is displayed when user selects option 1 and the required database does not exist.

Main menu is displayed after database is loaded successfully.

### Add a new Order File to the Database

Enter "2" and press enter to add a new order record.

Below message is displayed once enter is pressed.

"Enter order number, order date, required date, shipped date, status, comments, customer number Enter date in format 'yyyy-mm-dd'"

Give all the above details each in newline and press enter

Record should be inserted successfully and below message should be displayed.

"Record is inserted into Order table!"

Error message "Some <u>ParseException</u> Occured during Order record Insert!!" should be displayed when user attempts to insert invalid data in to order table.

Main menu is displayed after record is inserted successfully.

## Retrieve (view) or Delete any Employee by PrimaryKey

Enter "3" from main menu and press enter to retrieve or delete an employee record.

Submenu with below options is displayed:

- 1. View Employee by Employee Number
- 2. Delete Employee by Employee Number

### **View Employee record:**

- Enter 1 and press enter to view details of employee record.
- Message "Enter the Employee Number to view details" is displayed.
- Enter valid employee number and press enter.
- Employee details are displayed.
- Message "No employee with the given ID" is displayed when user enters invalid employee ID.
- Main Menu is displayed once the employee details are printed/above message is displayed for invalid entry.

### **Delete Employee record:**

- Enter "2" and press enter to delete details of employee record.
- Message "Enter the Employee Number to delete from database" is displayed.
- Enter valid employee number and press enter.
- Employee details are deleted.
- Message "No employee with the given ID" is displayed when user enters invalid employee ID.
- Main Menu is displayed once the employee details are deleted/above message is displayed for invalid entry.

### Retrieve (view) or Delete any Customer by PrimaryKey

Enter "4" from main menu and press enter to retrieve or delete an Customer record.

Submenu with below options is displayed:

- 1. View Customer details by Customer Number
- 2. Delete Customer by Customer Number

### **View Customer record:**

- Enter 1 from submenu and press enter to view details of Customer record.
- Message "Enter the Customer Number to view details" is displayed.
- Enter valid Customer number and press enter.
- Customer details are displayed.
- Message "No Customer with the given ID" is displayed when user enters invalid Customer ID.
- Main Menu is displayed once the Customer details are printed/above message is displayed for invalid entry.

#### **Delete Customer record:**

- Enter "2" from the submenu and press enter to delete details of Customer record.
- Message "Enter the Customer Number to delete from database" is displayed.
- Enter valid Customer number and press enter.
- Customer details are deleted.
- Message "No Customer with the given ID" is displayed when user enters invalid Customer ID.
- Main Menu is displayed once the Customer details are deleted/above message is displayed for invalid entry.

# **View all Employees**

Prior to view the employee details, database should be loaded in to application successfully.

- Once the database is loaded successfully, enter "5" from main menu and press enter to view the employee records.
- Message "First you will have to load the database into the application" is displayed when database is not loaded and user attempts to view the employee records.
- Main Menu is displayed once the employee details are printed.

## **View all Customers**

Prior to view the Customer details, database should be loaded in to application successfully.

- Once the database is loaded successfully, enter "6" from main menu and press enter to view the Customer records.
- Message "First you will have to load the database into the application" is displayed when database is not loaded and user attempts to view the Customer records.
- Main Menu is displayed once the Customer details are printed.

# **View all Orders**

Prior to view the Orders details, database should be loaded in to application successfully.

- Once the database is loaded successfully, enter "7" from main menu and press enter to view the Orders records.
- Message "First you will have to load the database into the application" is displayed when database is not loaded and user attempts to view the Orders records.
- Main Menu is displayed once the Orders details are printed.

### **Development and testing insights with expected results:**

- The application handles all the possible exceptions where user can go wrong and allows the user to run the application without interruption.
- MainDriver is the class which contains the main method and from where the mp3 code execution of starts.
- We have defined customized exception "DatabaseConnectionException.java" which extends exception class.
- We have used try-catch to catch all the exceptions in the main method.
- The entire data loading from database is handled by CustomersDAO.java,EmployeesDAO.java,OrdersDAO.java. All these classes uses RetrieveAbstract.java class to retrieve data from database.
- The view/delete operations on customer and employee records are handled by RDEmployeeCustomerRecord.java class.
- Tests CustomerSqlTest.java, EmployeeSqlTest.java, OrdersSqlTest.java are designed to test all the positive, negative and exception functionality of the mp3 project requirements.

### Screen captures demonstrating all application capabilities:

### Loading database in to application:

```
Main Menu:
1. Load the Database into the application
2. Add a new Order File to the Database
3. Retrieve (view) or Delete any Employee by PrimaryKey
4. Retrieve (view) or Delete any Customer by PrimaryKey
5. View all Employees
6. View all Customers
7. View all Orders
Database loaded into application successfully !
Main Menu:
1. Load the Database into the application
2. Add a new Order File to the Database
3. Retrieve (view) or Delete any Employee by PrimaryKey
4. Retrieve (view) or Delete any Customer by PrimaryKey
5. View all Employees
6. View all Customers
7. View all Orders
```

# **Adding new Order record:**

```
Main Menu:
1. Load the Database into the application
2. Add a new Order File to the Database
3. Retrieve (view) or Delete any Employee by PrimaryKey
4. Retrieve (view) or Delete any Customer by PrimaryKey
5. View all Employees
6. View all Customers
7. View all Orders
To add new Order record
Enter order number, order date, required date, shipped date, status, comments, customer number
Enter date in format 'yyyy-mm-dd'
2013-09-09
2013-09-09
2013-09-09
shipped
test
103
Record is inserted into Order table!
Main Menu:
1. Load the Database into the application
2. Add a new Order File to the Database
3. Retrieve (view) or Delete any Employee by PrimaryKey
4. Retrieve (view) or Delete any Customer by PrimaryKey
5. View all Employees
6. View all Customers
7. View all Orders
```

# View Employee data:

```
Nain Menu:

1. Load the Database into the application

2. Add a new Order File to the Database
3. Retrieve (view) or Delete any Employee by PrimaryKey
4. Retrieve (view) or Delete any Employee by PrimaryKey
5. View all Customers
7. View all Customers
7. View all Customers
7. View all Customers
8. When all Customers
9. Add a new Order File to the Database
9. Retrieve (view) or Delete any Employee by PrimaryKey
9. Settle and Customers
9. When all Employees any Customer by PrimaryKey
9. View all Employees by Employee Number
9. View all Customers
1. View Employee by Employee Number
1. Coal the Employee Bunder to view details
1. Nain Menu:
1. Load the Database into the application
1. Retrieve (view) or Delete any Employee by PrimaryKey
1. Retrieve (view) or Delete any Employee by PrimaryKey
1. Retrieve (view) or Delete any Employee by PrimaryKey
1. View all Employees
1. View all Employe
```

# **Delete Employee data:**

```
Main Menu:
1. Load the Database into the application
2. Add a new Order File to the Database
3. Retrieve (view) or Delete any Employee by PrimaryKey
4. Retrieve (view) or Delete any Customer by PrimaryKey
5. View all Employees
6. View all Customers
7. View all Orders
1. View Employee by Employee Number
2. Delete Employee by Employee Number
Enter the Employee Number to delete from database
Record is deleted!
Main Menu:
1. Load the Database into the application
2. Add a new Order File to the Database
3. Retrieve (view) or Delete any Employee by PrimaryKey
4. Retrieve (view) or Delete any Customer by PrimaryKey
5. View all Employees
6. View all Customers
7. View all Orders
```

## **View Customer Data:**

```
Main Menu:

1. Load the Database into the application

2. Add a new Order File to the Database

3. Retrieve (view) or Delete any Employee by PrimaryKey

4. Retrieve (view) or Delete any Employee by PrimaryKey

5. view all Employees

6. view all Customers

7. view all Orders

8.

1. view Customer details by Customer Number

2. Delete Customer by Customer Number

1. Enter the Customer Number to view details

103

Customers [customerNumber=103, customerName=Atelier graphique, contactLastName=Schmitt, contactFirstName=Carine , phone=40.32.2555, addressLine1=54, rue Royale, addressLine2=null,

Main Menu:

1. Load the Database into the application

2. Add a new Order File to the Database

3. Retrieve (view) or Delete any Employee by PrimaryKey

4. Retrieve (view) or Delete any Employee by PrimaryKey

5. View all Employees

5. View all Employees

6. View all Customers

7. View all Orders
```

## **Delete Customer Data:**

```
Main Menu:
1. Load the Database into the application
2. Add a new Order File to the Database
3. Retrieve (view) or Delete any Employee by PrimaryKey
4. Retrieve (view) or Delete any Customer by PrimaryKey
5. View all Employees
6. View all Customers
7. View all Orders
1. View Customer details by Customer Number
2. Delete Customer by Customer Number
Enter the Customer Number to delete from database
Record is deleted!
1. Load the Database into the application
2. Add a new Order File to the Database
3. Retrieve (view) or Delete any Employee by PrimaryKey
4. Retrieve (view) or Delete any Customer by PrimaryKey
5. View all Employees
6. View all Customers
7. View all Orders
```

# **View Employees Data:**

```
4. Retrieve (view) or Delete any Customer by PrimaryKey
5. View all Employees
 6. View all Customers
7. View all Orders
Employees [employeeNumber=1056, lastName=Patterson, firstName=Mary, extension=x4611, email=mpatterso@classicmodelcars.com, officeCode=1, Employees [employeeNumber=1076, lastName=Firrelli, firstName=Jeff, extension=x9273, email=jfirrelli@classicmodelcars.com, officeCode=1, Employees [employeeNumber=1088, lastName=Patterson, firstName=William, extension=x4871, email=wpatterson@classicmodelcars.com, officeCode Employees [employeeNumber=1102, lastName=Bondur, firstName=Gerard, extension=x5408, email=gbondur@classicmodelcars.com, officeCode=4, representation=x5408, email=gbondur@classicmodelcars.com, off
Employees [employeeNumber=1143, lastName=Bow, firstName=Anthony, extension=x5428, email=abow@classicmodelcars.com, officeCode=1, reports 
Employees [employeeNumber=1165, lastName=Jennings, firstName=Leslie, extension=x3291, email=ljennings@classicmodelcars.com, officeCode=1 
Employees [employeeNumber=1166, lastName=Thompson, firstName=Leslie, extension=x4065, email=lthompson@classicmodelcars.com, officeCode=1
                                [employeeNumber=1188, lastName=Firrelli, firstName=Julie, extension=x2173, email=jfirrelli@classicmodelcars.com, officeCode=2,
 Employees
 Employees [employeeNumber=1216, lastName=Patterson, firstName=Steve, extension=x4334, email=spatterson@classicmodelcars.com, officeCode=
Employees [employeeNumber=1286, lastName=Tseng, firstName=Foon Yue, extension=x2248, email=ftseng@classicmodelcars.com, officeCode=3, re; Employees [employeeNumber=1323, lastName=Vanauf, firstName=George, extension=x4102, email=gvanauf@classicmodelcars.com, officeCode=3, re;
 Employees
                                  [employeeNumber=1337, lastName=Bondur, firstName=Loui, extension=x6493, email=lbondur@classicmodelcars.com, officeCode=4, repo
 Employees [employeeNumber=1370, lastName=Hernandez, firstName=Gerard, extension=x2028, email=ghernande@classicmodelcars.com, officeCode=
Employees [employeeNumber=1401, lastName=Castillo, firstName=Damela, extension=x2759, email=pastillo@classicmodelcars.com, officeCode=4. Employees [employeeNumber=1401, lastName=Bott, firstName=Larry, extension=x2311, email=lbott@classicmodelcars.com, officeCode=7, reports
 Employees [employeeNumber=1504, lastName=Jones, firstName=Barry, extension=x102, email=bjones@classicmodelcars.com, officeCode=7, report:
[employeeNumber=1619, lastName=King, firstName=Tom, extension=x103, email=tking@classicmodelcars.com, officeCode=6, reportsTo=:
Employees [employeeNumber=1621, lastName=Nishi, firstName=Mami, extension=x101, email=mnishi@classicmodelcars.com, officeCode=5, reports Employees [employeeNumber=1625, lastName=Kato, firstName=Yoshimi, extension=x102, email=ykato@classicmodelcars.com, officeCode=5, reports Employees [employeeNumber=1702, lastName=Gerard, firstName=Martin, extension=x2312, email=mgerard@classicmodelcars.com, officeCode=4, reports Employees [employeeNumber=1702, lastName=Gerard, firstName=Martin, extension=x2312, email=mgerard@classicmodelcars.com, officeCode=4, reports Employees [employeeNumber=1702, lastName=Gerard, firstName=Martin, extension=x2312, email=mgerard@classicmodelcars.com, officeCode=5, reports Employees [employeeNumber=1702, lastName=Gerard, firstName=Martin, extension=x2012, email=mgerard@classicmodelcars.com, officeCode=5, reports Employees [employeeNumber=1702, lastName=Gerard, firstName=Martin, extension=x2012, email=mgerard@classicmodelcars.com, officeCode=5, reports Employees [employeeNumber=1702, lastName=Gerard, firstName=Martin, extension=x2012, email=mgerard@classicmodelcars.com, officeCode=4, reports Employees [employeeNumber=1702, lastName=Gerard, firstName=Martin, extension=x2012, email=mgerard@classicmodelcars.com, officeCode=4, reports Employees [employeeNumber=1702, lastName=Gerard, firstName=Martin, extension=x2012, email=mgerard@classicmodelcars.com, officeCode=4, reports Employees [employeeNumber=1702, lastName=Martin, email=mgerard@classicmodelcars.com, email=mgerard@classicmodelcars.com, email=mgerard@clas
 1. Load the Database into the application
 2. Add a new Order File to the Database
3. Retrieve (view) or Delete any Employee by PrimaryKey
4. Retrieve (view) or Delete any Customer by PrimaryKey
 5. View all Employees
 6. View all Customers
 7. View all Orders
```

# View Customer Data:

```
1. Load the Database into the application
2. Add a new Order File to the Database
3. Retrieve (view) or Delete any Employee by PrimaryKey
4. Retrieve (view) or Delete any Customer by PrimaryKey
5. View all Employees
6. View all Customers
7. View all Orders
Customers [customerNumber=103, customerName=Atelier graphique, contactLastName=Schmitt, contactFirstName=Carine , phone=40.32.2555, addre
             customerNumber=112, customerName=Signal Gift Stores, contactLastName=King, contactFirstName=Jean, phone=7025551838, addressLiv
Customers
             [customerNumber=114, customerName=Australian Collectors, Co., contactLastName=Ferguson, contactFirstName=Peter, phone=03 9520 / [customerNumber=119, customerName=La Rochelle Gifts, contactLastName=Labrune, contactFirstName=Janine , phone=40.67.8555, addre
Customers
             [customerNumber=121, customerName=Baane Mini Imports, contactLastName=Bergulfsen, contactFirstName=Jonas , phone=07-98 9555, ac
             customerNumber=124, customerName=Mini Gifts Distributors Ltd., contactLastName=Nelson, contactFirstName=Susan, phone=41555514
Customers
Customers
             [customerNumber=125, customerName=Havel & Zbyszek Co, contactLastName=Piestrzeniewicz, contactFirstName=Zbyszek , phone=(26) 64
             customerNumber=128, customerName=Blauer See Auto, Co., contactLastName=Keitel, contactFirstName=Roland, phone=+49 69 66 90 25:
Customers
             customerNumber=129, customerName=Mini Wheels Co., contactLastName=Murphy, contactFirstName=Julie, phone=6505555787, addressLir
             [customerNumber=131, customerName=Land of Toys Inc., contactLastName=Lee, contactFirstName=Kwai, phone=2125557818, addressLine:
Customers
             customerNumber=141, customerName=Euro+ Shopping Channel, contactLastName=Freyre, contactFirstName=Diego , phone=(91) 555 94 4
[customerNumber=144, customerName=Volvo Model Replicas, Co, contactLastName=Berglund, contactFirstName=Christina , phone=0921-1
Customers
             customerNumber=145, customerName=Danish Wholesale Imports, contactLastName=Petersen, contactFirstName=Jytte , phone=31 12 355
Customers
             [customerNumber=146, customerName=Saveley & Henriot, Co., contactLastName=Saveley, contactFirstName=Mary , phone=78.32.5555, ac [customerNumber=148, customerName=Dragon Souveniers, Ltd., contactLastName=Natividad, contactFirstName=Eric, phone=+65 221 755
Customers
             [customerNumber=151, customerName=Muscle Machine Inc, contactLastName=Young, contactFirstName=Jeff, phone=2125557413, addressL
             customerNumber=157, customerName=Diecast Classics Inc., contactLastName=Leong, contactFirstName=Kelvin, phone=2155551555, addi
Customers
Customers
             customerNumber=161, customerName=Technics Stores Inc., contactLastName=Hashimoto, contactFirstName=Juri, phone=6505556809, add
             [customerNumber=166, customerName=Handji Gifts& Co, contactLastName=Victorino, contactFirstName=Wendy, phone=+65 224 1555, addı
[customerNumber=167, customerName=Herkku Gifts, contactLastName=Oeztan, contactFirstName=Veysel, phone=+47 2267 3215, addressL:
Customers
Customers
             customerNumber=168, customerName=American Souvenirs Inc, contactLastName=Franco, contactFirstName=Keith, phone=2035557845, add
             [customerNumber=169, customerName=Porto Imports Co., contactLastName=de Castro, contactFirstName=Isabel , phone=(1) 356-5555, a [customerNumber=171, customerName=Daedalus Designs Imports, contactLastName=Ranc, contactFirstName=Martine , phone=20.16.1555,
Customers
Customers
             [customerNumber=172, customerName=La Corne D'abondance, Co., contactLastName=Bertrand, contactFirstName=Marie, phone=(1) 42.34
             customerNumber=173, customerName=Cambridge Collectables Co., contactLastName=Tseng, contactFirstName=Jerry, phone=6175555555,
Customers
            [customerNumber=175, customerName=Gift Depot Inc., contactLastName=King, contactFirstName=Julie, phone=2035552570, addressLine:
[customerNumber=177, customerName=Osaka Souveniers Co., contactLastName=Kentary, contactFirstName=Mory, phone=+81 06 6342 5555]
Customers
             [customerNumber=181, customerName=Vitachrome Inc., contactLastName=Frick, contactFirstName=Michael, phone=2125551500, addressL:
```

```
Customers [customerNumber=406, customerName=Auto Canal+ Petit, contactLastName=Perrier, contactFirstName=Dominique, phone=(1) 47.55.6555 (Customers [customerNumber=409, customerName=Stuttgart Collectable Exchange, contactLastName=M, contactFirstName=Rita , phone=0711-555361
              customerNumber=412, customerName=Extreme Desk Decorations, Ltd, contactLastName=McRoy, contactFirstName=Sarah, phone=04 499 9
Customers
              customerNumber=415, customerName=Bavarian Collectables Imports, Co., contactLastName=Donnermeyer, contactFirstName=Michael, pl
Customers [customerNumber=424, customerName=Classic Legends Inc., contactLastName=Hernandez, contactFirstName=Naria, phone=2125558493, ac CustomerS [customerNumber=443, customerName=Feuer Online Stores, Inc, contactLastName=Feuer, contactFirstName=Alexander, phone=0342-555
Customers [customerNumber=447, customerName=Gift Ideas Corp., contactLastName=Lewis, contactFirstName=Dan, phone=2035554407, addressLine: Customers [customerNumber=448, customerName=Scandinavian Gift Ideas, contactLastName=Larsson, contactFirstName=Martha, phone=0695-34 655! Customers [customerNumber=450, customerName=The Sharp Gifts Warehouse, contactLastName=Frick, contactFirstName=Sue, phone=4085553659, add
               customerNumber=452, customerName=Mini Auto Werke, contactLastName=Mendel, contactFirstName=Roland , phone=7675-3555, addressL:
              [customerNumber=455, customerName=Super Scale Inc., contactLastName=Murphy, contactFirstName=Leslie, phone=2035559545, addressl [customerNumber=456, customerName=Microscale Inc., contactLastName=Choi, contactFirstName=Yu, phone=2125551957, addressLine1=56
Customers
Customers
              customerNumber=458, customerName=Corrida Auto Replicas, Ltd, contactLastName=Sommer, contactFirstName=Mart, phone=(91) 555 22
Customers
              [customerNumber=459, customerName=Warburg Exchange, contactLastName=Ottlieb, contactFirstName=Sven , phone=0241-039123, addres:
[customerNumber=462, customerName=FunGiftIdeas.com, contactLastName=Benitez, contactFirstName=Violeta, phone=5085552555, addres:
Customers
              [customerNumber=465, customerName=Anton Designs, Ltd., contactLastName=Anton, contactFirstName=Carmen, phone=+34 913 728555, ac
              [customerNumber=471, customerName=Australian Collectables, Ltd, contactLastName=Clenahan, contactFirstName=Sean, phone=61-9-384 [customerNumber=473, customerName=Frau da Collezione, contactLastName=Ricotti, contactFirstName=Franco, phone=+39 022515555, ac
Customers
Customers
              customerNumber=475, customerName=West Coast Collectables Co., contactLastName=Thompson, contactFirstName=Steve, phone=3105553
              customerNumber=477, customerName=Mit Vergn, contactLastName=Moos, contactFirstName=Hanna , phone=0621-08555, addressLine1=For:
Customers
Customers
              [customerNumber=480, customerName=Kremlin Collectables, Co., contactLastName=Semenov, contactFirstName=Alexander , phone=+7 81:
Customers
              customerNumber=481, customerName=Raanan Stores, Inc. contactLastName=Altagar,G M, contactFirstName=Raanan, phone=+ 972 9 959 (
              customerNumber=484, customerName=Iberia Gift Imports, Corp., contactLastName=Roel, contactFirstName=Jos, phone=(95) 555 82 82
Customers
              customerNumber=486, customerName=Motor Mint Distributors Inc., contactLastName=Salazar, contactFirstName=Rosa, phone=21555598
Customers [customerNumber=487, customerName=Signal Collectibles Ltd., contactLastName=Taylor, contactFirstName=Sue, phone=4155554312, account of the CustomerNumber=487, customerName=Signal Collectibles Ltd., contactLastName=Taylor, contactFirstName=Sue, phone=4155554312, account of the CustomerNumber=489, customerName=Double Decker Gift Stores, Ltd., contactLastName=Smith, contactFirstName=Thomas, phone=(171)
              [customerNumber=495, customerName=Diecast Collectables, contactLastName=Franco, contactFirstName=Valarie, phone=6175552555, add
Customers [customerNumber=496, customerName=Kelly's Gift Shop, contactLastName=Snowden, contactFirstName=Tony, phone=+64 9 5555500, addre
1. Load the Database into the application
2. Add a new Order File to the Database
3. Retrieve (view) or Delete any Employee by PrimaryKey
4. Retrieve (view) or Delete any Customer by PrimaryKey
5. View all Employees
6. View all Customers
7. View all Orders
```

## **View Orders Data:**

```
Main Menu:
1. Load the Database into the application
2. Add a new Order File to the Database
3. Retrieve (view) or Delete any Employee by PrimaryKey
4. Retrieve (view) or Delete any Customer by PrimaryKey
5. View all Employees
6. View all Customers
7. View all Orders
Orders [orderNumber=232, orderDate=2013-09-09, requiredDate=2013-09-09, shippedDate=2013-09-09, status=shipped, comments=test, customerNu
Orders [orderNumber=2837, orderDate=2013-09-09, requiredDate=2013-09-09, shippedDate=2013-09-09, status=shipped, comments=qoiwue, custome Orders [orderNumber=10100, orderDate=2003-01-06, requiredDate=2003-01-13, shippedDate=2003-01-10, status=Shipped, comments=null, custome
        orderNumber=10101, orderDate=2003-01-09, requiredDate=2003-01-18, shippedDate=2003-01-11, status=Shipped, comments=Check on avai
Orders [orderNumber=10102, orderDate=2003-01-10, requiredDate=2003-01-18, shippedDate=2003-01-14, status=Shipped, comments=null, customer Orders [orderNumber=10103, orderDate=2003-01-29, requiredDate=2003-02-07, shippedDate=2003-02-02, status=Shipped, comments=null, customer
        orderNumber=10104, orderDate=2003-01-31, requiredDate=2003-02-09, shippedDate=2003-02-01, status=Shipped, comments=null, customer
Orders [orderNumber=10105, orderDate=2003-02-11, requiredDate=2003-02-21, shippedDate=2003-02-12, status=Shipped, comments=null, customer
       [orderNumber=10106, orderDate=2003-02-17, requiredDate=2003-02-24, shippedDate=2003-02-21, status=Shipped, comments=null, customer
Orders.
        orderNumber=10107, orderDate=2003-02-24, requiredDate=2003-03-03, shippedDate=2003-02-26, status=Shipped, comments=Difficult to
Orders [orderNumber=10108, orderDate=2003-03-03.73, requiredDate=2003-03-12, shippedDate=2003-03-08, status=Shipped, comments=null, customer
Orders | OrderNumber=10109, orderDate=2003-03-10, requiredDate=2003-03-19, shippedDate=2003-03-11, status=Shipped, comments=Customer requa
       [orderNumber=10110, orderDate=2003-03-18, requiredDate=2003-03-24, shippedDate=2003-03-20, status=Shipped, comments=null, customer
Orders [orderNumber=10111, orderDate=2003-03-25, requiredDate=2003-03-31, shippedDate=2003-03-30, status=Shipped, comments=null, customer
Orders [orderNumber=10112, orderDate=2003-03-24, requiredDate=2003-04-03, shippedDate=2003-03-29, status=Shipped, comments=Customer requi
       orderNumber=10113, orderDate=2003-03-26, requiredDate=2003-04-02, shippedDate=2003-03-27, status=Shipped, comments=null, customer
Orders
       [orderNumber=10114, orderDate=2003-04-01, requiredDate=2003-04-07, shippedDate=2003-04-02, status=Shipped, comments=null, customer
Orders [orderNumber=10115, orderDate=2003-04-04, requiredDate=2003-04-12, shippedDate=2003-04-07, status=Shipped, comments=null, customer
       orderNumber=10116, orderDate=2003-04-11, requiredDate=2003-04-19, shippedDate=2003-04-13, status=Shipped, comments=null, custome
Orders
       orderNumber=10117, orderDate=2003-04-16, requiredDate=2003-04-24, shippedDate=2003-04-17, status=Shipped, comments=null, customer
Orders [orderNumber=10118, orderDate=2003-04-21, requiredDate=2003-04-29, shippedDate=2003-04-26, status=Shipped, comments=Customer has v
       orderNumber=10119, orderDate=2003-04-28, requiredDate=2003-05-05, shippedDate=2003-05-02, status=Shipped, comments=null, customer
Orders
        orderNumber=10120, orderDate=2003-04-29, requiredDate=2003-05-08, shippedDate=2003-05-01, status=Shipped, comments=null, customer
Orders
       [orderNumber=10121, orderDate=2003-05-07, requiredDate=2003-05-13, shippedDate=2003-05-13, status=Shipped, comments=null, customer
       [orderNumber=10122, orderDate=2003-05-08, requiredDate=2003-05-16, shippedDate=2003-05-13, status=Shipped, comments=null, customer
       orderNumber=10123, orderDate=2003-05-20, requiredDate=2003-05-29, shippedDate=2003-05-22, status=Shipped, comments=null, customer
Orders [orderNumber=10124, orderDate=2003-05-21, requiredDate=2003-05-29, shippedDate=2003-05-25, status=Shipped, comments=Customer very
Orders [orderNumber=10125, orderDate=2003-05-21, requiredDate=2003-05-27, shippedDate=2003-05-24, status=Shipped, comments=null, customer
```

<u>User attempting to view customer,employee,orders records when database</u> <u>doesnot exist</u>

```
Main Menu:
1. Load the Database into the application
2. Add a new Order File to the Database
3. Retrieve (view) or Delete any Employee by PrimaryKey
4. Retrieve (view) or Delete any Customer by PrimaryKey
5. View all Employees
6. View all Customers
7. View all Orders
First you will have to load the database into the application
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First you will have to load the database into the application
```

# Message when user enter invalid option in main menu:

#### Main Menu:

- 1. Load the Database into the application
- 2. Add a new Order File to the Database
- 3. Retrieve (view) or Delete any Employee by PrimaryKey
- 4. Retrieve (view) or Delete any Customer by PrimaryKey
- 5. View all Employees
- 6. View all Customers
- 7. View all Orders

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Sorry, Invalid Entry

#### Main Menu:

- 1. Load the Database into the application
- 2. Add a new Order File to the Database
- 3. Retrieve (view) or Delete any Employee by PrimaryKey
- 4. Retrieve (view) or Delete any Customer by PrimaryKey
- 5. View all Employees
- 6. View all Customers
- 7. View all Orders