# **REPORT – OOPD PROJECT**

## About-

#### My Project

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Main Page	Classes *	Files •				
FOOD O	RDERING	SYSTEM				

#### Introduction

The Objective of the Food Ordering System is to allow the users to explore through multiple restaurants and their menus and order the Food. The module also contains the functionality of the Payment and Tracking Order.

#### About the Authors:

The Following group members are behind the design and code of the System -

- 1. Niharika Poddar MT21057
- 3. Sristi Sharma MT21098
- 4. Shubham Jain MT21091

#### Learnings

While development of the Project following aspects were covered and learnt -

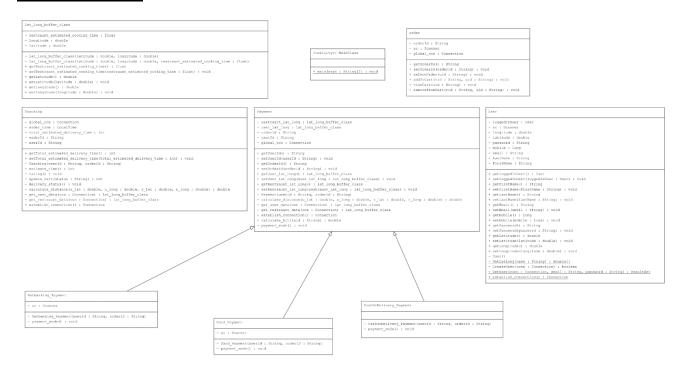
- 1. Object Oriented Programming
- 2. Object Oriented Design ( classes and objects )
- 3. Encapsulation
- Abstract Class
- 5. Buffer Class
- 6. Database Connectivity ( JDBC )
- 7. UML Diagram
- Documentation using Doxygen
   Profiling
- 10. Packaging
- 11. Polymorphism
- 12. Method Overriding

Classes-

#### My Project

Main Page Classes ▼ File	5*
Class List	
ere are the classes, structs, uni	ons and interfaces with brief descriptions:
Card_Payment	Inherited Class from the Abstract Class Payment Card_Payment : To do Payment through Card
CashOnDelivery_Payment	nt .
[6] lat_long_buffer_class	A Buffer Class This buffer class holds the latitude , longitude and restraunt_estimated_cooking_time
MainClass	Main Class
Netbanking_Payment	Inherited Class from the Abstract Class Payment Netbanking_Payment: To do Payment through Netbanking
G order	Class Order This class manages the order, the restaurants / food items user wants, According to the input by user
@ Payment	Abstract Payment Class
Tracking	Tracking Class
( User	User Class

## Class diagram-



## Running the code-

## **USER MODULE**

First if we enter wrong credentials (according to the ones stored in database) then it shows – Incorrect credentials, then entering correct details, user is successfully logged in.

```
MainClass X
  "C:\Program Files\Java\jdk-17.0.1\bin\java.exe" "-javaagent:C:\Program Files\JetBrain
 Welcome to the Food Ordering App
 Are you an existing user? If yes then enter 'yes', if No then enter 'no'
 yes
 Enter user name :
 jain@test.comm
 Enter password :
 Incorrect credentials. Try again..
 Are you an existing user? If yes then enter 'yes', if No then enter 'no'
 yes
 Enter user name :
 jain@test.com
 Enter password :
 jain
 shubham
 shubham has successfully logged-in
```

## **ORDER MODULE**

User can add items now.

```
shubham has successfully logged-in
Restaurant list:
1 Sagar Gaire
2 Vishnu's
3 Barista
4 Sam's Cafe
Enter the Restaurant you want:
Menu of the selected restaurant:
1 Burger 50
2 Sandwich 40
3 Coffee 20
4 Pasta 300
5 Shake 220
Option:
1. Add item
2. View cart
3. Remove items
4. Go to payment
5. Discard
Add to cart option enabled...
Enter item number from menu-
Enter the quantity
ORDER ID : jain@test.com_2021-12-10T16:20:43.102914900
ITEM ADDED SUCCESSFULLY.
1.Do you want to keep adding items?
2.Finish adding and go back to Menu.
1
```

## **PAYMENT MODULE**

If bill is less than minimum value (100) then user has to add more items to card to move to payment.

```
PAYMENT:
Select the payment mode:
1.Debit/credit card
2.Cash on delivery
3.Net banking
Your base bill is less than the minimun value
Add more Items and make sure Base Bill is above 100
Option:
1. Add item
2. View cart
3. Remove items
4. Go to payment
5. Discard
1
Add to cart option enabled...
Enter item number from menu-
Enter the quantity
ORDER ID : jain@test.com_2021-12-10T16:20:43.102914900
ITEM ADDED SUCCESSFULLY.
1.Do you want to keep adding items?
2.Finish adding and go back to Menu.
```

Now since total bill exceeds 100, then user can move to payment module according to the payment mode he wants.

```
PAYMENT:
Select the payment mode:
1.Debit/credit card
2.Cash on delivery
3.Net banking
Your total bill is 969.56
Do you have a Promo Code?
yes
Enter the Promo Code
save20
Your Final Cost is 775.647999999999
Enter ID
9874
Incorrect ID
Enter Again
987456
Enter Password
741
Your Payment is Successful, Thankyou for Ordering
```

## TRACKING MODULE

This module tracks the order according to the time of arrival, then when the order is received user can give ratings.

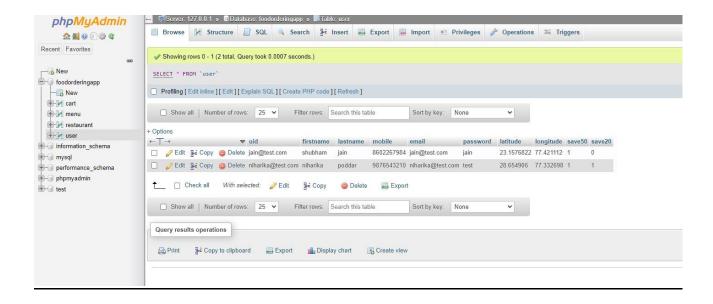
```
Your Payment is Successful, Thankyou for Ordering
Your Order will be delivered in 49 mins
Expected Time of arrival : 17:15:22.237682700
Order Recieved ? Yes / No :
Your Order will be delivered in 44 mins
Expected Time of arrival : 17:15:27.675624200
Order Recieved ? Yes / No :
Your Order will be delivered in 44 mins
Expected Time of arrival : 17:15:39.307407900
Order Recieved ? Yes / No :
Your Order will be delivered in 44 mins
Expected Time of arrival: 17:15:41.378917
Order Recieved ? Yes / No :
yes
Thank You for ordering !!
Please provide the rating to our service 1 to 5 :
```

If the delivery time exceeds 10% of delivery time and order has still not received then – cancel order option is enabled for the user.

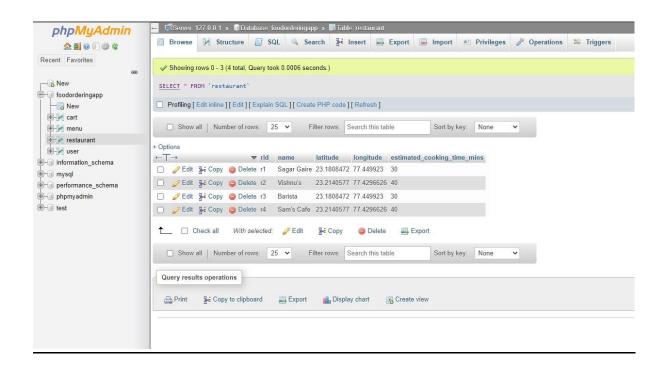
```
Your Payment is Successful, Thankyou for Ordering
Your Order will be delivered in 7 mins
Expected Time of arrival : 17:02:48.389410300
Order Recieved ? Yes / No :
Your Order will be delivered in 7 mins
Expected Time of arrival : 17:02:51.814768100
Order Recieved ? Yes / No :
Your Order will be delivered in 7 mins
Expected Time of arrival : 17:02:53.924031700
Order Recieved ? Yes / No :
Your Order will be delivered in 7 mins
Expected Time of arrival : 17:02:56.665599500
Order Recieved ? Yes / No :
Your Order will be delivered in 5 mins
Expected Time of arrival : 17:02:57.261152300
Order Recieved ? Yes / No :
Your order will be delivered anytime now !
Order Recieved ? Yes / No :
Do you wish to cancel order ? Yes/No :
Your order will be delivered anytime now !
Order Recieved ? Yes / No :
Do you wish to cancel order ? Yes/No :
Your Order has been cancelled and money will be refunded to your account(COD not eligible for refund)!!
Process finished with exit code 0
```

#### **DATABASE-**

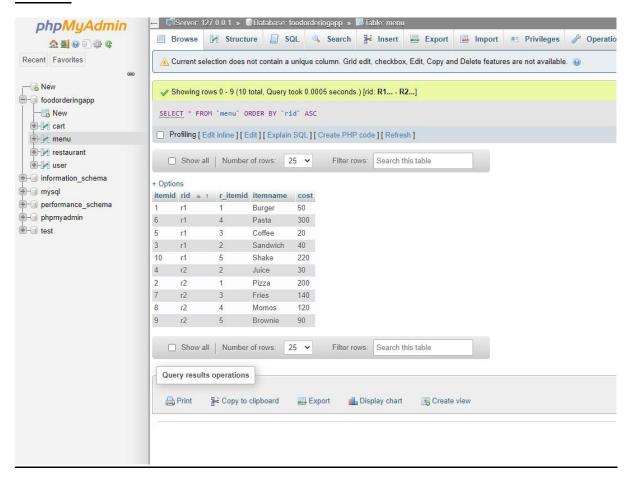
### **USER**



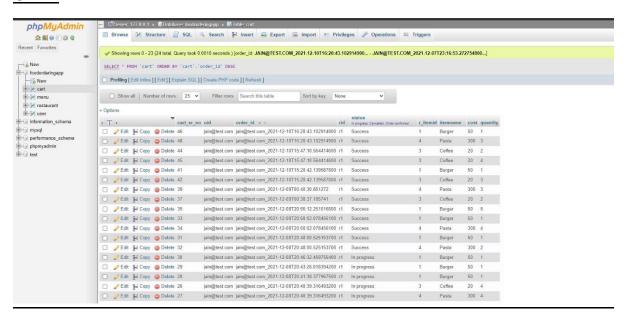
## **RESTAURANT**



### **MENU**



#### **CART**



## **PROFILING-**

# Live call tree

Live-call-tree - Notepad
File Edit Format View Help
Live call tree

Call Tree	Time	(ms)
- <all threads=""></all>	1,778	100%
MainClass.main(String[])	1,637	92%
 +MainClass.java:40 User. <init>()</init>	1,334	75%
   +User.java:108 User.establish_connection()	984	55%
User.java:271 <> java.sql.DriverManager.getConnection(String, String, String)	921	52%
+User.java:270 <> java.lang.Class.forName(String)	62	39
User.java:121 User.GetUser(Connection, String)	256	149
     +User.java:252 <> com.mysql.cj.jdbc.ConnectionImpl.prepareStatement(String)	142	85
+User.java:253 <> com.mysql.cj.jdbc.ClientPreparedStatement.executeQuery()	114	65
	114	6
+User.java:23 <> java.util.Scanner. <init>(InputStream)</init>	62	3
+User.java:23 <> java.util.Scanner. <clinit>()</clinit>	31	25
MainClass.java:43 order.selectOrder(String)	271	155
   +order.java:80 order.addToCart(String, String)	93	55
     +order.java:192 <> java.lang.invoke.MethodHandleNatives.linkCallSite(Object, int, Object, Object, Object, Object[])	46	3!
+order.java:194 <> com.mysql.cj.jdbc.StatementImpl.execute(String)	15	1
+order.java:182 <> java.lang.invoke.MethodHandleNatives.linkCallSite(Object, int, Object, Object, Object, Object[])	15	1
+order.java:197 <> java.util.Scanner.nextInt()	15	1
   +order.java:39 <> java.sql.DriverManager.getConnection(String, String, String) 	31	25
   +order.java:75 <> java.util.Scanner.nextInt()	31	25
   +order.java:136 Tracking. <init>(String, String)      </init>	21	15
     +Tracking.java:50 Tracking.establish_connection()	15	19
       +Tracking.java:319 <> java.sql.DriverManager.getConnection(String, String, String)	15	19

```
Live-call-tree - Notepad
```

```
File Edit Format View Help
                     +---Tracking.java:319 <...> java.sql.DriverManager.getConnection(String, String)
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                     +---Tracking.java:56 Tracking.get_restraunt_data(Connection)
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                          ----Tracking.java:295 com.mysql.cj.jdbc.ClientPreparedStatement.executeQuery()
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                            +---[SQL] SELECT * from restaurant where rid = ?
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                      --order.java:118 CashOnDelivery_Payment.<init>(String, String)
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                         +---Payment.java:61 Payment.get_user_data(Connection)
                             +---Payment.java:104 <...> com.mvsql.cj.jdbc.ConnectionImpl.prepareStatement(String)
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                     ---order.java:54 <...> java.util.Scanner.next()
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                 +---order.java:86 order.viewCart(String)
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                     +---order.java:214 <...> com.mysql.cj.jdbc.StatementImpl.executeQuery(String)
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----<...> com.intellij.rt.execution.application.AppMainV2$1.run()
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          ।
+---<...> com.sun.management.internal.GarbageCollectorExtImpl.createGCNotification(long, String, String, String, GcInfo)
```

# Live call tree by thread

Live-call-tree-by-Thread - Notepad File Edit Format View Help Live call tree

Call Tree	Time	(ms
ain Group: 'main' Native ID: 12356	1,637	1
-MainClass.main(String[])	1,637	1
MainClass.java:40 User. <init>()</init>	1,334	
 +User.java:108 User.establish_connection()	984	
	921	
	62	
+User.java:121 User.GetUser(Connection, String)	256	:
   +User.java:252 <> com.mysql.cj.jdbc.ConnectionImpl.prepareStatement(String)	142	
	114	
   +[SQL] Select * from user where email ='jain@test.com' and password= 'jain'	114	
+User.java:23 <> java.util.Scanner. <init>(InputStream)</init>	62	
 +User.java:23 <> java.util.Scanner. <clinit>()</clinit>	31	
MainClass.java:43 order.selectOrder(String)	271	
+order.java:80 order.addToCart(String, String)	93	
+order.java:192 <> java.lang.invoke.MethodHandleNatives.linkCallSite(Object, int, Object, Object, Object, Object])	46	
+order.java:194 <> com.mysql.cj.jdbc.StatementImpl.execute(String)	15	
+order.java:182 <> java.lang.invoke.MethodHandleNatives.linkCallSite(Object, int, Object, Object, Object, Object[])	15	
+order.java:197 <> java.util.Scanner.nextInt()	15	
 +order.java:39 <> java.sql.DriverManager.getConnection(String, String)	31	
 +order.java:75 <> java.util.Scanner.nextInt()	31	
 +order.java:136 Tracking. <init>(String, String)</init>	21	
+Tracking.java:50 Tracking.establish_connection()	15	
	15	

#### Live-call-tree-by-Thread - Notepad

File Edit Format View Help

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               +---Tracking.java:56 Tracking.get_restraunt_data(Connection)
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                    +---Tracking.java:295 com.mysql.cj.jdbc.ClientPreparedStatement.executeQuery()
                       +---[SQL] SELECT * from restaurant where rid = ?
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              ----order.java:54 <...> java.util.Scanner.next()
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                --order.java:131 Netbanking_Payment.<init>(String, String)
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+---Netbanking_Payment.java:9 Payment.establish_connection()
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                            +---Payment.java:173 <...> java.sql.DriverManager.getConnection(String, String, String)
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                 --order.java:92 order.removeFromCart(String, String)
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+---order.java:86 order.viewCart(String)
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                +---order.java:214 <...> com.mysql.cj.jdbc.StatementImpl.executeQuery(String)
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           ---MainClass.java:38 <...> java.io.PrintStream.println(String)
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        +---MainClass.java:40 <...> java.lang.ClassLoader.loadClass(String)
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    ---Monitor Ctrl-Break Group: 'main' Native ID: 11364
                                                                                                                                                                                                                                                                                                    78 100%
|
+---Notification Thread Group: 'system' Native ID: 4428
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```

# Live method list

Live-method-list - Notepad File Edit Format View Help

Method	Time	(ms)	Own Time (ms
sinClass.main(String[]) MainClass.java	1,637	92%	!
ser. <init>() User.java</init>	1,334	75%	i
ava.sql.DriverManager.getConnection(String, String, String) DriverManager.java	984	55%	j 98
ser.establish connection() User.java	984	55%	i
ava.lang.ClassLoader.loadClass(String) ClassLoader.java	734	41%	79
rder.selectOrder(String) order.java	271	15%	İ
ser.GetUser(Connection, String, String) User.java	256	14%	i
m.mysql.cj.jdbc.ConnectionImpl.prepareStatement(String) ConnectionImpl.java	157	9%	j 15
m.mysql.cj.jdbc.ClientPreparedStatement.executeQuery() ClientPreparedStatement.java	120	7%	j 1:
va.lang.Class.forName(String) Class.java	93	5%	1
va.lang.invoke.MethodHandleNatives.linkCallSite(Object, int, Object, Object, Object, Object, Object[]) MethodHandleNatives.java	93	5%	i
der.addΤοCart(String, String) order.java	93	5%	i
intellij.rt.execution.application.AppMainV2\$1.run() AppMainV2.java	78	4%	i :
sun.management.internal.GarbageCollectorExtImpl.createGCNotification(long, String, String, GtInfo) GarbageCollectorExtImpl.java	62	3%	i
/a.util.Scanner. <init>(InputStream) Scanner.java</init>	62	3%	i
va.util.Scanner.nextInt() Scanner.java	46	3%	i .
m.mysql.cj.jdbc.StatementImpl.executeQuery(String) StatementImpl.java	31	2%	i
va.util.Scanner. <clinit>() Scanner.java</clinit>	31	2%	i
yment. <init>(String, String) Payment.java</init>	31	2%	i
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shOnDelivery Payment. <anit>(String, String) CashOnDelivery Payment.java</anit>	15	1%	i
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va.io.PrintStream.println(String) PrintStream.java	15	1%	i
va.util.Scanner.next() Scanner.java	15	1%	i
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tbanking Payment.calculate bill(String) Netbanking Payment.java	15	1%	i
tbanking Payment.establish connection() Netbanking Payment.java	15	1%	i
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