

# Final Project Report

EXPRESS PARKING

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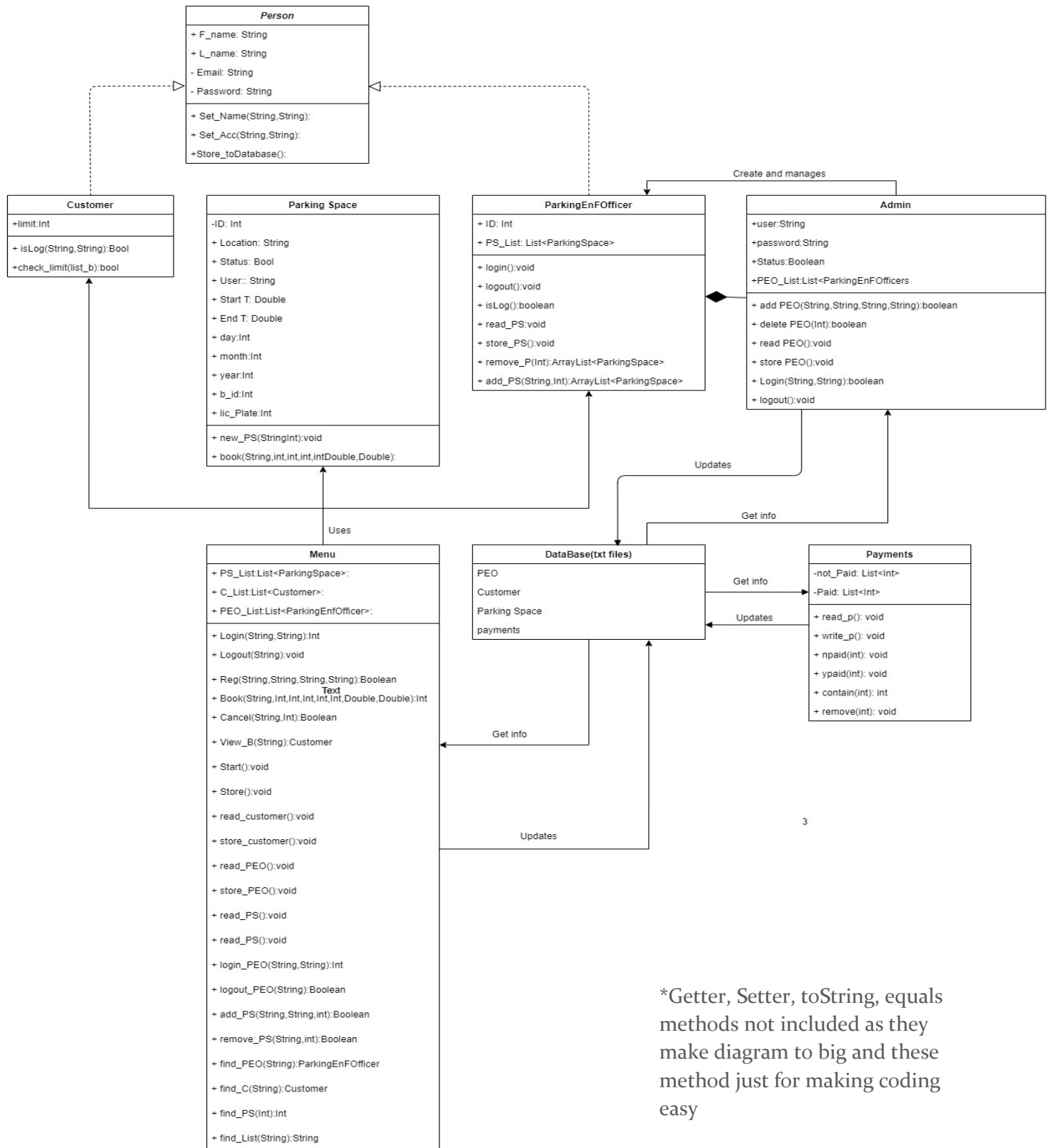
Prism ID:- lordwolf

Course:-EECS3311

## Content:-

1. UML
2. GUI AND EXAMPLE DATA ILLUSTRATION
3. DIFFERERNC E BETWEEN FINAL AND INITIAL DESIGN
4. TEST CASE COVERAGE
5. HOW TO RUN

# 1. UML\*



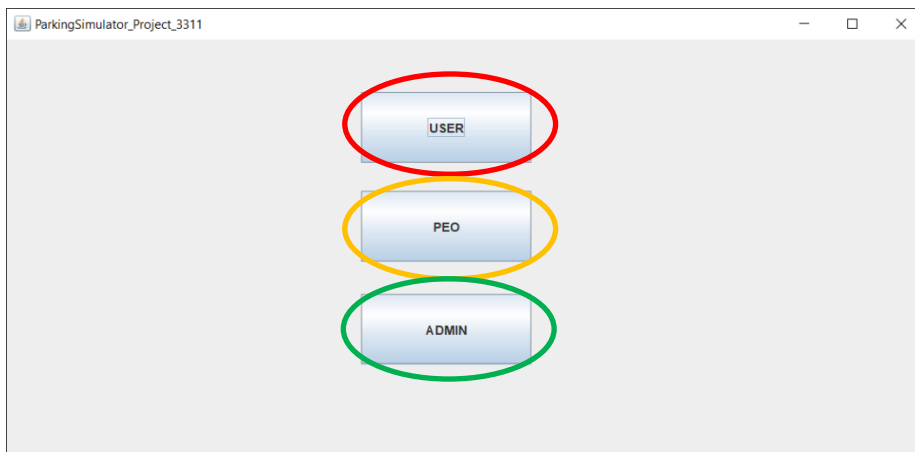
\*Getter, Setter, toString, equals methods not included as they make diagram to big and these method just for making coding easy

## 2. GUI AND EXAMPLE DATA ILLUSTRATION

System Starts from here:-

There are three you can login:-

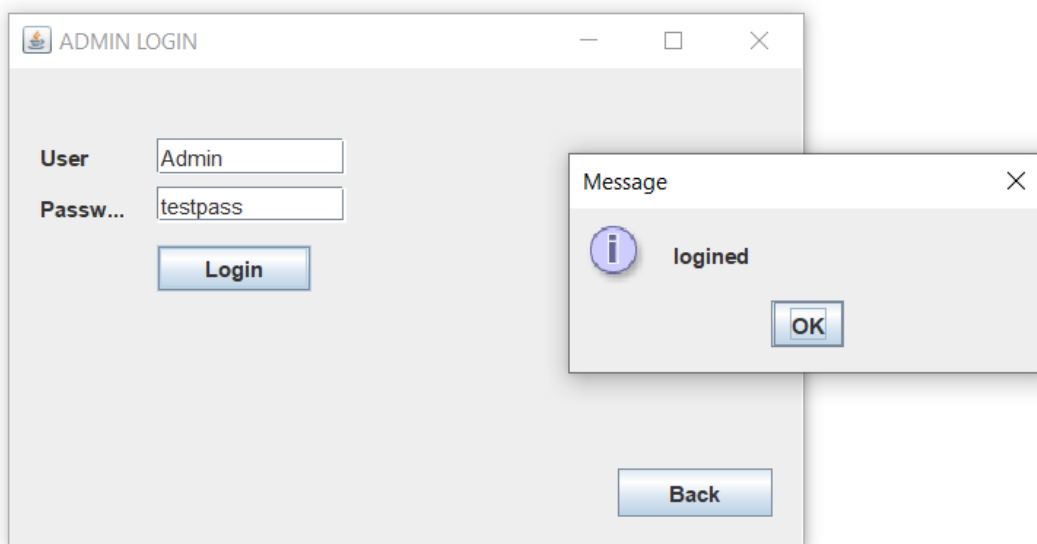
1. As Customer through “**USER**”
2. As Parking Enforcement Officer through “**PEO**”
3. As Admin through “**ADMIN**”



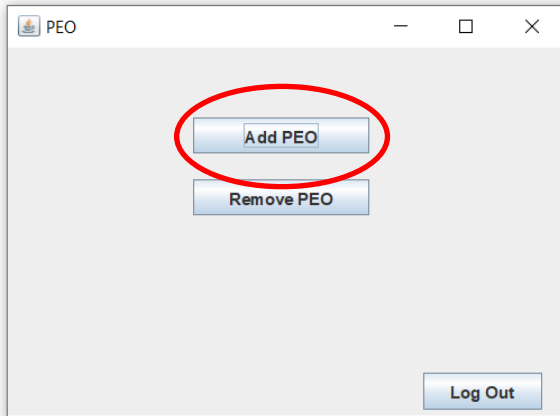
Let go through ADMIN:-

For testing purpose User:- Admin Password:- testpass

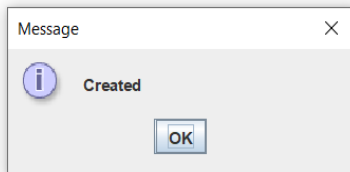
From this 4.1 Manage Parking Enforcement Officer requirements starts



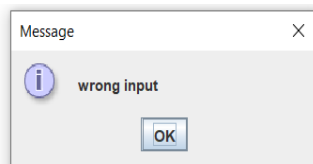
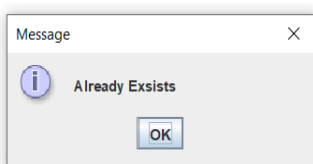
To add new PEO go through Add PEO

A screenshot of a web application window titled 'New PEO Creator'. It contains four input fields: 'First Name:-', 'Last Name:-', 'Email:-', and 'Password'. Below these fields is a 'Create' button. There is also a 'Back' button in the bottom right corner.

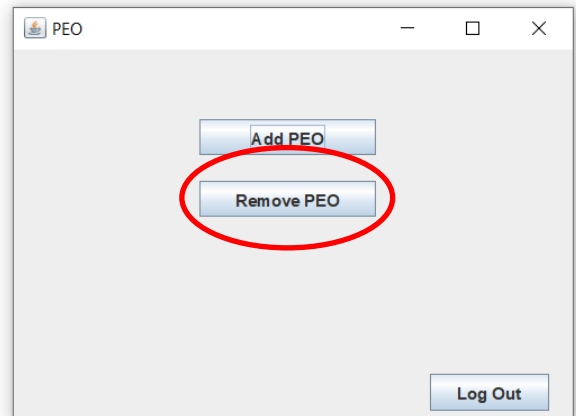
You can add new PEO here and if info is right message appears



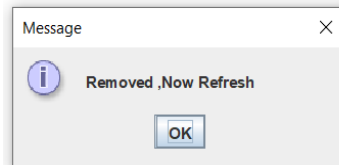
Else if already existed or any info not filled



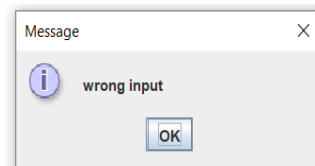
To remove already existed PEO

A screenshot of a web application window titled 'REMOVE PEO'. It contains an 'ID' input field, a 'Remove' button, and a 'Refresh' button. Below these is a text area displaying 'Name=Ravi Shastri ID=693898691'. There is also a 'Back' button in the bottom right corner.

You delete PEO here and a list is also given for you and if info is right

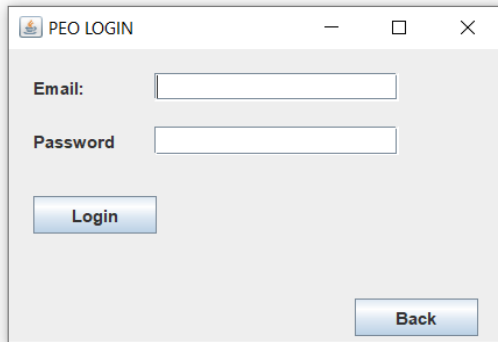


Info is Wrong



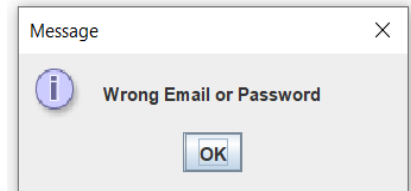
## Now we Go through PEO

From here 4.8 Manage Parking Spaces requirements Start



A window titled "PEO LOGIN" with a standard Windows title bar (minimize, maximize, close buttons). It contains two input fields: "Email:" and "Password". Below the "Password" field is a "Login" button. At the bottom right is a "Back" button.

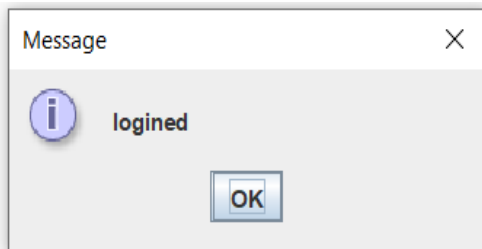
Wrong Info



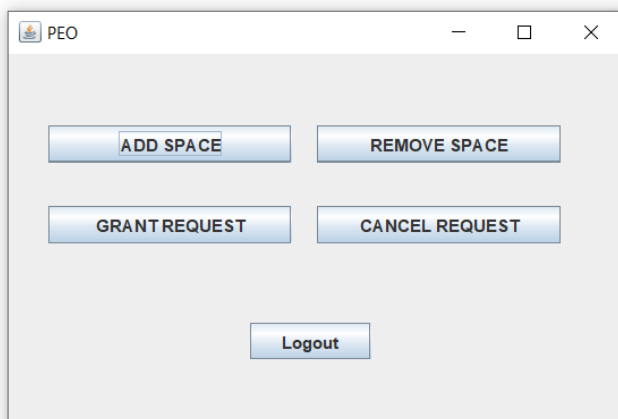
A "Message" dialog box with a close button (X) in the top right. It features an information icon (i) on the left and the text "Wrong Email or Password" in the center. An "OK" button is located at the bottom right.

Right Info, For test try :-

Email-rh@gm.com P:-12345

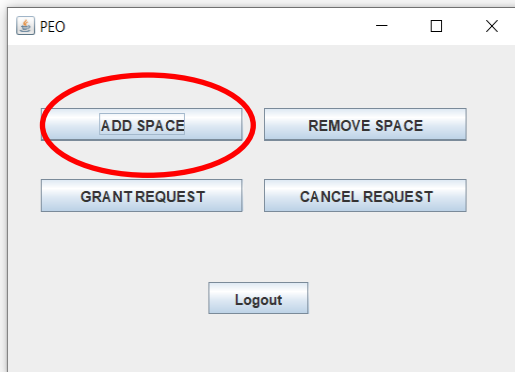


A "Message" dialog box with a close button (X) in the top right. It features an information icon (i) on the left and the text "logged" in the center. An "OK" button is located at the bottom right.

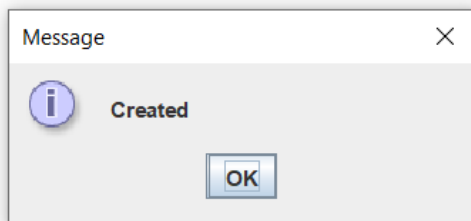


A window titled "PEO" with a standard Windows title bar (minimize, maximize, close buttons). It contains four buttons arranged in a 2x2 grid: "ADD SPACE", "REMOVE SPACE", "GRANT REQUEST", and "CANCEL REQUEST". A "Logout" button is positioned at the bottom center.

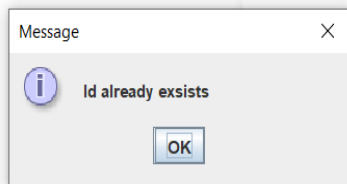
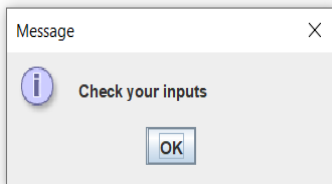
To add new Parking Space

A form titled 'Add New Parking Space'. It has two input fields: 'Location' and 'ID'. Below the 'ID' field is a note: '\*Only Numbers (4 digits minimum)'. There is a 'Create' button and a 'back' button at the bottom right.

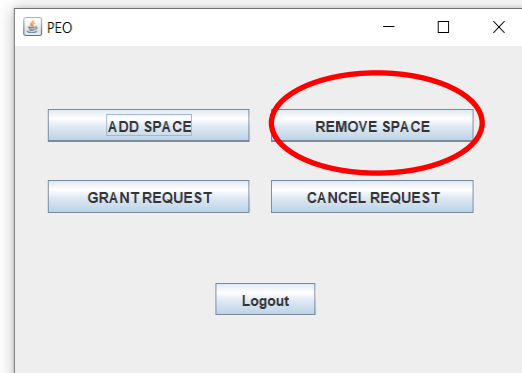
If info right then:-



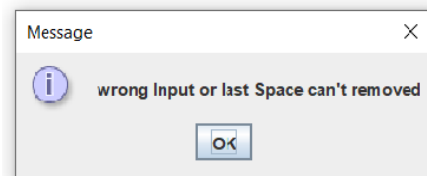
Else,if wrong info or already exist



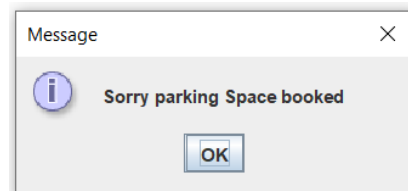
To remove Parking Space

A form titled 'REMOVING PARKING SPACE'. It has an 'ID:-' label and an input field. Below the input field are 'Remove' and 'Refresh' buttons. A text area displays: 'Location=Tims horton Id=1221' and 'Location=StarBucks01 Id=2341'. There is a 'Back' button at the bottom right.

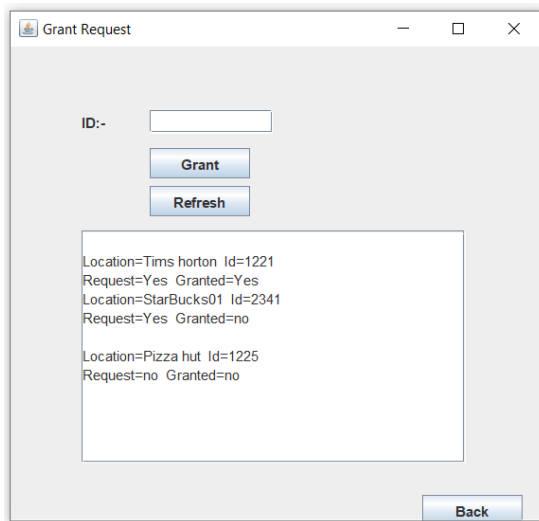
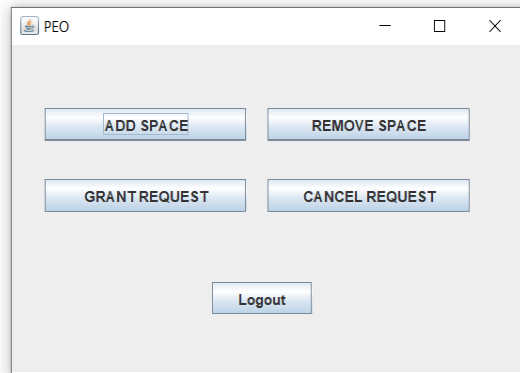
Wrong input:-



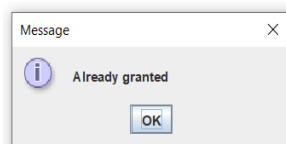
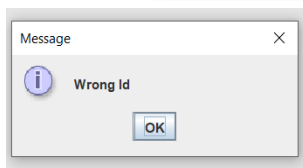
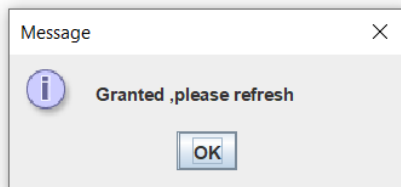
Correct input but space booked:-



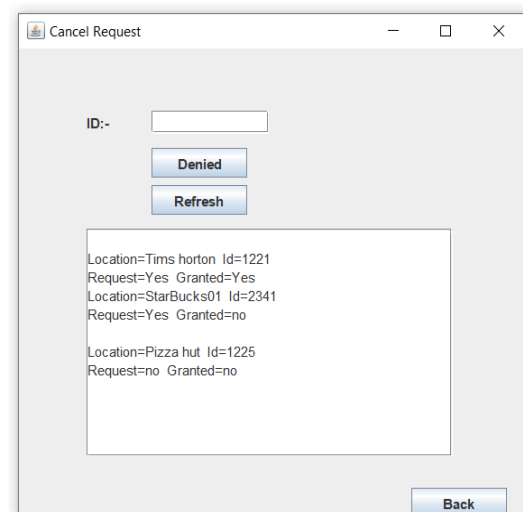
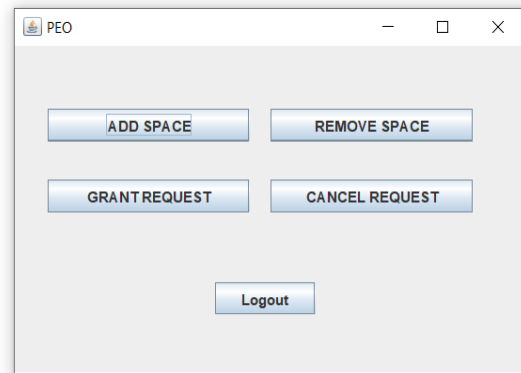
## To Grant Request



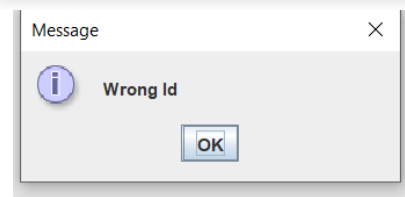
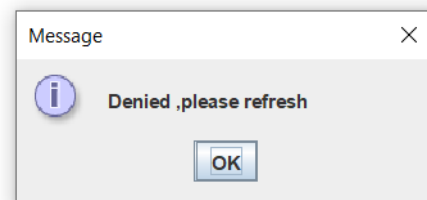
Message after Successful granting,  
wrong id or Already granted error



## To Cancel Request



Message after Succesfull Denied or  
Wrong ID

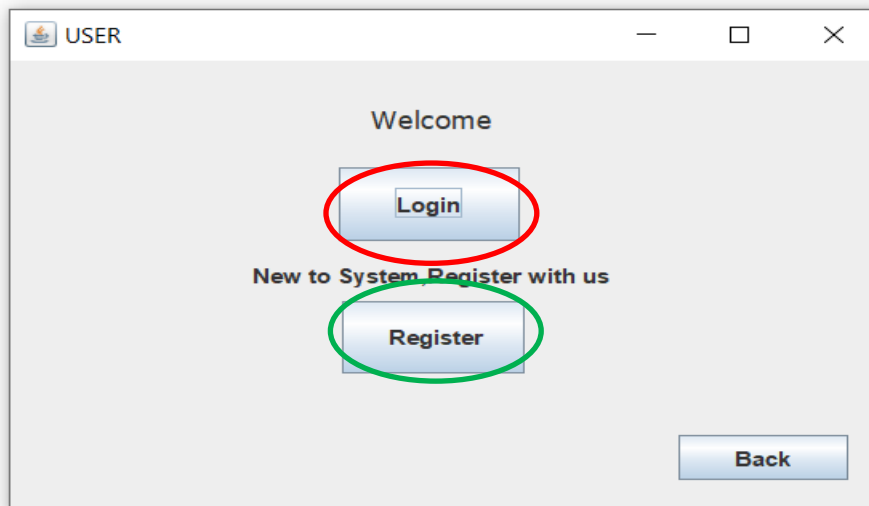


## Now we Go through Customer

There are two options:-

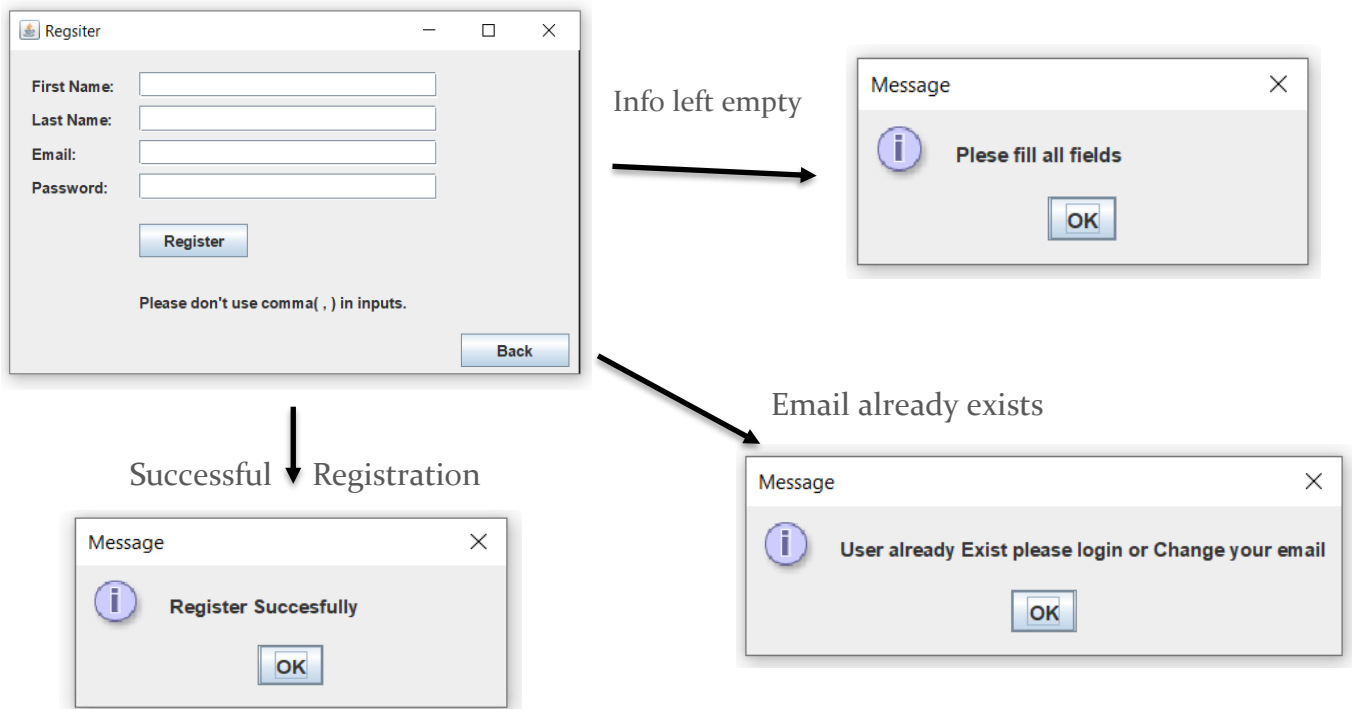
For new Customer go through “**Register**”

For old Customer go through “**Login**”



## Now we Go through Registration

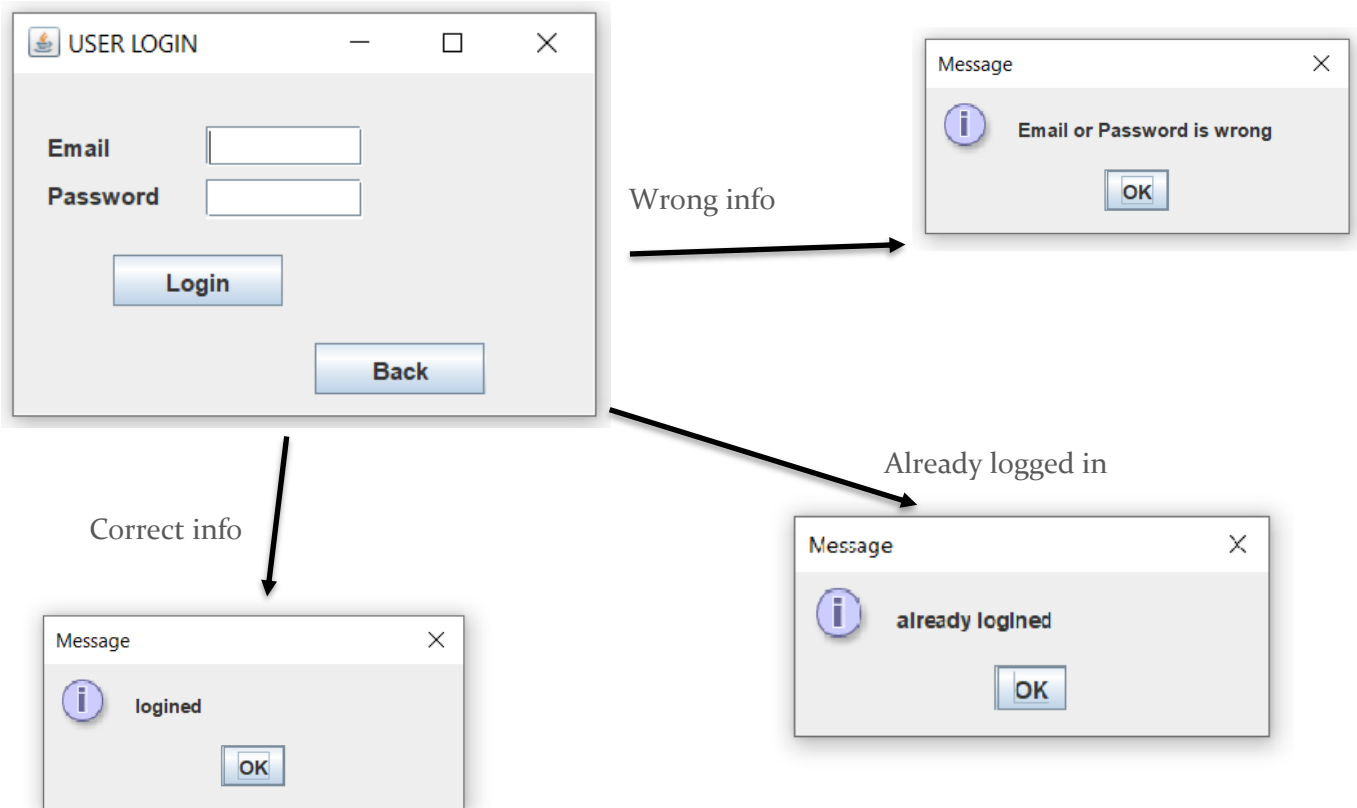
From here 4.2 Customer Registration requirement starts





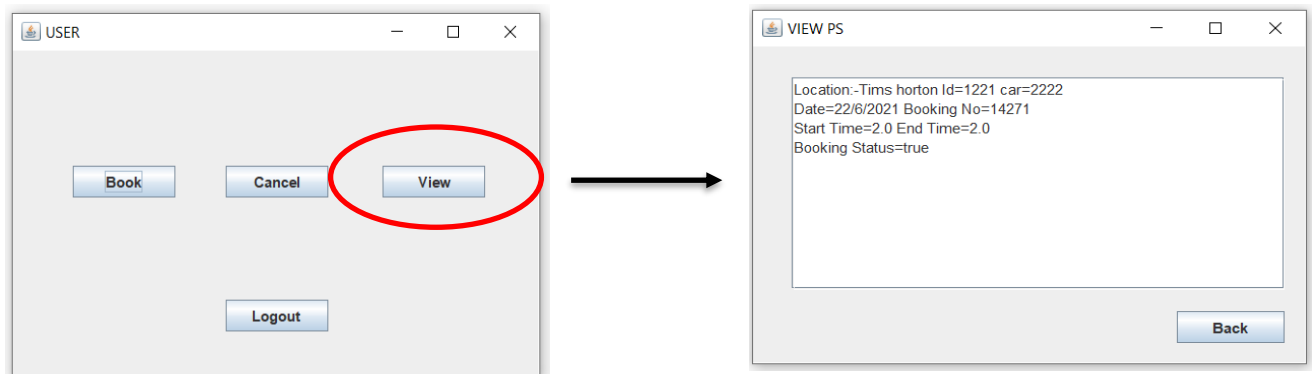
## Now we Go through Login

Now 4.3 User Login requirements will start



## Now we Go through View option

Now 4.7 View Bookings requirements will start



## Now we Go through Book option

Now 4.4 Book a Parking Space requirements will start

The flowchart illustrates the booking process. It starts with a 'USER' window containing 'Book', 'Cancel', 'View', and 'Logout' buttons. The 'Book' button is circled in red. An arrow points from the 'Book' button to the 'Booking Parking Space' window. This window contains input fields for 'Parking Space ID:-', 'Till Date:-', 'Starting Time:-', 'Ending Time:-', and 'Car Lic Plate #:-', along with 'List', 'Book', 'Payment', and 'Back' buttons. From the 'Booking Parking Space' window, three arrows branch out: one labeled 'Worng ID' points to a 'Message' box, one labeled 'Booked' points to another 'Message' box, and one labeled 'Already Booked' points to a third 'Message' box.

Worng ID

Booked

Already Booked

Message

Input in wrong, please check id from list

OK

Message

Tempory booked, you can pay now

OK

Message

Sorry Already Booked

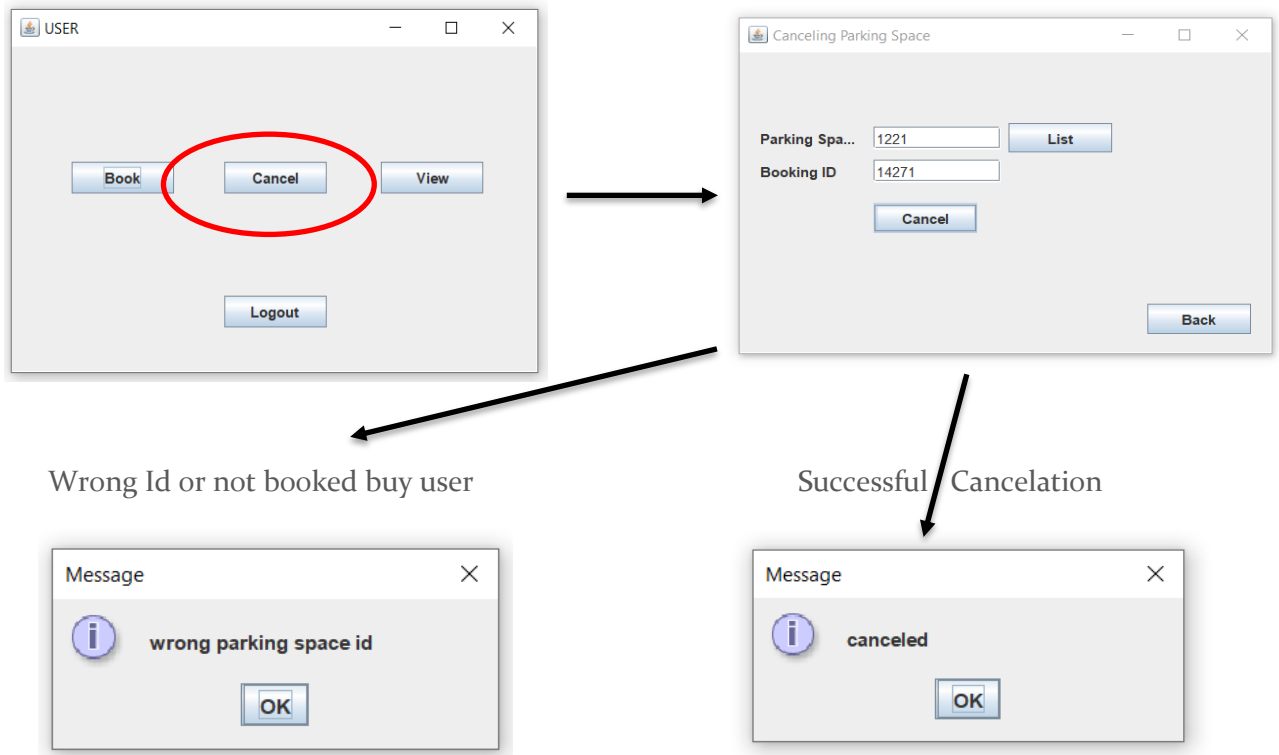
OK

After temporary booked we will see how to pay and here 4.6 Payment requirement will start

The 'Payments' window contains a 'Payme...' section with three radio buttons: 'Debit Card' (selected), 'Credit Card', and 'Payapl'. Below these are input fields for 'Card/Acc #:-', 'Name', 'Exp Date', 'CVV', and 'ID'. A text box on the right displays 'To pay for:- 1. Loction=StarBucks01 Id=2341'. A note at the bottom states '\* make sure you inputing correct id from above'. At the bottom are 'Pay' and 'Refresh' buttons.

## Now we Go through Cancel option

Now 4.5 Cancel a Parking space requirement will start



### 3. DIFFERERNC E BETWEEN FINAL AND INITIAL DESIGN

There are a lot of differences between the initial design and final because of following factors:-

1. Initial Design was made for database(SQL based),but final Design database is just text files.
2. Some methods ,variables and concepts can only come to mind while coding so initial design doesn't have those.
3. Initial design had many faults which were corrected in final design while working on implementation.

Differences between them are stated below:-

1. Database is now text files instead of a Database Management System.
1. Person has being change from a interface to abstract class.
2. Many new methods and variables are added to classes like menu, admin to counter the database issue
3. All the faults and wrong point were corrected by either removing or adding variables and methods or by changing the working or process of the classes.
4. Relationship between some classes changed to tactical the faults, shortcomings of project and database issue.

\*No new class was introduced so no change in that area.

## 4. TEST CASE COVERAGE

SoftwareCode is the non-GUI package and coverage in 89.4% with test cases made for project

The screenshot displays an IDE interface with the following components:

- JUnit Test Results:** Shows 21 runs completed in 0.219 seconds with 0 errors and 0 failures. The test cases listed are:
  - register\_customer2 (0.000 s)
  - logout\_peo (0.001 s)
  - add\_parkingSpace (0.000 s)
  - remove\_parkingSpace (0.000 s)
  - admin\_check (0.000 s)
  - login\_customer1 (0.000 s)
  - login\_customer2 (0.000 s)
  - login\_customer3 (0.000 s)
  - ref (0.000 s)
  - remove\_parkingSpace2 (0.000 s)
  - check\_Payment (0.000 s)
  - DataBase (0.000 s)
  - booking1 (0.000 s)
  - booking2 (0.000 s)
  - booking3 (0.000 s)
  - Cancel (0.000 s)
- Code Coverage Table:** Provides a detailed breakdown of coverage for the EECS3311-project and its sub-packages.

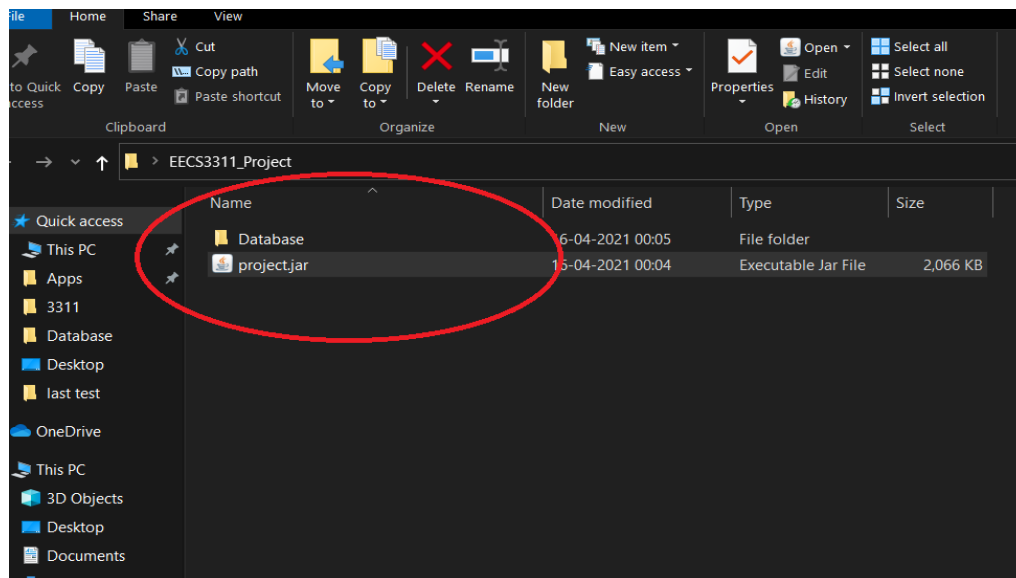
Element	Coverage	Covered Instructions	Missed Instructions	Total Instructions
EECS3311-project	27.5 %	2,892	7,638	10,530
src	27.5 %	2,892	7,638	10,530
GUI	0.0 %	0	7,295	7,295
SoftwareCode	89.4 %	2,892	343	3,235
menu.java	93.3 %	1,244	89	1,333
ParkingEnFOfficer.java	84.7 %	327	59	386
ParkingSpace.java	73.2 %	161	59	220
Payment.java	82.1 %	215	47	262
Customer.java	42.3 %	33	45	78
Admin.java	91.2 %	259	25	284
t.java	0.0 %	0	10	10
TestCases.java	98.6 %	650	9	659
Person.java	100.0 %	3	0	3

## 5. How to run

There are two ways:-

1. Either run from jar file:- project.jar

\* Keep these file together for that as folder Database folder is required.



2. Run entry class from GUI folder of src in eclipse.

