EECS3311 Final Project Report

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1. Design Patter
2. Visitor Pattern: I applied visitor patter for customer, officer and admin. Because this part is for three users shared the same data structure. Because visitor pattern used for concrete Object structure, and rarely changing.
3. Iterator pattern: I used ArrayList for saveing generic type data.
4. Singleton pattern: I applied singleton pattern for customer officer and admin because this will help saving memory and avoiding bugs.
5. Instruction using
6. Changing absolute Path: I used absolute path for csv file. Users need to change absolute path before running the application.

文本

低可信度描述已自动生成customer path in maintainCustomer and maintainOfficer

文本

描述已自动生成

文本

描述已自动生成officer path in maintainOfficer

图片包含 应用程序

描述已自动生成order path in maintainOrder

文本

中度可信度描述已自动生成parkingPlot path in maintainOrder

1. To pay for orders, cardNum must be 16digits, or it won’t be valid.
2. Registering a officer, system will save it info both in customer and officer database
3. Admin can only be added from backend.
4. User run application form mainView.java
5. Please check the CSV Jar file, because I add it from Java build path as external jar file.
6. GUI guidance
7. Main view

图形用户界面

中度可信度描述已自动生成

1. 图形用户界面, 应用程序

   描述已自动生成User\_mode
2. Officer\_Mode

图形用户界面, 应用程序

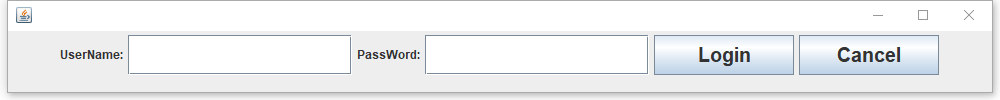
描述已自动生成

1. 图形用户界面

   描述已自动生成Customer register with existing email
2. Customer register successfully

图形用户界面

描述已自动生成

1. Customer login
2. 图形用户界面, 应用程序

   描述已自动生成Login failed.
3. 图形用户界面

   描述已自动生成Login success

Refresh button for refresh parking lot status, customer can type one of parking plot to book.

1. Customers tap a plot to book.

图形用户界面

描述已自动生成

1. 图形用户界面

   描述已自动生成Customer needs to enter duration to book.
2. 图形用户界面

   描述已自动生成Booking successfully, and refresh
3. 图形用户界面

   低可信度描述已自动生成Book parking plot 2 again and view order
4. 图形用户界面, 应用程序

   描述已自动生成Cancel order, just tap order to cancel.
5. Tap viewOrder to refresh order.

图形用户界面

描述已自动生成

1. Pay for the order.

图形用户界面

描述已自动生成

1. 图形用户界面

   描述已自动生成View order status
2. 图形用户界面

   描述已自动生成View plot status
3. After login as Officer

图形用户界面

描述已自动生成

Officer can add plot by tap adding plot with specific non-existing number

1. 图形用户界面

   描述已自动生成Adding plot 19

After adding just refresh it.

1. 图形用户界面

   描述已自动生成Auto adding a plot
2. Tap one of plot to remove.

图形用户界面

描述已自动生成

1. 图形用户界面

   描述已自动生成After removing, refresh the plot.
2. 图形用户界面

   描述已自动生成Officer can register for new customers.
3. Officer can book new order for customer by enter email, then the system will check whether the email is registered or not. If not, booking failed. If yes, officer need to tap id of parking plot and the duration to finish booking. After finishing booking successfully, officer can tap vieworder and enter the valid email to check the order.

图形用户界面, 文本

描述已自动生成

1. Officer can tap makeAplayment, enter the valid email and then enter the cardnumber to help user finishing booking.
2. Admin mode

图形用户界面, 应用程序

描述已自动生成

Admin can register Officer by tapping register Officers. It will add officer info both in Customer Database and Officer Database. Admin can tap refresh button to check current officer condition and tap one of officer to remove it like that officer removed parking plot. Admin also can tap remove button to remove specific officer by enter valid email. Officer can only be removed when they are offline.

1. Junit test

I test as customer, officer, and admin. All the function including payment booking register, parking plot management are covered.

图表

低可信度描述已自动生成