CSCI927 Service-Oriented Software Engineering (Project Proposal)

Project Title
An application for online car-hailing services

Group Members (Group number): Name1, Name2, Name3, Name4
Group Menbers (Group 17):Wenrui Chen, Lu Xiong, Bing Xia, Yunbo Zhang

This project is an application for online car-hailing services. We have four group members. Wenrui Chen is responsible for the process of qualification view, Lu Xiong is responsible for the process of customer hailing and the writing of the report, Bing Xia designs the process of the allotment of the order to cars, Yunbo Zhang designs the process of drivers. Our process would be designed by BPMN and CMMN.

In the process of qualification review, first of all, the driver needs to apply to the regulatory authority and submit personal data, and the regulatory authority receiving the request will review the qualification of online car Hailing driver. After passing the examination, the driver can take part in the examination. After passing the examination, the driver can be given a license to drive a car online and obtain a three-year valid qualification.

In the process of customer hailing, the customer should download the application firstly, and create an account. Then, when the client wants a sharing car, the client opens the application, and ask for a car. Maybe queueing is needed. Then the customer gets on the car, and arrives the destination. After the payment, the client leaves. If there are any problems, the client can contact the customer service, and solve the possible problems.

In the process of the allotment of the order, the system of this company will allot the order to car. Firstly, system will judge the types of the order, which may be private cars and taxies. Secondly, the system will allot the order according to the types of the order. If it is a private car order, the order will sent to the nearest nine drivers, or if it is a taxi order, the order will sent to the drivers in 1.5 kilometers. After the order is finished, the system will get money from the client and pay money to the driver. If the client has any problems for this order, the client can call to the company.

This project describes an application for online car-hailing services which needs four part. The part which a driver's process is as follow. When a driver wants to start a business, it is important to register and review qualification. Until the driver passes the audit before receiving the order, the driver starts online and then waits for message about an order. When the driver receives the order, the driver could choose to confirm or cancel. Driver needs to connect with the passenger and waits for the passenger if confirmed. When the passenger gets on the car, driver starts to record the mileage. If there is a traffic accident, the system needs to throw an exception. Under normal circumstances, the car reaches its destination without any trouble, then the order information is submitted to the company for settlement. Business can be suspended or closed if there are no orders in progress.

Appendix

Project Title: An application for online car-hailing services

Group Members (Group 17): Name1, Name2, Name3, Name4
Group Menbers (Group 17):Wenrui Chen, Lu Xiong, Bing Xia, Yunbo Zhang

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In the process of qualification review, first of all, the driver needs to apply to the regulatory authority and submit personal data, and the regulatory authority receiving the request will review the qualification of online car Hailing driver. After passing the examination, the driver can take part in the examination. After passing the examination, the driver can be given a license to drive a car online and obtain a three-year valid qualification.
Subject: audit department and driver
I. application
Fill in the application form online and submit photos, ID cards and photocopies of driver's license.
II. Qualification examination
1. The driver has registered permanent residence or temporary residence permit of the city for more than 6 months or has obtained temporary residence permit for more than 12 months.
2. Obtain the driving license of the corresponding quasi driving vehicle type and have more than 3 years of driving experience;
3. There is no traffic accident crime, dangerous driving crime record, drug use record, driving record after drinking, and no record of 12 points in the last three consecutive scoring cycles;
4. No violent criminal record;
5. There is no record of the revocation of taxi driver's qualification certificate in the first three years since the date of application for the examination.
III. test appointment
If the examination is passed, the applicant can make an appointment for the examination through the management information system. After the appointment is successful, the examination permit can be printed or saved.
IV. taking the exam
The applicant shall take the unified online computer examination with the printed or saved examination permit. At the end of the test, the scores will be automatically corrected and the test results will be recognized on the spot. For the corresponding examination subjects, if they fail to pass the examination for the first time, they can make up an appointment 15 days later; if they fail to pass the supplementary examination, they can make up an appointment 30 days later.
V. review and issue driver's license
If the national public subjects and regional subjects pass the examination, the municipal transportation administration department shall examine and issue the driver's license, and the applicant can print or save it through the management information system.

In the process of customer hailing, the customer should download the application firstly, and create an account. Then, when the client wants a sharing car, the client opens the application, and ask for a car. Maybe queueing is needed. Then the customer gets on the car, and arrives the destination. After the payment, the client leaves. If there are any problems, the client can contact the customer service, and solve the possible problems.
1. Download app

Clients know about the sharing car application, and download it, and create accounts by using their personal messages, and set emergency contacts.

2. Ask for a sharing car

When a client needs a sharing car, the client opens the application and ask for a car.

3. Calling accepted or queueing

If the calling is accepted, then the client would see the location of the sharing car, and know the details of the car. If the calling is not accepted, the client needs to know the number of people queued.

4. Drive to the destination

The client gets on the sharing car, and go to the destination.

5. Leave the sharing car

When it is arrived, the client should pay the money and ask for an invoice, check the personal items, then leave the sharing car. This is the end of transaction.

6. Solve possible problems in the order

If there is any questions about the transaction, the client can contact the customer service, and solve the problems. (more details)

In the process of the allotment of the order, the system of this company will allot the order to car. Firstly, system will judge the types of the order, which may be private cars and taxies. Secondly, the system will allot the order according to the types of the order. If it is a private car order, the order will sent to the nearest nine drivers, or if it is a taxi order, the order will sent to the drivers in 1.5 kilometers. After the order is finished, the system will get money from the client and pay money to the driver. If the client has any problems for this order, the client can call to the company.

The type of order:

Immediately call a car

Book a car

Free ride

a. Immediately call a car

Private car: Receive an order, filtrate nearest nine drivers, send order to nine drivers. If no driver accepts the order, system will allot the order to a befitting driver. When the order has accomplished, the system will get money from client and pay money to driver. If client didn't pay money to system, the client will not able to use this system until he pay money.

Taxi: Receive an order, filtrate taxis that the distance between client and taxi is less than 1.5km. Send order to these taxis. If no taxi accepts the order in ten minutes, system will inform client change the style of car. When the order has accomplished, the system will get money from client and pay money to driver. If client didn't pay money to system, the client will not able to use this system until he pay money.

Exception handling: If no car can meet the order, system will inform the client the error message. If client cancel order and a driver or a taxi has accepted more than two minutes, the client should pay Liquidated damages.

b. Book a car

Receive an order. Issue the order to drivers that the distance between client and driver is less than 10km. If no driver accepts the order, system will allot the order to a befitting driver. Client pay down payment to system. When the order has accomplished, the system will get money from client and pay money to driver. If client didn't pay money to system, the client will not able to use this system until he pay money.

c. Free ride

Receive an order. According the path of order to filtrate the car. Issue the order to drivers that satisfy the path. If no driver accepts the order, the system will inform client no car. When the order has accomplished, the system will get money from client and pay money to driver. If client

didn't pay money to system, the client will not able to use this system until he pay money.

This project describes an application for online car-hailing services which needs four part. The part which a driver's process is as follow. When a driver wants to start a business, it is important to register and review qualification. Until the driver passes the audit before receiving the order, the driver starts online and then waits for message about an order. When the driver receives the order, the driver could choose to confirm or cancel. Driver needs to connect with the passenger and waits for the passenger if confirmed. When the passenger gets on the car, driver starts to record the mileage. If there is a traffic accident, the system needs to throw an exception. Under normal circumstances, the car reaches its destination without any trouble, then the order information is submitted to the company for settlement. Business can be suspended or closed if there are no orders in progress.

Specific process:

a. The driver logs into the system and needs to verify that he is a registered user.

If the driver has been registered, he can enter the business.

If there is no registration, he needs to submit information such as driver's license, identity information and vehicle information for registration, and then submit the information for review.

b. After logging in the system, confirm the start of business, can accept orders.

After receiving the order, if the driver does not confirm, the default wait 20 seconds to cancel.

After confirming the order, wait for the passengers and contact with the passengers. After receiving the passengers, confirm the passengers get on the bus and record the mileage by meter. c. Abnormal handling and settlement of driving process.

In case of accident, contact company, hospital, insurance company, etc.

After successfully reaching the destination, the formation information will be sent to the company for settlement.

Then the next order can be placed.

d. Drivers can choose to enter the rest stage and off duty stage; the company will not send orders to the driver.