**Final Project report**

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Course: Object oriented Software design

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Title: myUber: a car-ride sharing system

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# Introduction

The project is an attempt to design and create an Java framework for myUber so that they can be used by numerous customers and drivers. The main difficulty with the creation of such a framework is the fact that the communication between different part of the system, and how to make our framework be extendable. The need for such a system is justified. The use of car-sharing application is a common part of everyday life for most people in urban city. It is likely that the usage of Uber will increase in the future.

For the developer of a concrete and more realistic myUber application, this framework gives a great amount of hints for the methods that will be needed for user or driver as well as the simulation for the whole car sharing progress. This project also

explores the possibility that new types of cars can be added to the system without great change in code, flexible set up for simulation zone and simulation time.

## Overview of the Project Progress

1. Define core class and design pattern
2. Handwrite the UML
3. Define attribute
4. Use junit test to implement methods
5. Simulation
6. CLML – not done yet
7. evaluation

## Overview of this report

This report fully describes the project undertaken which is split into five main sections :

1. Introduction and background This introduces the project, its aims, an overview of the work undertaken in the project and an overview of this report.
2. Analysis of the design pattern and UML structure. Further, possible extensions to the basic design requirements are proposed.
3. Implementation - Discussion of the implementation choices taken and the software that was developed. Detailed advantages and drawbacks are given for the implementation.
4. Testing and result - Results of the success of the implementation for two main use cases tests.
5. Conclusions - Analysis of the successes and failures of the project, and discussion of the advances made.

In addition to these main sections there is a number of appendices. These

appendices contain:

Appendix A – maybe some usage for certain functions

# Background

Project 介绍，java安卓

MyUber system 适用范围（特征）： 在以巴黎为中心的半径为xx的范围内使用我们的系统

Developer 参考

# Analysis and design

UML

MyUber

Customer

Driver

Ride

Car (factory pattern)

# Implementation

Function of methods, to notify : change field

To realise communication

To accomplish certain functions

Simulation:

Customer: createanewride

Myuber:driverallocation

Customer: aboard

MyUber: ridefinished

Composition:

# Testing

# Results

# Conclusion

# Appendices