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| 学号: | 1306010517 |
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**本科毕业设计**

**基于百度地图和Bmob后端云存储的租车平台的设计实现**

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| **专 业** | 计算机13级 |
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**BACHELOR'S DEGREE THESIS**

**OF HOHAI UNIVERSITY**

**Design and Implementation of**

**bike rental platform based on Baidu map and Bmob cloud storage**

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Subject ：Computer science and technology

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摘 要

近几年，特别是近两年来，共享单车如雨后春笋一般在全国各地不断涌现，以摩拜单车为代表的共享单车正在服务着通过互联网连接的我们，伴随着共享单车的盛行，人们的出行越来越离不开共享单车，这种共享经济极大地给人们带来了便利。同时我发现大家的自行车多数时候都处于闲置状态，所以产生一个想法，开发一个租车平台将大家闲置的单车出租出去，更好的利用资源。在这篇论文中，主要是基于百度地图、Bmob云存储、安卓平台的租车平台的设计与实现，百度地图提供了基础地图、实时定位、室内定位、导航、POI检索、路线规划等一系列有关地图和地理信息方面的API,其中定位的方式多样化，采用GPS、WIFI基站、IP混合定位模式。Bmob后端云存储提供了实时数据与文件存储功能，轻松实现应用“云与端”的数据连通，提供可视化的云端数据表设计界面，轻松建库建表。支持10种数据类型存储：如字符串、整型、数组等。Bmob通过提供的API接口和多语言的SDK，为平台提供快速上传、安全可靠的数据存储服务。租车平台的出发点是对大学生闲时单车的利用，本着诚信原则，拥有单车的学生可以使用租车平台出租自己的单车，有租车需求的学生可以在租车平台上进行租车，骑行结束返还单车，进行计费服务。

**关键词：**百度地图；Bmob云存储；共享单车

**ABSTRACT**

In recent years,especially in the past two years, the sharing of bicycles has been sprung up everywhere in all parts of the country. The shared bicycles ,represented by Mobike,are serving us via the Internet,along with the prevalence of shared bicycles. People travel more and more inseparable from sharing the bike,this shared economy has greatly brought convenience to people. At the same time I found that most of the bicycles are in idle state, so produce an idea, develop a bicycles rental platform so that people can rent out their own idle bicycles, better use of resources. In the thesis, mainly about the design and implementation of bike rental platform based on baidu map, Bmob cloud storage,Android platform. Baidu map provides a basic map, real-time positioning, indoor positioning,navigation,POI search,route planning and a series of related Maps and geographic information on the API,where the positioning of the way diversified, using GPS,WIFI base station, IP mixed positioning mode. Bmob back-end cloud storage provides real-time data and file storage capabilities,easy to implement the application of “cloud and terminal” of data connectivity, to provide a visual cloud data table design interface, easy to build the table. Supports 10 types of data storage: such as string, integer, array, and so on. Bmob provides fast upload, secure and reliable data storage services for the platform through API interfaces and multilingual SDKs. The starting point of the bike rental platform is the use of leisure time cycling, in line with the principle of good faith, students has bikes can rent out their bikes use the bike rental platform. Students need hire a bike can hire a bike in the bike rental platform. End of ride back to the bike, billing services.

**Key words:** baidu map；Bmob cloud storage；shared bike

第1章 绪论

1.1 研究背景及研究意义

1.1.1 研究背景

伴随着科技的进步和经济的高速发展，人们更多的将时间花费在工作中，随之而来的是运动量的减少。根据世界卫生组织的数据，与上世纪80年代相比，世界肥胖症人数是原来的两倍，到2014年为止，在世界上所有18岁及其以上的成年人中,有超过19亿人超重，占其中的39%，其中有6亿人肥胖，占其中13%，在由于肥胖问题而死亡的人当中，死于太瘦的人的人数小于死于太重和肥胖的人的人数 [1]。由于缺少体育锻炼，肥胖正在不断的出现。此外，缺乏体育锻炼，也会提高心血管疾病，癌症以及糖尿病等非传染疾病发生的风险。因此，加强体育锻炼已经成为生活中必不可少的活动。