
基于 Android 的智能小区物业管理系统的设计与实现

摘要

本智能小区物业管理系统的的设计,可将传统门禁、物业管理系统的功能给提高,然后让物业的工作变得更简单,利用 XMPP 协议(消息与出席协议均可拓展)物业信息的传递更及时,小区日常管理信息效果更好,纵观当前小区业务管理内容而言,它整个工作程序是极为繁琐的,并且涉及面非常的广泛,尤其对于大面积小区更是如此。而利用电脑开发出的这种物业管理系统是非常人性化的,不论在高效性、便捷性、还是在准确性上都是极具优势的,能够避免很多因人为疏忽而造成的错误出现。并简单介绍了这种物业管理系统的先进化特点。

于是,本人在这篇论文当中先是围绕小区物业管理系统的研发情况来展开具体说明,并向大家介绍了 Android 系统所具有的各项优点。另外,关于小区的智能化管理系统的软件架构与作业过程,是依次针对各个功能板块进行具体陈述。其次鉴于 Android 系统能够实现智能小区管理系统的设计,不仅将模块间的问题给考虑到了,更将单独模块的拓展问题给顾虑到了,做到了优化协调的系统设计。文章最后通过对各模块进行测试,包括对实时通信模块进行了性能测试,对用户注册和登陆模块进行以及查询信息模块进行功能测试,各项测试表明,本系统可以很好地完成小区物业管理过程中的各项工作并能将通讯时延限制在合理范围内。

关键词: 智能小区管理系统; Android 平台; XMPP 协议

Abstract

Design of the intelligent residential area property management system, the traditional access control, the function of property management system to improve, and then let the property of the work much easier, use XMPP agreement (with the present agreement can expand) property in the transfer of information more timely, plot better daily management information, throughout the business management in terms of content, it is the whole process is very cumbersome, and covers a very wide, especially for large area. The use of the computer developed by the property management system is very humanized, whether in the high efficiency, convenience, or accuracy are very advantageous, can avoid a lot of human negligence caused by the error. The advanced characteristics of this kind of property management system are introduced briefly.

Therefore, In this paper, I first focus on the development of the residential property management system to carry out a detailed explanation, and introduced to you the advantages of Android system. In addition, about the intelligent management system software architecture and work process, is in turn for each functional plate specific statement. Secondly, in view of the fact that Android system can realize the design of intelligent community management system, the problem between modules is not only taken into account, but the expansion of individual modules is also taken into consideration, so as to achieve an optimized and coordinated system design. Finally through the test module, including performance testing for real-time communication module, the user registration and login module and information query module function test, the test shows that this system is a good way to finish all the work in the process of community property management and can limit the communication time delay in a reasonable range.

Key words: intelligent community management system; Android platform; XMPP protocol

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