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Development and Performance Analysis of Multifunctional City Smart Card System

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Abstract : In recent years, several smart card solutions for transportation services of cities with different technical infrastructures and business models has emerged considerably, which triggers new business and technical opportunities. In order to create a unique system, we present a novel, promising system called Multifunctional City Smart Card System to be used in all cities that provides transportation and loyalty services based on the MasterCard M/Chip Advance standards. The proposed system provides a unique solution for transportation services of large cities over the world, aiming to answer all transportation needs of citizens. In this paper, development of the Multifunctional City Smart Card System and system requirements are briefly described. Moreover, performance analysis results of M/Chip Advance Compatible Validators which is the system's most important component are presented.

Keywords: smart card, m/chip advance standard, city transportation, performance analysis

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