Analysis and Design of a Salary Management System for the Power Plant Factory of the Steel Company in Thai Nguyen

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***Abstract*—This thesis analyzes and designs a salary management system for the Power Plant Factory of the Steel Company in Thai Nguyen, utilizing MS-SQL Server 2005 and C# programming language. The system covers the analysis of salary calculation, distribution, and management, addressing issues such as insurance contributions and employee benefits. The research provides a detailed examination of the current salary management practices and proposes a structured system to improve efficiency. The system includes features for calculating and distributing salaries, handling insurance contributions, and managing employee benefits. The use of C# and MS-SQL Server 2005 ensures robust and efficient data handling, but the limitations of the author's experience and knowledge are acknowledged.**

***Index Terms*—salary management, C#, MS-SQL Server, system design, theoretical analysis, real-world application**

I. Introduction

In recent years, the development of Information Technology (IT) in Vietnam has expanded into various fields, including management information systems. This thesis focuses on the design and analysis of a salary management system for the Power Plant Factory of the Steel Company in Thai Nguyen, using MS-SQL Server 2005 and C# for implementation. The system aims to address the complexities of salary management in a large industrial setting, ensuring accurate and efficient salary calculations, distribution, and management of employee benefits. The research provides a comprehensive examination of the current salary management practices and proposes a structured system to improve efficiency. [1]

II. Methods

The thesis employs a structured approach to system design, including theoretical foundations, real-world organizational and salary management practices, system analysis, and software implementation. The methods involve detailed data analysis and the use of C# and MS-SQL Server 2005. The system design includes a detailed analysis of the salary calculation process, including insurance contributions and employee benefits. The implementation uses C# for the front-end and MS-SQL Server 2005 for the back-end database management. The limitations of the author's experience and knowledge are acknowledged, and the research does not provide specific numerical evaluations of the system's performance. [1]

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III. Results

The thesis presents a comprehensive salary management system that addresses various aspects of salary calculation, including insurance contributions and employee benefits. The system includes features for calculating and distributing salaries, handling insurance contributions, and managing employee benefits. However, specific numerical evaluations are not provided. The system design is thorough, covering the analysis of salary calculation, distribution, and management. The use of C# and MS-SQL Server 2005 ensures robust and efficient data handling, but the limitations of the author's experience and knowledge are acknowledged. [1]

IV. Discussion

The system design is thorough, covering the analysis of salary calculation, distribution, and management. The use of C# and MS-SQL Server 2005 ensures robust and efficient data handling, but the limitations of the author's experience and knowledge are acknowledged. The system includes features for calculating and distributing salaries, handling insurance contributions, and managing employee benefits. The implementation uses C# for the front-end and MS-SQL Server 2005 for the back-end database management. The research does not provide specific numerical evaluations of the system's performance, and the limitations of the author's experience and knowledge are acknowledged. [1]

V. Conclusion

The thesis successfully develops a salary management system for the Power Plant Factory, improving the efficiency of salary management. The system includes features for calculating and distributing salaries, handling insurance contributions, and managing employee benefits. The use of C# and MS-SQL Server 2005 ensures robust and efficient data handling. The system addresses various aspects of salary calculation, including insurance contributions and employee benefits. However, the author acknowledges the limitations due to limited experience and time constraints. The implementation of the system is expected to enhance the overall management of salaries in the Power Plant Factory. [1]

References

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