Development of a Student Admission Management Program for the 10th Grade at the Chuyên Hạ Long High School

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***Abstract*—This thesis describes the development of a computer program for managing student admissions at the Chuyên Hạ Long High School. The program aims to streamline the admission process, enhance the accuracy and efficiency of management, and reduce costs and time. It includes features such as secure user access, comprehensive information management, and automated test scheduling and result processing. The research involved surveying the current admission management system, analyzing and designing the system, and implementing and testing the software. The developed program managed student and admission committee information, automated test scheduling and result processing, and provided secure and efficient access. However, further development is needed to enhance the user interface, improve error handling, and expand the database.**

***Index Terms*—student admission, management system, VB6, database, system design, high school**

I. Introduction

In the 21st century, the advancement of information technology and automation has transformed management practices. This thesis applies database and system design knowledge to develop a VB6-based software for managing student admissions at the Chuyên Hạ Long High School, aiming to improve the efficiency and accuracy of the admission process. The school is a specialized high school that selects students based on their academic performance and potential. The program is designed to assist the school in managing the complex and time-consuming admission process, which involves multiple stages such as application submission, test scheduling, and result processing. [1]

II. Methods

The research involved surveying the current admission management system, analyzing and designing the system, and implementing and testing the software. The methods ensured the system's adaptability, long-term development, and flexibility. The survey included interviews with school administrators and staff to understand the current processes and identify areas for improvement. The system design involved creating a database schema and user interface design to ensure the program could handle the specific requirements of the school. The implementation phase involved coding the program using VB6 and testing it with real data to ensure its functionality and reliability. [1]

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III. Results

The developed program managed student and admission committee information, automated test scheduling and result processing, and provided secure and efficient access. It met some basic requirements for admission management, including secure user access, comprehensive information management, and automated test scheduling and result processing. However, the program did not include advanced features such as real-time data synchronization or integration with external systems. The program was tested with a small dataset, and while it performed well, further testing with a larger dataset is needed to fully evaluate its performance. [1]

IV. Discussion

The program demonstrated some improvements in admission management, such as secure user access and comprehensive information management. However, further development is needed to enhance the user interface, improve error handling, and expand the database. The current version of the program is limited in its ability to handle large volumes of data and complex queries. Additionally, the user interface could be improved to make it more intuitive and user-friendly. The program's success in managing basic admission processes suggests that it could be a valuable tool for the school, but further development is necessary to fully realize its potential. [1]

V. Conclusion

The thesis successfully developed a program for managing student admissions at the Chuyên Hạ Long High School, which improved the efficiency and accuracy of the admission process. The program managed student and admission committee information, automated test scheduling and result processing, and provided secure and efficient access. It met some basic requirements for admission management, including secure user access, comprehensive information management, and automated test scheduling and result processing. However, the program did not include advanced features such as real-time data synchronization or integration with external systems. The program was tested and demonstrated some improvements

in admission management, such as secure user access and comprehensive information management. Future work will focus on enhancing the user interface, improving error handling, and expanding the database to better meet the school's needs. [1]

References

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