Development of an Android Application for Subject A Exam Practice for Class 9 Students

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***Abstract*—This thesis presents the development of an Android application designed for Class 9 students to practice exams in subjects A. The application includes features such as login, registration, exam practice, and score management. The database is built using SQLite, and the application is developed using Android Studio and Genymotion for testing. The application supports various Android devices and uses SQLite for database operations. The database structure includes fields for questions, answers, and exam details. The application meets the basic needs of students for exam practice but has limitations in terms of image quality and question content. Future improvements could focus on enhancing the user interface and content quality.**

***Index Terms*—Android, SQLite, Java, Database, Exam Practice, Class 9**

I. Introduction

The thesis provides an overview of the Java programming language, Android operating system, and SQLite database. It covers the fundamental concepts and features of Java, Android, and SQLite, including their advantages and disadvantages. The application is designed to support Class 9 students in their exam preparation for subjects A. The use of SQLite is appropriate for small-scale applications but may not be suitable for larger systems. The application includes features such as login, registration, exam practice, and score management. The database is stored in a single file, and the application uses SQLite for database operations [1]. Published articles on the methods and subject of this project provide context for this English summary [6], [7], [8]. Published books on the methods and subject of this project provide context for this English summary [9].

II. Methods

The application was developed using Android Studio and SQLite. The database structure includes fields for questions, answers, and exam details. The application supports various Android devices and uses Genymotion for testing. The database is stored in a single file, and the application uses SQLite for database operations. The application includes features such as login, registration, exam practice, and score management. The use of SQLite is appropriate for small-scale applications but may not be suitable for larger systems. The application meets the basic needs of students for exam practice but has limitations in terms of image quality and question content [1].

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III. Results

The application was successfully developed and tested. It includes features such as login, registration, exam practice, and score management. The database is stored in a single file, and the application uses SQLite for database operations. The database structure includes fields for questions, answers, and exam details. The application meets the basic needs of students for exam practice but has limitations in terms of image quality and question content. The application supports various Android devices and uses Genymotion for testing. The use of SQLite is appropriate for small-scale applications but may not be suitable for larger systems [1].

IV. Discussion

The application meets the basic needs of students for exam practice. However, there are limitations in terms of image quality and question content. The use of SQLite is appropriate for small-scale applications but may not be suitable for larger systems. The application supports various Android devices and uses Genymotion for testing. The database is stored in a single file, and the application uses SQLite for database operations. The application includes features such as login, registration, exam practice, and score management. Future improvements could focus on enhancing the user interface and content quality [1]. Earlier ICTU undergraduate work addressed computer-based multiple-choice practice [5].

V. Conclusion

The application provides a basic framework for exam practice. Future improvements could focus on enhancing the user interface and content quality. The application supports various Android devices and uses Genymotion for testing. The database is stored in a single file, and the application uses SQLite for database operations. The use of SQLite is appropriate for small-scale applications but may not be suitable for larger systems. The application meets the basic needs of students for exam practice but has limitations in terms of image quality and question content [1].

References

[1] Nguyễn Hoàng Sơn, ”Development of an Android Application for Subject A Exam Practice for Class 9 Students,” internal undergraduate thesis (original in Vietnamese), Thai Nguyen University of Information and Communication Technology, 2021.

[2] Nguyễn Tuấn Ninh, “App trắc nghiệm Android”, 06/11/2016, https://www.youtube.com/watch?v=Vzw_8qloYqI&t=545s

[3] Nguyễn Văn Quân, “Lập trình Android”,28/06/2016, https://cachhoc.net/2016/06/28/lap-trinh-android

[4] Võ Thành Nhật ft Phan Nhật Trung (ĐH Khoa học tự nhiên-TP.HCM), Giáo trình “Tìm hiểu hệ điều hành android và xây dựng ứng dụng minh họa” 62

[5] ICTU Student 207, ”Construction of a Multiple Choice Exam Program and Educational Support,” internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2010.

[6] Xing Li Feng, Zhi Hai Suo, Yao Tang Wei, Mo Xu, ”The Financial Management System Based on Android and SQLite,” Applied Mechanics and Materials, vol. 462-463, pp. 974-977, 2013. DOI: 10.4028/www.scientific.net/amm.462-463.974.

[7] Kiran Dhokale ., ”IMPLEMENTATION OF SQL SERVER BASED ON SQLITE ENGINE ON ANDROID PLATFORM,” International Journal of Research in Engineering and Technology, vol. 03, no. 04, pp. 268-273, 2014. DOI: 10.15623/ijret.2014.0304048.

[8] Ayu Bandu Retnomurti, Nurmala Hendrawaty, Leni Tiwiyanti, ”DEVELOPMENT OF ANDROID-BASED PROTADROID APPLICATION IN PRONUNCIATION PRACTICE LEARNING FOR UNDERGRADUATE STUDENTS,” English Review: Journal of English Education, vol. 7, no. 2, pp. 67, 2019. DOI: 10.25134/erjee.v7i2.1721.

[9] A. Silberschatz, H. F. Korth, and S. Sudarshan, Database System Concepts, 5th ed. McGraw-Hill, 2005. ISBN 9780072958867.