Simple Contact Saving Mobile App

D.G.H.P.Leelasena

Department Information and Communication

Technology

South Eastern University of Sri Lanka Oluvil,

Sri Lanka

hansini.prabodha.le@gmail.com

Introduction

A user-friendly mobile application, designed with simplicity in mind, revolutionizes the way individuals manage their contacts on the go. Developed using Android Studio and SQLite database, this innovative Simple Contact Saving Mobile App enables users to effortlessly store and organize their contacts, all while providing essential functionalities like insertion, updating, and deletion. And also insert a photo and it is a simple basic style. By following the outlined stages and components, you'll embark on a journey to develop a remarkable mobile app that streamlines contact management, making it a breeze for users to stay connected and informed.

Literature Review

SQLite in Android Studio serves as a lightweight and embedded database management system that enables efficient storage, retrieval, and manipulation of data within Android applications. It provides a structured framework for managing data related to a literature review, allowing seamless organization, search, and analysis of relevant information. Its integration with Android Studio facilitates the development of literature review apps with robust data management capabilities.

Methodology

Design a simple-quality contact saving app with an SQLite database using Android Studio simple-structured development methodology. The following step-by-step methodology outlines an effective approach to building your own contact saving app:

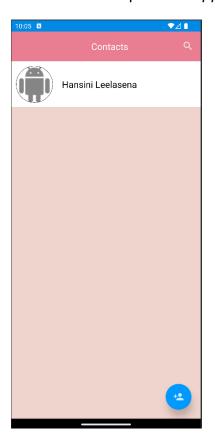
- Requirement Analysis: Define the objectives, features, and functionalities of the app.
- User Interface Design: Create a user-friendly and intuitive interface for seamless user interaction.
- Database Schema Design: Plan and design the database structure.
- Implement CRUD Operations: Write code to handle contact insertion, retrieval, update, and deletion using SQLite queries.
- User Input Validation: Validate and sanitize user input to ensure data integrity and prevent errors.

• Testing ad Debugging: Thoroughly test the app's functionality, identify and fix any issues or bugs.

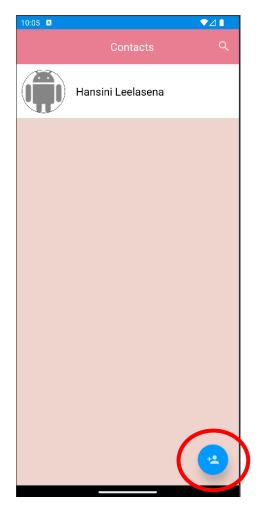
Result and Screenshots

Following shows what I have created as a Simple Contact Saving Mobile App and how its working.

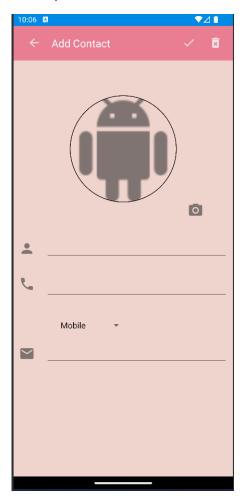
1. This what user sees when user opens the *app*.



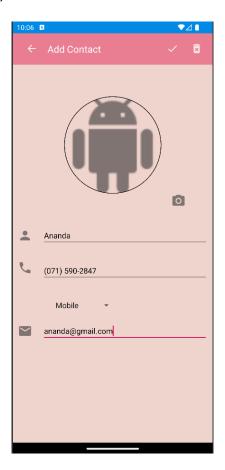
2. When click the right bottom user can add a *contact* to the *contact list*.



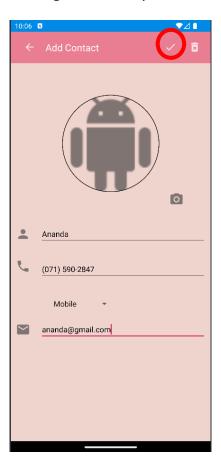
3. Then it will opens as *add contact* and user can enter *name*, *telephone number* and also the *email address*. I just add the *photo* insert one but did not connect the database.



4. When user enter data, it will show as below.



5. Click the *okay* button. Then go back and you will be showing like below screen.



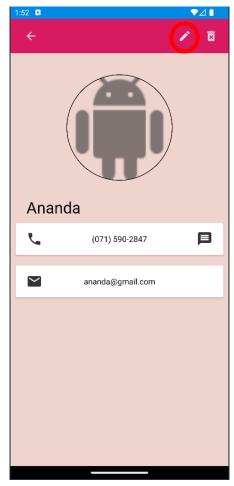
6. That new contact will add to *list* and will appear like this.



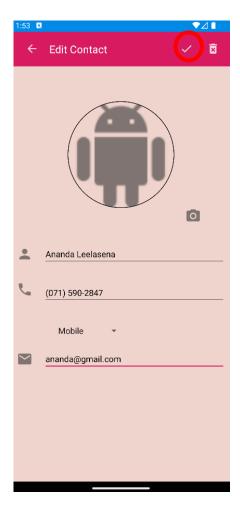
7. If you want to update the contact *click* on that contact. Then it will go inside to that contact.

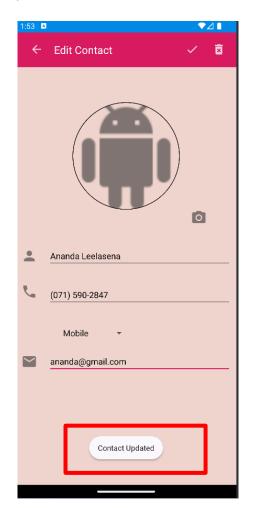


8. Click on that *pencil* icon to update that.



9. Then *edit* on that contact and enter what you want to update. Then click that *okay* button comes as *correct icon*. *Contact* will be updated.

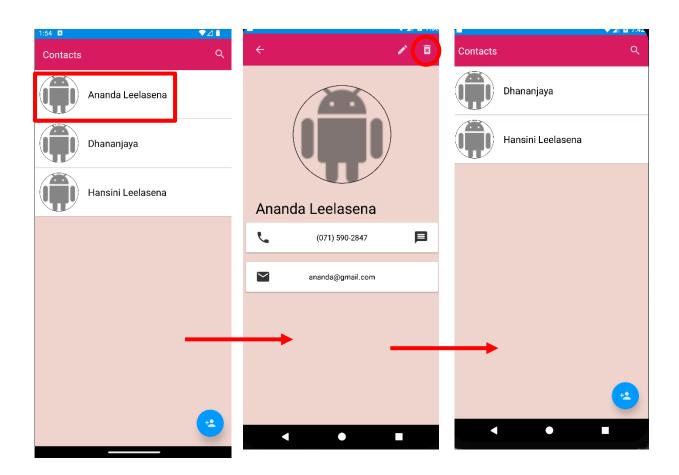




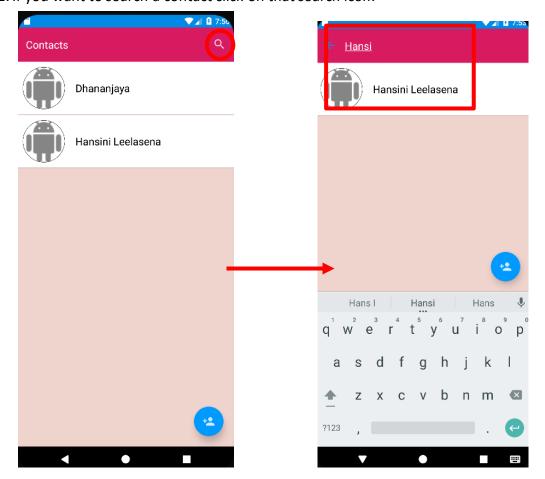
10. Updated contact will list in list as below.



11. If you want to *delete* a contact *click* on that contact. Click that *bin icon* shows as *delete* fuction. After that new updated list will shown as below.



12. If you want to search a contact click on that search icon.



Conclusion

In conclusion, the integration of SQLite database in Android Studio for the development of a simple contact saving mobile app has been instrumental in creating a seamless and efficient user experience. Android Studio's powerful development environment coupled with SQLite's lightweight database management system allowed for effective storage and management of contact information. The project successfully implemented key features such as contact insertion, updating, and deletion, while also providing the capability to generate reports based on the stored data. Overall, the utilization of SQLite in Android Studio has enhanced the functionality and usability of the contact saving app, ensuring smooth contact management for users.

Reference

- 1. Bentley, F., & Chen, Y. (2015a). The composition and use of modern mobile phonebooks. https://doi.org/10.1145/2702123.2702182
- 2. Hinze, A., Vanderschantz, N., Timpany, C., Cunningham, S. J., Saravani, S., & Wilkinson, C. R. (2022a). A Study of Mobile App Use for Teaching and Research in Higher Education. A Study of Mobile App Use for Teaching and Research in Higher Education. https://doi.org/10.1007/s10758-022-09599-6
- 3. Joorabchi, M. E., Mesbah, A., & Kruchten, P. (2013a). Real challenges in mobile app development. https://doi.org/10.1109/esem.2013.9
- 4. Kaur, A., & Kaur, K. (2022a). Systematic literature review of mobile application development and testing effort estimation. Journal of King Saud University Computer and Information Sciences, 34(2), 1–15. https://doi.org/10.1016/j.jksuci.2018.11.002
- 5. Sihag, V., Vardhan, M., & Singh, P. K. (2021b). A survey of android application and malware hardening. Computer Science Review, 39, 100365. https://doi.org/10.1016/j.cosrev.2021.1003

Esmaeel/publication/331673953_Apply_Android_Studio_SDK_Tools/links/5db4b159458 5155e27074ed0/Apply-Android-Studio-SDK-Tools.pdf (Accessed: 14 July 2023).

6. Application of firebase in Android app development - researchgate. Available at: https://www.researchgate.net/profile/Chunnu-Khawas/publication/325791990_Application_of_Firebase_in_Android_App_Developme nt-A_Study/links/5bab55ed45851574f7e6801e/Application-of-Firebase-in-Android-App-Development-A-Study.pdf (Accessed: 14 July 20