A Mobile Application for Personal Health Management

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***Abstract*—This undergraduate thesis investigates a mobile application for recording personal health information. Users may wish to keep basic wellness information such as sleep, calorie intake, and body measurements in one place. The student designs a mobile application with login and screens for personal details, sleep information, calorie tracking, and body-mass index. The source presents interface examples and supporting data design. The report concludes that the basic application and its thesis were completed. Its own summary acknowledges a plain interface and data handling that needs further improvement. No clinical evaluation or validated health benefit is reported. The PDF text extraction is imperfect, so this summary uses legible interface labels and the concluding passage. The app is a student record-keeping prototype, not a medical diagnostic or treatment tool. The contribution is a documented student study or prototype whose stated scope can guide further testing.**

***Index Terms*—mobile health, sleep, calories, body-mass index**

I. Introduction

Users may wish to keep basic wellness information such as sleep, calorie intake, and body measurements in one place. This thesis investigates a mobile application for recording personal health information. It begins from a practical engineering need and explains the technologies and workflow chosen for the case. The objective is to document a student implementation or comparative investigation, together with the evidence available in the manuscript. Broader operational or economic effects require separate measurements and are not assumed from the existence of a prototype [1]. Earlier ICTU student work on related designs is included here for context [2]. Related published studies provide context for the subject and methods [3], [4], [5], [6], [7], [8], [9], [10]. These contextual works were selected for this English summary; they are not asserted to appear in the original thesis bibliography.

II. Methods

The student designs a mobile application with login and screens for personal details, sleep information, calorie tracking, and body-mass index. The source presents interface examples and supporting data design. The source is summarized through its stated design, implementation material, examples, and conclusion. Features shown in the manuscript are distinguished from proposals for later development. This review does not add a new experiment, fill missing measurements with estimates, or treat a planned capability as an observed result. The source thesis remains the provenance for the reported work [1].

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III. Results

The report concludes that the basic application and its thesis were completed. Its own summary acknowledges a plain interface and data handling that needs further improvement. No clinical evaluation or validated health benefit is reported. The report's screens, configurations, examples, or measurements constitute the evidence for this summary. A capability described only as a design intention is not counted as a validated operational outcome. No additional performance, adoption, financial, or safety figure has been introduced here. The result is interpreted within the scope of the student's documented setup [1].

IV. Discussion

The PDF text extraction is imperfect, so this summary uses legible interface labels and the concluding passage. The app is a student record-keeping prototype, not a medical diagnostic or treatment tool. Further work could verify calculations, protect personal health data, improve accessibility, and test the experience with users under appropriate review. These limitations affect how the evidence should be read. The current manuscript can support understanding of the design and reported demonstration, while independent tests would be needed for stronger claims. Any later deployment should document its environment and separate observed outcomes from intended benefits [1].

V. Conclusion

The thesis documents a mobile application for recording personal health information. The report concludes that the basic application and its thesis were completed. Its own summary acknowledges a plain interface and data handling that needs further improvement. No clinical evaluation or validated health benefit is reported. The PDF text extraction is imperfect, so this summary uses legible interface labels and the concluding passage. The app is a student record-keeping prototype, not a medical diagnostic or treatment tool. Further work could verify calculations, protect personal health data, improve accessibility, and test the experience with users under appropriate review. Accordingly, the present contribution is a

source-grounded account of the student work and its tested or illustrated scope. Claims about broader effectiveness should be assessed in later work using explicit evaluation conditions [1].

References

[1] Nguyễn Tiến Phước, ”A Mobile Application for Personal Health Management,” internal undergraduate thesis (original in Vietnamese), Thai Nguyen University of Information and Communication Technology, 2024.

[2] ICTU Student 194, ”Application of Information Technology in Building and Implementing a Patient Management Program for Tan Lac General Hospital, Hoa Binh,” internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2010.

[3] Sergiu JECAN, ”WeightWatcher - Mobile Application for Health Monitoring,” Journal of Applied Computer Science & Mathematics, 2018. doi:10.4316/jacsm.201802004.

[4] J. Leppänen et al., ”Mobile Health and Wellness Application Framework,” Methods of Information in Medicine, 2008. doi:10.3414/me9113.

[5] Byeong-Doo Yim et al., ”Development of a Personal Health Information Management Program Using Mobile Biometric Information Measuring Device,” Journal of Digital Contents Society, 2020. doi:10.9728/dcs.2020.21.11.1921.

[6] Melissa Stec et al., ”Wellness and Disease Self-Management Mobile Health Apps Evaluated by the Mobile Application Rating Scale,” Advances in Family Practice Nursing, 2020. doi:10.1016/j.yfpn.2020.01.003.

[7] Leslie A. Saxon, ”Mobile Health Application Solutions,” Circulation: Arrhythmia and Electrophysiology, 2016. doi:10.1161/circep.115.002477.

[8] Galuh Octavia Chrisdianti et al., ”Users’ Intention to Use Mobile Health Applications for Personal Health Tracking,” Jurnal Sistem Informasi, 2023. doi:10.21609/jsi.v19i1.1196.

[9] □□ □, ”Design and Implementation of Health Management System Based on Mobile Application,” Computer Science and Application, 2018. doi:10.12677/csa.2018.812204.

[10] Yan Yang et al., ”Research on the application of health management model based on the perspective of mobile health,” Medicine, 2019. doi:10.1097/md.0000000000016847.