A Java Android Food-Ordering Application

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***Abstract*—This undergraduate thesis investigates a Java Android application for online food ordering. A food-ordering app needs customer, product, cart, and order-status flows. The student develops VuongFood in Android Studio with a Firebase database and UML models, and implements customer and administrator screens. The thesis shows the app screens and administrative order-status updates. The author estimates that more than 80 percent of the intended project was completed. The conclusion says search and order handling are incomplete; online payment and map services are absent. No independent usage or delivery performance is reported. The contribution is a documented student study or prototype whose stated scope can guide further testing.**

***Index Terms*—Android, Java, food ordering, Firebase**

I. Introduction

A food-ordering app needs customer, product, cart, and order-status flows. This thesis investigates a Java Android application for online food ordering. 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], [3], [4]. Related published studies provide context for the subject and methods [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 develops VuongFood in Android Studio with a Firebase database and UML models, and implements customer and administrator screens. 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].

III. Results

The thesis shows the app screens and administrative order-status updates. The author estimates that more than 80 percent of the intended project was completed. 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].

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IV. Discussion

The conclusion says search and order handling are incomplete; online payment and map services are absent. No independent usage or delivery performance is reported. Further work could complete search and order flows, test data consistency, and assess usability and security before integrating payments or location services. 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 Java Android application for online food ordering. The thesis shows the app screens and administrative order-status updates. The author estimates that more than 80 percent of the intended project was completed. The conclusion says search and order handling are incomplete; online payment and map services are absent. No independent usage or delivery performance is reported. Further work could complete search and order flows, test data consistency, and assess usability and security before integrating payments or location services. 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] Thân Văn Vượng, "A Java Android Food-Ordering Application," internal undergraduate thesis (original in Vietnamese), Thai Nguyen University of Information and Communication Technology, 2024.
[2] Nguyễn Văn Hưng, "Construction of an Online Food Ordering Application," internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2021.
[3] Phạm Minh Hiếu, "Development of an Order Management Application for 1987 Hot Pot and Grill Restaurant," internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2023.

[4] Lã Quyết Tâm, ”BUILDING A RESTAURANT MANAGEMENT SYSTEM USING THE LARAVEL FRAMEWORK,” internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2021.
[5] Siri Srujana Karnala, ”Food Delivery Android Application,” International Journal for Research in Applied Science and Engineering Technology, 2022. doi:10.22214/ijraset.2022.44515.
[6] Nurul Asyilah, ”Design of Ordering Information System for MSME Food Processed Products Using FIFO Method Based on Android,” Jurnal Teknologi Informasi dan Pendidikan, 2023. doi:10.24036/jtip.v16i1.690.
[7] Samer Atawneh et al., ”Android-based Mobile Application for Door-to-Door Product Delivery,” International Journal of Interactive Mobile Technologies (iJIM), 2019. doi:10.3991/ijim.v13i03.9598.
[8] Saurabh Madake et al., ”Online Catering System for College Canteen using Firebase,” International Journal for Research in Applied Science and Engineering Technology, 2023. doi:10.22214/ijraset.2023.52041.
[9] Uriel Cambrón Hernández et al., ”Apptojo: Behavioral Relationship between Consumers and Food Merchants through a CRM Mobile Application,” Research in Computing Science, 2019. doi:10.13053/rcs-148-6-2.
[10] Zalikha Zulkifli, ”Food Runner Mobile Application for UiTM Tapah Students,” Mathematical Sciences and Informatics Journal, 2021. doi:10.24191/mij.v2i2.14352.