A Flutter Food Delivery Mobile Application

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***Abstract*—This undergraduate thesis investigates a mobile food-delivery application. Customers, restaurants, and couriers need coordinated ordering and delivery information. The student develops a Flutter and Firebase application with separate customer, seller, and courier workflows. The report documents registration, restaurant search, menu management, ordering, notifications, and order history. The manuscript reports basic implemented flows for placing orders and notifying sellers and couriers. It describes seller menu updates and delivery history but characterizes the application as a basic prototype. The source does not verify live restaurant adoption, payment processing, courier location tracking, or measured delivery reliability. The contribution is a documented student study or prototype whose stated scope can guide further testing.**

***Index Terms*—Flutter, Firebase, food delivery, mobile application**

I. Introduction

Customers, restaurants, and couriers need coordinated ordering and delivery information. This thesis investigates a mobile food-delivery application. 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 a Flutter and Firebase application with separate customer, seller, and courier workflows. The report documents registration, restaurant search, menu management, ordering, notifications, and order history. 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 manuscript reports basic implemented flows for placing orders and notifying sellers and couriers. It describes seller menu updates and delivery history but characterizes the application as a basic prototype. 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 source does not verify live restaurant adoption, payment processing, courier location tracking, or measured delivery reliability. Further work could add location tracking and payment only after testing order-state consistency, privacy, security, and performance. 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 food-delivery application. The manuscript reports basic implemented flows for placing orders and notifying sellers and couriers. It describes seller menu updates and delivery history but characterizes the application as a basic prototype. The source does not verify live restaurant adoption, payment processing, courier location tracking, or measured delivery reliability. Further work could add location tracking and payment only after testing order-state consistency, privacy, security, and performance. 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].

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