A C# WinForms Management Application for Chum Coffee in Thai Nguyen

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***Abstract*—This undergraduate thesis investigates a C# WinForms management application for Chum Coffee in Thai Nguyen. A coffee shop needs software to organize routine business information and reduce manual handling. The student studies C# and system development and builds a WinForms application for the stated shop-management case. The thesis presents its design and example program screens. The conclusion reports that the program runs and meets basic requirements. It also says that more functions and code optimization are needed and that the interface needs visual refinement. The report does not establish deployment at Chum Coffee, verified operational benefits, or measured performance and reliability. The contribution is a documented student study or prototype whose stated scope can guide further testing.**

***Index Terms*—C#, WinForms, coffee shop, management software**

I. Introduction

A coffee shop needs software to organize routine business information and reduce manual handling. This thesis investigates a C# WinForms management application for Chum Coffee in Thai Nguyen. 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], [5], [6]. Related published studies provide context for the subject and methods [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 studies C# and system development and builds a WinForms application for the stated shop-management case. The thesis presents its design and example program 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].

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III. Results

The conclusion reports that the program runs and meets basic requirements. It also says that more functions and code optimization are needed and that the interface needs visual refinement. 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 report does not establish deployment at Chum Coffee, verified operational benefits, or measured performance and reliability. Further work could complete the management features, test representative transactions, and evaluate the interface with shop staff. 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 C# WinForms management application for Chum Coffee in Thai Nguyen. The conclusion reports that the program runs and meets basic requirements. It also says that more functions and code optimization are needed and that the interface needs visual refinement. The report does not establish deployment at Chum Coffee, verified operational benefits, or measured performance and reliability. Further work could complete the management features, test representative transactions, and evaluate the interface with shop staff. 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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