# A C# Cosmetics Sales Management Application for ChamomileSkill

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***Abstract*—This thesis develops a C# sales-management application for the Thuy Nguyen ChamomileSkill cosmetics shop in Thai Nguyen. The author surveys the shop workflow and prepares use-case, activity, sequence, class, and state diagrams before designing the database and interface. The manuscript presents forms for product and sales operations and includes a report chart. In the conclusion, the author states that the main functions and visual reporting were designed, while acknowledging limited experience and possible gaps between the model and actual shop requirements. The source does not report sustained use by shop staff, measured sales-process improvement, or an independent usability study. Its contribution is a documented desktop prototype whose fit to the real business workflow still requires validation.**

***Index Terms*—cosmetics sales, C#, database design, retail management, reporting**

## I. Introduction

A cosmetics retailer needs to maintain products, customers, sales, and summary information. The thesis uses ChamomileSkill as the case for a C# application to organize those records. It introduces software analysis and the shop management problem before identifying expected user tasks. The objective is to design and implement a coherent workflow. The report does not provide a measured baseline or evidence that the application replaced an existing production system [1]. Earlier ICTU student work on related designs is included here for context [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 author surveys the stated shop process and prepares detailed use-case, sequence, activity, class, and state diagrams. These inform a relational database design and a C# desktop interface. The implementation chapter shows data-entry and management screens and a chart for reporting. The report documents how the screens correspond to the analyzed tasks. No controlled field study, transaction-speed comparison, or formal acceptance test with staff is described [1].

## III. Results

The manuscript presents a database model, an application interface with core management functions, and a chart for summarizing data. The conclusion records these as completed design and implementation outputs. It also acknowledges that the author limited practical experience may leave some requirements imperfectly represented. The source does not quantify improvement in sales processing or show routine shop adoption. The evidence is strongest for the prototype structure and screens [1].

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## IV. Discussion

Diagrams and a database make the sales workflow explicit, while the chart helps readers inspect stored information. Yet a useful shop system must match actual product, customer, and transaction rules. The author notes possible mismatches and plans further adjustment. Security, data backup, and staff workflow testing are not evaluated in the source. These issues should be resolved before the program is treated as a complete operational service [1].

## V. Conclusion

The thesis documents a C# cosmetics sales-management prototype for ChamomileSkill, including diagrams, a database, interface forms, and visual reporting. The source supports that these outputs were built or designed. The author recognizes possible gaps against real requirements, and no measured operational result is shown. Further validation with the shop would determine whether the application fits daily work and what functions still need revision [1].

## References

[1] Dương Thị Hồng Ngọc, ”A C# Cosmetics Sales Management Application for ChamomileSkill,” internal undergraduate thesis (original in Vietnamese), Thai Nguyen University of Information and Communication Technology, 2024.
[2] Trần Thị Hồng Yến (2021), Bài giảng môn Lập trình trực quan, Khoa CNPM, Trường ĐH. Công Nghệ Thông Tin
[3] Đỗ Thị Thu, ”Sales Management Program for Tan Viet Dung Construction and Trading Services Co., Ltd.,” internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2014.
[4] Hoàng Thị Thu Thảo, ”Sales Management Program for Trung Thanh Private Enterprise in Thai Nguyen,” internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2014.
[5] ICTU Student 17, ”Development of a Sales Management and Service Development Program for Thai Nguyen Telecommunications,” internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2009.
[6] Đỗ Bảo Uyên, ”Construction of a Cosmetics Sales Website for Vy Ha Cosmetics in Cao Bang City,” internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2022.

[7] Đặng Vũ Hưng, ”Development of Sales Management Software for Minh Anh Warehouse,” internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2023.
[8] ICTU Student 122, ”Construction of an Online Sales Management Program,” internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2009.
[9] Nguyễn Thị Thu Hằng, ”Sales and Accounts Receivable Management Program for DCOS Technology Development Co., Ltd. in Thai Nguyen,” internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2013.
[10] ICTU Student 204, ”Construction of a Sales Management Program for Hadicomex Vietnam Ha Using Oracle Technology,” internal undergraduate thesis, Thai Nguyen University of Information and Communication Technology, 2010.