

BỘ THÔNG TIN VÀ TRUYỀN THÔNG
HỌC VIỆN CÔNG NGHỆ BƯU CHÍNH VIỄN THÔNG



Weekly Report

Foundation Internship

Project Title: Smart Shop AI Assistant

Instructor: Kim Ngoc Bach
Student Name : Le Tran Quoc Bao
Student ID : B22DCVT050
Class : E22CQCN05-B

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INTERNSHIP BASE REPORT – WEEK 11

WEEK 11 INTERNSHIP REPORT

1. Overview of This Week's Work

During the eleventh week of the internship, I focused on **finalizing the admin chatbot** and **refining all transaction-related and email APIs** to match the newly redesigned frontend. All functions were implemented based on the previously built **FastAPI backend**, ensuring clarity, scalability, and maintainability.

2. Work Completed

2.1. Finalizing the Admin Chatbot

- Integrated the **internal support chatbot** directly into the admin interface, allowing the administrator to:
 - Quickly query product, order, and user information.
 - View revenue statistics by day or month.
 - Receive alerts about unprocessed or frequently canceled orders.
- The chat interface was designed to be clear and easy to use.
- Interaction history between the admin and chatbot is saved for review and future improvements.

2.2. Refining Transaction and Email APIs

- **Transaction APIs:**
 - Checked and updated all APIs related to order processing: order creation, status updates, total calculation, and cart management.
 - Ensured full compatibility with the redesigned frontend regarding data structure and response format.

- Added input validation and error handling to improve stability and safety during user operations.
- **Email APIs:**
 - Refactored the email sending process for order confirmations and status notifications.
 - Redesigned the email content to be simpler, clearer, and aligned with the new user interface.
 - **Used Gmail as the primary platform for sending emails,** ensuring reliability and avoiding spam detection.

2.3. System Testing and Synchronization

- Fully tested the updated APIs to ensure the frontend-backend workflow functioned correctly.
- Verified successful email delivery via Gmail with proper formatting and no display errors.
- Logged all email transactions and order handling operations to support issue tracking and debugging.

3. Technologies & Tools Used

- **Backend:** Python (FastAPI)
- **Frontend:** HTML, CSS, JavaScript
- **Database:** MySQL
- **Email Sending:** SMTP via Gmail

- **Admin Chatbot:** Intent-based query system integrated into the admin panel
- **Tools:** VSCode, Git

4. Outcomes

- The admin chatbot is now fully operational, offering quick support and streamlined management capabilities.
- All transaction and email APIs have been refined and work smoothly with the new frontend.
- The system has reached a higher level of completeness and is ready for real-world deployment with a unified frontend-backend experience.