

# Customer Support System:

Comment and Email Response Generator

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# Project Design

- **Flask:** Serves as the web framework for the application.
- **OpenAI API:** Utilized for generating text via the gpt-4o-mini model.
- **HTML/CSS:** Crafts the frontend interface with responsive design principles.
- **Python-dotenv:** Manages environment variables securely.
- **Bootstrap-inspired Styling:** Enhances UI elements for better aesthetics and responsiveness.

# Project Design

- **Comment Generation:** The app generates a customer comment about the store using GPT.
- **Email Generation:** An email response is generated based on the comment using the following steps:
  - generate **email subject** according to the comment
  - generate the **summary** of customer's comment
  - **sentiment analysis** of the customer's comment
  - generate an **email** to be sent to the customer

# Project Design

- **User Input:** The user selects a language and translation options on the web interface.
- **Translation:** If selected, the comment and/or email are translated into the chosen language.
- **Display Results:** The generated texts are displayed side by side on the web page.

# Command Line Execution

- Generate the comment

```
(base) zhangzhiyu@shengchanligongju w4 % python3 command_line.py
Please enter the language for the email (e.g., English, Spanish, French): Chinese
Customer Comment:
The product lineup offers an impressive range of electronics catering to various needs and preferences. From the sleek TechPro Ultrabook, perfect for everyday tasks, to the high-performance BlueWave Gaming Laptop, there's something for everyone. The inclusion of versatile devices like the PowerLite Convertible and budget-friendly options such as the BlueWave Chromebook showcases a commitment to accessibility. In the smartphone category, the SmartX ProPhone stands out with its advanced features. Additionally, the audio equipment, including the AudioPhonic Noise-Canceling Headphones and WaveSound Bluetooth Speaker, enhances the overall experience. Overall, this diverse selection ensures customers can find quality products that suit their lifestyles.
```

# Command Line Execution

- Analyse the comment

Email Subject:

"Explore Our Diverse Range of Electronics: Find the Perfect Device for You!"

Summary of Comment:

The product lineup features a wide range of electronics that cater to various needs, including the TechPro Ultrabook for everyday tasks, the high-performance BlueWave Gaming Laptop, and versatile devices like the PowerLite Convertible. Budget-friendly options such as the BlueWave Chromebook are also available. In the smartphone category, the SmartX ProPhone is highlighted for its advanced features. Additionally, audio equipment like the AudioPhonic Noise-Canceling Headphones and WaveSound Bluetooth Speaker enhances the user experience. Overall, the diverse selection ensures customers can find quality products that fit their lifestyles.

Sentiment Analysis:

The sentiment of the comment is overwhelmingly positive. The reviewer expresses satisfaction with the product lineup, highlighting the variety and quality of the electronics offered. Phrases like "impressive range," "perfect for everyday tasks," "high-performance," "commitment to accessibility," and "advanced features" indicate a favorable view of the products. Overall, the comment conveys a sense of enthusiasm and approval regarding the company's offerings.

# Command Line Execution

- Generate the email

Generated Email:

Subject: 探索我们多样化的电子产品系列：找到适合您的完美设备！

尊敬的客户，

感谢您对我们产品的关注！我们很高兴地向您介绍我们的电子产品系列，涵盖了各种需求和偏好，确保每位客户都能找到适合自己的优质产品。

我们的产品阵容包括适合日常任务的TechPro超极本，以及高性能的BlueWave游戏笔记本电脑，满足不同用户的需求。此外，我们还提供多功能设备，如PowerLite可转换笔记本，以及经济实惠的BlueWave Chromebook，充分体现了我们对可及性的承诺。

在智能手机类别中，SmartX ProPhone凭借其先进的功能脱颖而出。而在音频设备方面，Audio Phonic降噪耳机和WaveSound蓝牙音响则进一步提升了用户体验。

我们相信，这样多样化的选择将帮助您找到最符合您生活方式的产品。如您有任何疑问或需要进一步的信息，请随时与我们联系。

期待您的回复！

祝好，

[您的名字]

[您的职位]

[公司名称]

[联系电话]

[电子邮箱]

# Web Interface

## Customer Support System

Select Language:

English

☐ Translate Comment

☐ Translate Email

Generate

### Generated Comment

### Generated Email



# Language Selection

**Customer Support System**

Select Language:

- ✓ English
- Mandarin Chinese
- Hindi
- Spanish
- French
- Arabic
- Bengali
- Russian
- Portuguese
- Indonesian
- Urdu
- German
- Japanese

**Feedback Comment**

**Generated Email**

# Sample Use Case

- English to English

## Generated Comment

The product range offered by this electronic company is impressive, catering to various needs and preferences. From the sleek TechPro Ultrabook to the high-performance BlueWave Gaming Laptop, there's something for everyone. The smartphones, like the SmartX ProPhone, showcase advanced features, while accessories like the MobiTech Wireless Charger enhance user experience. The audio equipment, including the AudioPhonic Noise-Canceling Headphones, promises immersive sound quality. For photography enthusiasts, the FotoSnap DSLR and Mirrorless Cameras provide excellent options. Additionally, the gaming consoles and accessories, such as the GameSphere X, ensure an engaging gaming experience. Overall, a diverse and high-quality selection!

## Generated Email

Subject: Explore Our Impressive Range of High-Quality Electronic Products!

Dear [Customer's Name],

Thank you for your recent feedback regarding our product range. We are thrilled to hear that you find our selection impressive and diverse, catering to various needs and preferences.

At [Company Name], we strive to offer high-quality products that enhance our customers' experiences. From the sleek TechPro Ultrabook and high-performance BlueWave Gaming Laptop to the advanced features of our SmartX ProPhone smartphones, we aim to provide something for everyone. We are also proud of our user-friendly accessories like the MobiTech Wireless Charger, as well as our audio equipment, including the AudioPhonic Noise-Canceling Headphones, which promise immersive sound quality.

For photography enthusiasts, our FotoSnap DSLR and Mirrorless Cameras offer excellent options, while our gaming consoles and accessories, such as the GameSphere X, ensure an engaging gaming experience.

# Sample Use Case

- English to Spanish

## Generated Comment

The product lineup from this electronic company showcases a diverse range of high-quality items catering to various needs. From the sleek TechPro Ultrabook to the powerful BlueWave Gaming Laptop, there's something for everyone. The inclusion of innovative smartphones like the SmartX ProPhone and accessories such as the MobiTech PowerCase enhances the user experience. Additionally, the impressive selection of TVs, including the stunning CineView 8K TV, offers cutting-edge technology for home entertainment. Audio enthusiasts will appreciate the AudioPhonic Noise-Canceling Headphones and WaveSound Bluetooth Speaker. Overall, the combination of performance, design, and value makes these products highly appealing to consumers.

## Generated Email

Asunto: ¡Descubre nuestra diversa gama de productos electrónicos de alta calidad!

Estimado/a [Nombre del Cliente],

Espero que este mensaje le encuentre bien. Nos complace presentarle nuestra variada y de alta calidad línea de productos electrónicos, diseñada para satisfacer diversas necesidades y preferencias.

Desde el elegante TechPro Ultrabook hasta el potente BlueWave Gaming Laptop, tenemos algo para todos. Además, nuestros innovadores smartphones, como el SmartX ProPhone, junto con accesorios como el MobiTech PowerCase, mejoran la experiencia del usuario de manera significativa.

Para los amantes del entretenimiento en casa, ofrecemos una impresionante selección de televisores, incluyendo el deslumbrante CineView 8K TV, que incorpora tecnología de vanguardia. Los entusiastas del audio también encontrarán mucho que apreciar con nuestros productos, como los AudioPhonic Noise-Canceling Headphones y el WaveSound Bluetooth Speaker.

# Sample Use Case

- Vietnamese to English

## Generated Comment

Dòng sản phẩm điện tử thật ấn tượng, trưng bày một loạt các mặt hàng chất lượng cao đa dạng trong nhiều danh mục khác nhau. Từ chiếc TechPro Ultrabook thanh lịch, hoàn hảo cho việc sử dụng hàng ngày, đến chiếc BlueWave Gaming Laptop mạnh mẽ được thiết kế cho những trải nghiệm chơi game sống động, có điều gì đó cho tất cả mọi người. SmartX ProPhone nổi bật với các tính năng camera tiên tiến, trong khi TV CineView 8K mang đến cái nhìn về tương lai của giải trí tại nhà. Thêm vào đó, tai nghe chống ồn AudioPhonic và loa Bluetooth đa năng WaveSound nâng cao trải nghiệm âm thanh. Tổng thể, bộ sưu tập này kết hợp đổi mới, hiệu suất và phong cách, phục vụ cho cả những người đam mê công nghệ và người dùng thông thường.

## Generated Email

Subject: Explore Our Impressive Lineup of Innovative Electronic Products!

Dear [Customer's Name],

Thank you for your interest in our electronic product lineup! We are thrilled to hear your positive feedback regarding our diverse range of high-quality items.

Our collection features something for everyone, from the sleek TechPro Ultrabook, ideal for everyday use, to the powerful BlueWave Gaming Laptop, designed for an immersive gaming experience. The SmartX ProPhone, with its advanced camera features, and the CineView 8K TV, which offers a glimpse into the future of home entertainment, are just a few highlights. Additionally, our AudioPhonic Noise-Canceling Headphones and versatile WaveSound Bluetooth Speaker are perfect for enhancing your audio experience.

We take great pride in combining innovation, performance, and style in our products, catering to both tech enthusiasts and casual users alike. Your appreciation for our lineup reinforces our commitment to providing exceptional electronic solutions.

# Sample Use Case

- Chinese to Chinese

## Generated Comment

这家公司提供的电子产品种类繁多，令人印象深刻，满足了各种需求和偏好。从时尚的TechPro超极本到高性能的BlueWave游戏笔记本电脑，应有尽有。智能手机如SmartX ProPhone将先进功能与时尚设计相结合，而MobiTech无线充电器等配件则提升了用户的便利性。音频设备，包括AudioPhonic降噪耳机，承诺带来沉浸式体验。此外，像FotoSnap单反相机这样的相机非常适合摄影爱好者。总的来说，该公司的产品在质量、创新和多样性方面都使其成为科技爱好者的首选。

## Generated Email

主题：发现我们令人印象深刻的创新电子产品系列！

亲爱的 [客户姓名]，

感谢您对我们电子产品系列的深刻反馈。我们很高兴听到您认为我们的产品令人印象深刻，并且能够满足各种需求和偏好。

在 [公司名称]，我们努力提供多样化的产品线，包括时尚的TechPro 超极本、高性能的BlueWave 游戏笔记本电脑以及时尚的SmartX ProPhone 智能手机。我们还为我们的用户友好配件感到自豪，例如MobiTech 无线充电器，提升了客户的便利性。

此外，我们很高兴您欣赏我们的沉浸式音频设备，包括AudioPhonic 降噪耳机，以及我们的高质量相机，如FotoSnap 单反相机。您对我们质量、创新和多样性方面的承诺的认可，进一步巩固了我们成为科技爱好者首选的使命。

我们重视您的意见，并始终在这里为您提供任何关于我们产品的问题或进一步信息的帮助。

# Thanks

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