

# WEEK 3 HOMEWORK 2: CUSTOMER SUPPORT SYSTEM: AN EMAIL TO THE CUSTOMER

Structure of the web interface:

Language	
Question	Answer
Submit	

## STEPS INVOLVED IN DEVELOPMENT:

### STEP 1: Generate customer's comment.

An input of the list of products is given and expect a response of about 100 words as a customer comment.

```
(chatgpt) savitha07@LAPTOP-G4J2LEEG:~/Customer Support System (email to customer)$ flask run
* Debug mode: off
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on http://127.0.0.1:5000
Press CTRL+C to quit
Inside index--- GET
yes, it is post method
reached generate customer comment function!!
Comment:
I am extremely satisfied with the range of products offered by this electronics company. From their sleek and powerful ultrabook to their immersive gaming laptop, they have something for everyone. The smartphones and accessories, such as the ProPhone and PowerCase, are top-notch in terms of performance and functionality. The televisions and home theater systems, like the CineView 4K TV and SoundMax Home Theater, provide an incredible viewing and audio experience. The gaming consoles and accessories, such as the GameSphere X and ProGamer Controller, take gaming to a whole new level. Overall, this company offers high-quality and innovative products that exceed my expectations.
```

### STEP 2: Generate email subject.

The comment generated is given as input and expect ChatGPT to generate appropriate subject for the email using Inferring technique.

```
Subject of the email:
Satisfied Customer Feedback: Wide Range of High-Quality Products
```

### STEP 3: Generate summary of customer comments.

Based on the comment, expect ChatGPT generate a summary within 30 words.

Summary of the comment:

The customer is highly satisfied with the wide range of products offered by the company, including laptops, smartphones, televisions, home theater systems, and gaming consoles.

### STEP 4: Sentiment analysis of the customer comment.

Take the comment as an input and expect to analyze the sentiment of the comment if it is positive or negative using Inferring technique.

Since it gave an output with more than 100 words, I just wanted to know if the comment is positive or negative. So, I changed the prompt accordingly.

Sentiment of the comment:  
Positive

### STEP 5: Generate email.

Based on all the comment, subject of email, sentiment and summary, expect to generate an email in the selected language by the user.

Email generated:

Subject: Thank you for your feedback and satisfaction with our wide range of high-quality products!

Dear [Customer's Name],

Thank you for taking the time to provide us with your valuable feedback. We are thrilled to hear that you are extremely satisfied with the range of products offered by our electronics company. Your positive feedback is greatly appreciated and motivates us to continue delivering high-quality and innovative products.

We are delighted that you have found something for everyone in our product lineup. Our sleek and powerful ultrabook and immersive gaming laptop are designed to meet the needs of both professionals and gamers alike. We take pride in offering top-notch smartphones and accessories, such as the ProPhone and PowerCase, which are known for their exceptional performance and functionality.

Furthermore, we are glad that our televisions and home theater systems, like the CineView 4K TV and SoundMax Home Theater, have provided you with an incredible viewing and audio experience. We understand the importance of delivering immersive entertainment, and we strive to exceed your expectations in this regard.

Lastly, we are thrilled that our gaming consoles and accessories, such as the GameSphere X and ProGamer Controller, have taken your gaming experience to a whole new level. We are committed to providing gamers with cutting-edge technology and accessories that enhance their gameplay.

Your satisfaction is our top priority, and we are grateful for your trust in our brand. If you have any further feedback or suggestions, please do not hesitate to reach out to us. We are always here to assist you and ensure your continued satisfaction.

Once again, thank you for your kind words and for choosing our products. We look forward to serving you in the future and providing you with even more innovative and high-quality products.

Best regards,

[Your Name]  
Customer Support Representative

The entire output looks like:

```
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on http://127.0.0.1:5000
Press CTRL+C to quit
Inside index--- GET
yes, it is post method
reached genrate cutomer comment function!!
Comment:
I am extremely satisfied with the range of products offered by this electronics company. From their sleek and powerful ultrabook to their immersive gaming laptop, they have something for everyone. The smartphones and accessories, such as the ProPhone and PowerCase, are top-notch in terms of performance and functionality. The televisions and home theater systems, like the CineView 4K TV and SoundMax Home Theater, provide an incredible viewing and audio experience. The gaming consoles and accessories, such as the GameSphere X and ProGamer Controller, take gaming to a whole new level. Overall, this company offers high-quality and innovative products that exceed my expectations.
Subject of the email:
Satisfied Customer Feedback: Wide Range of High-Quality Products
Summary of the comment:
The customer is highly satisfied with the wide range of products offered by the company, including laptops, smartphones, televisions, home theater systems, and gaming consoles.
Sentiment of the comment:
Positive
Email generated:
Subject: Thank you for your feedback and satisfaction with our wide range of high-quality products!

Dear [Customer's Name],

Thank you for taking the time to provide us with your valuable feedback. We are thrilled to hear that you are extremely satisfied with the range of products offered by our electronics company. Your positive feedback is greatly appreciated and motivates us to continue delivering high-quality and innovative products.

We are delighted that you have found something for everyone in our product lineup. Our sleek and powerful ultrabook and immersive gaming laptop are designed to meet the needs of both professionals and gamers alike. We take pride in offering top-notch smartphones and accessories, such as the ProPhone and PowerCase, which are known for their exceptional performance and functionality.

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Lastly, we are thrilled that our gaming consoles and accessories, such as the GameSphere X and ProGamer Controller, have taken your gaming experience to a whole new level. We are committed to providing gamers with cutting-edge technology and accessories that enhance their gameplay.

Your satisfaction is our top priority, and we are grateful for your trust in our brand. If you have any further feedback or suggestions, please do not hesitate to reach out to us. We are always here to assist you and ensure your continued satisfaction.

Once again, thank you for your kind words and for choosing our products. We look forward to serving you in the future and providing you with even more innovative and high-quality products.

Best regards,

[Your Name]
Customer Support Representative
```

The translated output looks like:

```
Translation of customer comment summary in pt:
Caro [Nome do Cliente],

Obrigado por dedicar seu tempo para nos fornecer um feedback valioso. Estamos muito felizes em saber que você está extremamente satisfeito com a variedade de produtos oferecidos pela nossa empresa de eletrônicos. Seu feedback positivo é muito apreciado e nos motiva a continuar entregando excelentes produtos e serviços.

Estamos encantados em saber que você encontrou algo para todos em nossa linha de produtos. Nosso ultrabook elegante e poderoso e nosso laptop de jogos imersivo são projetados para atender às necessidades de profissionais e jogadores. Temos orgulho em oferecer smartphones e acessórios de alta qualidade, como o ProPhone e o PowerCase, conhecidos por seu desempenho e funcionalidade excepcionais.

Além disso, estamos felizes em saber que nossas televisões e sistemas de home theater, como a TV CineView 4K e o Home Theater SoundMax, proporcionaram uma experiência de visualização e áudio incrível. Nos esforçamos para oferecer produtos que aprimorem seu entretenimento e o tornem mais imersivo.

Também estamos muito felizes em saber que nossos consoles de jogos e acessórios, como o GameSphere X e o controle ProGamer, levaram sua experiência de jogo a um nível totalmente novo. Entendemos a importância de fornecer equipamentos de jogos de alta qualidade que permitam que você aproveite ao máximo seus jogos favoritos.

Em nossa empresa, estamos comprometidos em oferecer produtos de excelente qualidade que proporcionem um ótimo custo-benefício. Sua satisfação é nossa principal prioridade e estamos sempre trabalhando para melhorar e expandir nossa linha de produtos para atender às necessidades em constante evolução de nossos clientes.

Mais uma vez, obrigado por suas palavras gentis e por escolher nossos produtos. Se você tiver algum feedback adicional ou se houver algo mais em que possamos ajudar, não hesite em entrar em contato com nossa equipe de suporte ao cliente. Estamos sempre aqui para ajudar.

Atenciosamente,

[Seu Nome]
Representante de Suporte ao Cliente

127.0.0.1 - - [07/Feb/2024 14:20:57] "POST / HTTP/1.1" 200 -
```

The UI for the given use case is generated based on the design given and looks like:

INPUT English OUTPUT English

127.0.0.1:5000

Choose the language of Email to be generated:

English

Translate Comment in selected language:

☐

Translate Email in selected language:

☐

Comment:

I am extremely satisfied with the range of products offered by this electronics company. From their sleek and powerful ultrabook to their immersive gaming laptop, they have something for everyone. The smartphones and accessories, such as the ProPhone and PowerCase, are top-notch in terms of performance and functionality. The televisions and home theater systems, like the CineView 4K TV and SoundMax Home Theater, provide an incredible viewing and audio experience. The gaming consoles and accessories, such as the GameSphere X and ProGamer Controller, take gaming to a whole new level. Overall, their products are of excellent quality and offer great value for money.

Email:

Subject: Thank you for your feedback and satisfaction with our range of products! Dear [Customer's Name], Thank you for taking the time to provide us with your valuable feedback. We are thrilled to hear that you are extremely satisfied with the range of products offered by our electronics company. Your positive feedback is greatly appreciated and motivates us to continue delivering high-quality products to our valued customers like you. We are delighted that you have found something for everyone in our product lineup. Our sleek and powerful ultrabook and immersive gaming laptop are designed to meet the needs of both professionals and gamers alike. We take pride in offering top-notch smartphones and accessories, such as the ProPhone and PowerCase, which are known for their exceptional performance and functionality. Furthermore, we are glad that our televisions and home theater systems, like the CineView 4K TV and SoundMax Home Theater, have provided you with an incredible viewing and audio experience. We understand the importance of delivering immersive entertainment, and we are thrilled that our products have met your expectations. Additionally, we are pleased to hear that our gaming consoles and accessories, such as the GameSphere X and ProGamer Controller, have taken your gaming experience to a whole new level. We strive to provide cutting-edge technology and innovative features to enhance your gaming sessions. At our company, we are committed to offering products of excellent quality that provide great value for money. Your satisfaction is our top priority, and we are glad that our products have met your expectations in terms of performance, functionality, and overall value. Once again, we appreciate your feedback and your support. If you have any further questions or need assistance with any of our products, please do not hesitate to reach out to our customer support team. We are here to help. Thank you for choosing our electronics company, and we look forward to serving you again in the future. Best regards, [Your Name] Customer Support Representative

Process

INPUT English OUTPUT Spanish

127.0.0.1:5000

Choose the language of Email to be generated:

Spanish

Translate Comment in selected language:

☐

Translate Email in selected language:

☒

Comment:

I am extremely satisfied with the range of products offered by this electronics company. From their sleek and powerful ultrabook to their immersive gaming laptop, they have something for everyone. The smartphones and accessories, such as the ProPhone and PowerCase, are top-notch in terms of performance and functionality. The televisions and home theater systems, like the CineView 4K TV and SoundMax Home Theater, provide an incredible viewing and audio experience. The gaming consoles and accessories, such as the GameSphere X and ProGamer Controller, take gaming to a whole new level. Overall, this company offers high-quality and innovative products that exceed my expectations.

Email:

Estimado [Nombre del cliente], Gracias por tomarse el tiempo para proporcionarnos sus valiosos comentarios. Estamos encantados de saber que está extremadamente satisfecho con la variedad de productos ofrecidos por nuestra empresa de electrónica. Su experiencia positiva significa mucho para nosotros y apreciamos su apoyo. Nos enorgullece ofrecer una amplia selección de productos que satisfacen diversas necesidades y preferencias. Es fantástico saber que nuestro ultrabook y laptop para juegos han cumplido con sus expectativas en cuanto a diseño elegante y rendimiento potente. Nuestro equipo trabaja incansablemente para garantizar que nuestras laptops brinden la mejor experiencia de usuario posible. También nos complace saber que está impresionado con nuestros teléfonos inteligentes y accesorios, como el ProPhone y el PowerCase. Nos esforzamos por ofrecer un rendimiento y funcionalidad de primer nivel, y es gratificante saber que hemos logrado cumplir con sus expectativas. Además, nos alegra saber que nuestros televisores y sistemas de cine en casa, incluido el televisor CineView 4K y el sistema de sonido SoundMax Home Theater, le han brindado una experiencia de visualización y audio increíble. Entendemos la importancia del entretenimiento inmersivo y nos complace saber que nuestros productos han mejorado su configuración de cine en casa. Por último, nos emociona saber que nuestras consolas de juegos y accesorios, como el GameSphere X y el controlador ProGamer, han llevado su experiencia de juego a un nivel completamente nuevo. Nos comprometemos a proporcionar productos de juego innovadores y de alta calidad que satisfagan las demandas de los jugadores ávidos como usted. Su satisfacción es nuestra máxima prioridad y seguiremos esforzándonos por la excelencia en la entrega de productos que superen sus expectativas. Si tiene algún comentario o sugerencia adicional, no dude en comunicarse con nosotros. Valoramos su opinión y siempre estamos buscando formas de mejorar. Una vez más, gracias por sus amables palabras y apoyo. Apreciamos sinceramente su negocio y esperamos poder atenderle en el futuro. Atentamente, [Su nombre] Representante de At

Process

## INPUT Spanish OUTPUT English

127.0.0.1:5000

Incognito New Chrome available

Choose the language of Email to be generated:

Spanish

Translate Comment in selected language: ☐ Translate Email in selected language: ☐

**Comment:**

Estoy extremadamente satisfecho con la variedad de productos ofrecidos por esta empresa de electrónica. Desde su elegante y potente ultrabook hasta su portátil de juegos inmersivo, tienen algo para todos. Los teléfonos inteligentes y accesorios, como el ProPhone y el PowerCase, son de primera categoría en términos de rendimiento y funcionalidad. Los televisores y sistemas de cine en casa, como el televisor CineView 4K y el teatro en casa SoundMax, brindan una experiencia de visualización y audio increíble. Las consolas de juegos y accesorios, como el GameSphere X y el controlador ProGamer, llevan los juegos a un nivel completamente nuevo. En general, sus productos son de excelente calidad y ofrecen una gran relación calidad-precio.

**Email:**

Subject: Thank you for your feedback and satisfaction with our range of products! Dear [Customer's Name], Thank you for taking the time to provide us with your valuable feedback. We are thrilled to hear that you are extremely satisfied with the range of products offered by our electronics company. Your positive feedback is greatly appreciated and motivates us to continue delivering excellent products and services. We are delighted that you have found something for everyone in our product lineup. Our sleek and powerful ultrabook and immersive gaming laptop are designed to meet the needs of both professionals and gamers alike. We take pride in offering top-notch smartphones and accessories, such as the ProPhone and PowerCase, which are known for their exceptional performance and functionality. Furthermore, we are glad that our televisions and home theater systems, like the CineView 4K TV and SoundMax Home Theater, have provided you with an incredible viewing and audio experience. We strive to deliver products that enhance your entertainment and make it more immersive. We are also thrilled to hear that our gaming consoles and accessories, such as the GameSphere X and ProGamer Controller, have taken your gaming experience to a whole new level. We understand the importance of providing high-quality gaming equipment that allows you to fully enjoy your favorite games. At our company, we are committed to offering products of excellent quality that provide great value for money. Your satisfaction is our top priority, and we are constantly working to improve and expand our product range to meet the evolving needs of our customers. Once again, thank you for your feedback and for choosing our products. If you have any further questions or need assistance with any of our products, please do not hesitate to reach out to our customer support team. We are here to help. Best regards, [Your Name] Customer Support Representative

Process

## INPUT Spanish OUTPUT Spanish

127.0.0.1:5000

Incognito New Chrome available

Choose the language of Email to be generated:

Spanish

Translate Comment in selected language: ☐ Translate Email in selected language: ☐

**Comment:**

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**Email:**

Estimado [Nombre del cliente], Gracias por tomarse el tiempo para proporcionarnos sus valiosos comentarios. Estamos encantados de saber que está extremadamente satisfecho con la variedad de productos ofrecidos por nuestra empresa de electrónica. Su experiencia positiva significa mucho para nosotros y apreciamos su apoyo. Nos enorgullece ofrecer una amplia selección de productos que satisfacen diversas necesidades y preferencias. Es fantástico saber que nuestro ultrabook y laptop para juegos han cumplido con sus expectativas en cuanto a diseño elegante y rendimiento potente. Nuestro equipo trabaja incansablemente para garantizar que nuestras laptops brinden la mejor experiencia de usuario posible. También nos complace saber que está impresionado con nuestros teléfonos inteligentes y accesorios, como el ProPhone y el PowerCase. Nos esforzamos por ofrecer un rendimiento y funcionalidad de primer nivel, y es gratificante saber que hemos logrado cumplir con sus expectativas. Además, nos alegra saber que nuestros televisores y sistemas de cine en casa, incluido el televisor CineView 4K y el sistema de sonido SoundMax Home Theater, le han brindado una experiencia de visualización y audio increíble. Entendemos la importancia del entretenimiento inmersivo y nos complace saber que nuestros productos han mejorado su configuración de cine en casa. Por último, nos emociona saber que nuestras consolas de juegos y accesorios, como el GameSphere X y el controlador ProGamer, han llevado su experiencia de juego a un nivel completamente nuevo. Nos comprometemos a proporcionar productos de juego innovadores y de alta calidad que satisfagan las demandas de los jugadores ávidos como usted. Su satisfacción es nuestra máxima prioridad y seguiremos esforzándonos por la excelencia en la entrega de productos que superen sus expectativas. Si tiene algún comentario o sugerencia adicional, no dude en comunicarse con nosotros. Valoramos su opinión y siempre estamos buscando formas de mejorar nuestros productos y servicios. Una vez más, gracias por sus amables palabras y apoyo. Apreciamos sinceramente su negocio y esperamos poder atenderle en el futuro. Atentamente, [Su nombre]

Process

**GITHUB LINK:** [https://github.com/savithashreem07/Machine-Learning/tree/main/Customer%20Support%20System%20\(email%20to%20customer\)](https://github.com/savithashreem07/Machine-Learning/tree/main/Customer%20Support%20System%20(email%20to%20customer))

**GOOGLE SLIDE LINK:** [https://docs.google.com/presentation/d/18tjAEROPI9xNpIi57ktpI9-BQqKXuM1GB9pg8\\_gTVPo/edit?usp=sharing](https://docs.google.com/presentation/d/18tjAEROPI9xNpIi57ktpI9-BQqKXuM1GB9pg8_gTVPo/edit?usp=sharing)