

# 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.

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 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

IncognitoNew Chrome available

Choose the language of Email to be generated:

English

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:

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 experience means a lot to us, and we appreciate your support. We take great pride in offering a diverse selection of products that cater to various needs and preferences. It is fantastic to hear that our ultrabook and gaming laptop have met your expectations in terms of sleek design and powerful performance. Our team works tirelessly to ensure that our laptops provide the best user experience possible. We are also delighted that you are impressed with our smartphones and accessories, such as the ProPhone and PowerCase. We strive to deliver top-notch performance and functionality, and it is rewarding to know that we have succeeded in meeting your expectations. Furthermore, we are thrilled that our televisions and home theater systems, including the CineView 4K TV and SoundMax Home Theater, have provided you with an incredible viewing and audio experience. We understand the importance of immersive entertainment, and we are glad that our products have enhanced your home theater setup. Lastly, we are excited 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 are committed to providing innovative and high-quality gaming products that meet the demands of avid gamers like yourself. Your satisfaction is our utmost priority, and we will continue to strive for excellence in delivering products that exceed your expectations. If you have any further feedback or suggestions, please do not hesitate to reach out to us. We value your input and are always looking for ways to improve. Once again, thank you for your kind words and support. We truly appreciate your business and look forward to serving you in the future. Best regards, [Your Name] Customer Support Representative

Process

INPUT English OUTPUT Spanish

127.0.0.1:5000

IncognitoNew Chrome available

Choose the language of Email to be generated:

Spanish

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 elegante y potente y nuestra laptop de juegos inmersiva han captado su atención. Nos esforzamos por proporcionar tecnología de vanguardia y un rendimiento excepcional en todas nuestras laptops. También nos complace que esté impresionado con nuestros teléfonos inteligentes y accesorios, como el ProPhone y el PowerCase. Entendemos la importancia del rendimiento y la funcionalidad en el mundo acelerado de hoy, y nos alegra que nuestros productos cumplan con sus expectativas en estos aspectos. Además, estamos encantados de que nuestros televisores y sistemas de cine en casa, incluido el televisor CineView 4K y el sistema de sonido SoundMax Home Theater, le hayan brindado una experiencia de visualización y audio increíble. Trabajamos constantemente para mejorar la experiencia de entretenimiento de nuestros clientes, y su satisfacción es un testimonio de nuestros esfuerzos. Por último, nos emociona que nuestras consolas de juegos y accesorios, como el GameSphere X y el controlador ProGamer, hayan llevado su experiencia de juego a un nivel completamente nuevo. Nos esforzamos por crear experiencias de juego inmersivas y agradables, y sus comentarios positivos nos animan a seguir innovando en esta área. En nuestra empresa, nos comprometemos a ofrecer productos de alta calidad e innovadores que superen las expectativas de nuestros clientes. Su satisfacción es nuestra principal prioridad y estamos agradecidos por su apoyo y confianza en nuestra marca. Si tiene algún comentario adicional o necesita ayuda con alguno de nuestros productos, no dude en comunicarse con nuestro equipo de atención al cliente. Estamos aquí para ayudar y garantizar su satisfacción continua. Una vez más, gracias por sus am

Process

## INPUT Spanish OUTPUT Spanish

127.0.0.1:5000

Incognito

New Chrome available

Choose the language of Email to be generated:

Spanish

**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 sistema de sonido SoundMax Home Theater, 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, esta empresa ofrece productos de alta calidad e innovadores que superan mis expectativas.

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

**GOOGLE SLIDE LINK:** [https://docs.google.com/presentation/d/18tjAEROPI9xNpli57ktpI9-BQqKXuM1GB9pg8\\_gTVPo/edit?usp=sharing](https://docs.google.com/presentation/d/18tjAEROPI9xNpli57ktpI9-BQqKXuM1GB9pg8_gTVPo/edit?usp=sharing)