

```

▶ # Create a simple bar chart for user feedback ratings
ratings = [f['rating'] for f in feedback]
plt.figure(figsize=(8, 6))
plt.bar(range(1, len(ratings) + 1), ratings)
plt.title('User Feedback Ratings')
plt.xlabel('User')
plt.ylabel('Rating')
plt.show()

```

## OUTPUT

```

Enter the customer ID (101 to 109):
102
AI Model Retrained with new data.
AI Model Optimized for speed and accuracy.
Chatbot response time improved.
Chatbot NLP capabilities enhanced.
User data synchronized across web, mobile, email, and social media.
API calls optimized for smoother and faster data retrieval.
Robust encryption implemented for data security.
Security testing performed to ensure data integrity and privacy.
Load testing performed to handle increased user traffic.
Performance metrics collected: {'response_time': 0.1, 'system_stability': 99.99, 'error_rate': 0.005, 'data_processing_capacity': 1500}
User feedback gathered: [{'user_id': 101, 'rating': 5, 'comment': 'Great recommendations! Faster response!'}, {'user_id': 102, 'rating': 4, 'comment': 'Chatbot was helpful. Improved NLP.'}, {'user_id': 103

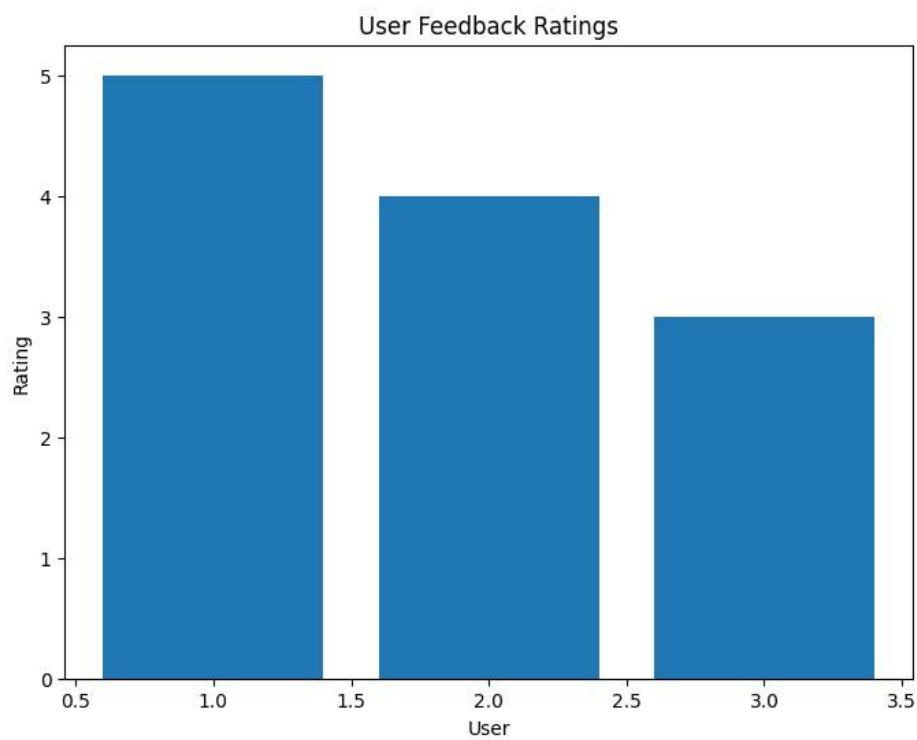
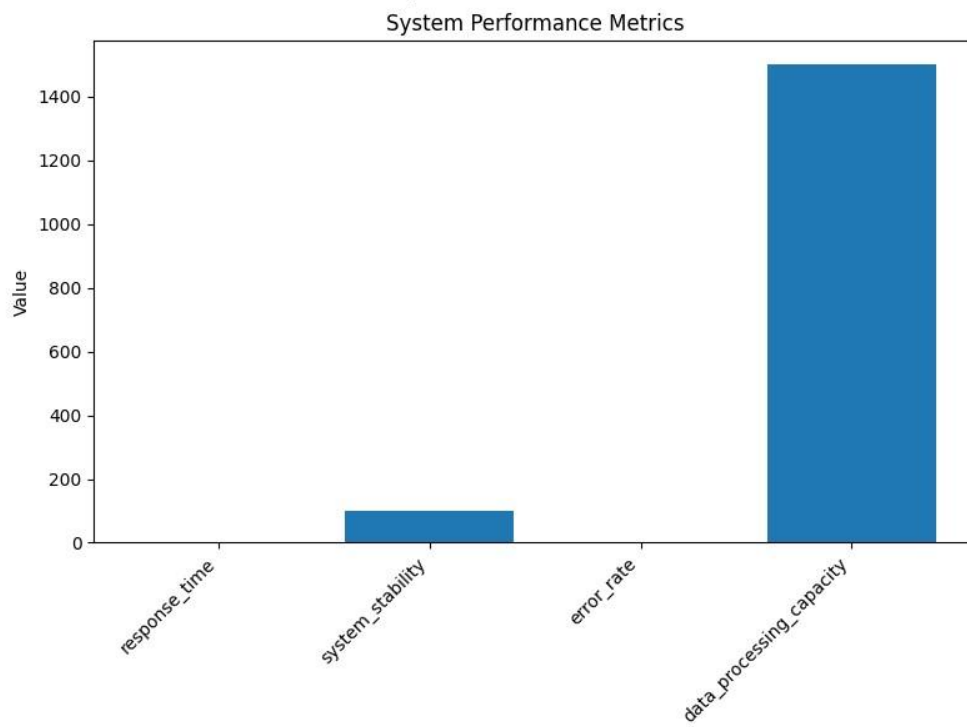
--- Recommendations for Customer 102 ---
['Product F']

--- Personalized Offers for Customer 102 ---
['Special offer on: Category Y products!']

--- Chatbot Interaction ---
Enter your chatbot query: help
I am here to assist you.

--- Marketing Consent Check ---
Customer 102 has NOT consented to marketing.

```



**GITHUB LINK :** <https://github.com/Deena0707/personalised-marketing-and-customer-experience.git>