Project Plan Presentation
Email Improvement Tool

The Capstone Experience

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Project Sponsor Overview

• Amazon was founded in 1994 by Jeff Bezos
• Started as online book marketplace and e-reader manufacturer
• Ranked second in Fortune 500 list & part of the Big Five American Information Technology companies
• Online global retailer and web services provider, owns over 100 subsidiaries
• Hosts over 6.3 million sellers & 150 million users
• Amazon’s #1 principle is customer obsession
Project Functional Specifications

• Goal: Improve quality of Amazon emails
• Compare new email templates to pre-existing email templates
• Provide instant feedback on email objective, clarity, and empathy
• Provide email summary and possible template duplicates
Project Design Specifications

- The app is a standalone web application
- Follows Amazon color scheme
- Email Analysis Page contains interactive dashboard
- Simple UI for quick use
Screen Mockup: Homepage

Email Improvement Tool

Paste in the body of your email to get started!

Enter email here...

Click submit to analyze your email and receive instant feedback.

Submit
Screen Mockup: Analysis Page

E-mail

Hello, Michael

Thank you for reaching out to us regarding your recent product inquiry. We appreciate your interest in our products and your feedback is important to us.

I'm delighted to assist you with any questions or concerns you may have. Could you please provide me with more details about the specific product you're inquiring about? This will help me give you the most accurate and helpful information.

Once I have more information from you, I'll be able to provide a more detailed response and address any concerns or questions you may have. Feel free to include any order or product details that could be relevant to your inquiry.

In the meantime, if you have any other questions or if there's anything else we can assist you with, please don't hesitate to let us know. We're here to ensure your experience with our products is as positive as possible.

Thank you for choosing our products, and we look forward to assisting you further.

Category: Requests

Select options below for more information

Empathy: Positive

Clarity: Very Clear

Summary

In response to the customer’s product inquiry, the email expresses gratitude for the customer’s interest and offers assistance. The email politely asks for more specific details about the product in question to provide accurate...

Possible Duplicates: 4
Screen Mockup: Summary Pop-Up

In response to the customer's product inquiry, the email expresses gratitude for the customer's interest and offers assistance. The email politely asks for more specific details about the product in question to provide accurate information. It assures the customer that any questions or concerns will be addressed promptly and encourages them to reach out for further assistance. The email concludes with a friendly tone, expressing appreciation for the customer's choice of their products and readiness to assist.
Screen Mockup: Duplicates Page
Screen Mockup: Duplicates Pop-Up
Project Technical Specifications

• React web application, supported by Node.js
• Leverages Amazon Web Services for deployment and cloud technologies
• Utilizes AWS SageMaker and Comprehend to make ML queries
• Data stored in NoSQL and DynamoDB
Project System Architecture

Full-Stack

Front-End: React.js

HTML, CSS, JavaScript

Back-End: Node.js

Cloud Services: Amazon Web Services

Amplify

API Gateway

Lambda

Artificial Intelligence/Machine Learning (AI/ML)

Comprehend

SageMaker

NoSQL Database: DynamoDB

S3 Bucket
Project System Components

• Software Platforms / Technologies
  ▪ **AWS Amplify** - Host web application
  ▪ **API Gateway** – Creates and manages the APIs for the lambda functions we will create
  ▪ **Lambda** – Creates functions that will manage events on our web app such as finding potential duplicates
  ▪ **SageMaker** – ML service used to classify the emails by category, determine clarity, and summarize
  ▪ **Comprehend** – NLP service used to analyze empathy/tone
  ▪ **DynamoDB** – Stores the summaries for future reference
  ▪ **S3 Bucket** – Stores the training/testing data for ML
Project Risks

• **Categorizing, Testing and Training Data**
  - Since there are 10+ main categories that split into 40+ sub-categories, we are unsure if we will have enough training data to accurately classify each sub-category.
  - We will continue to push our sponsor to give us the data we need and once received determine the best method for categorization. We may have to reduce the categories to the main 10+.

• **Data Storage**
  - Determining the optimal method for storing the data provided to us with the AWS services available to us.
  - Research and work with sponsor to learn more about the available storage methods and find which works best with our data.

• **Project Expense**
  - We have been provided a $100/month budget to use AWS services and we must stay below this figure.
  - We will implement cost-effective strategies with how we use the AWS services to stay below this monthly threshold.