Automated Review Rating System

Intoduction:

In the digital marketplace, customer reviews play a crucial role in shaping purchasing decisions. Automatically predicting the rating of a product based on its textual review has become an important task in sentiment analysis and natural language processing (NLP). This project adopts a transformer-based approach by leveraging the Bidirectional Encoder Representations from Transformers (BERT) model to predict numerical review ratings from text. BERT, a pretrained language model, is fine-tuned on customer review data to capture deep contextual relationships between words in both directions. The model learns meaningful semantic and sentiment patterns from raw text, enabling accurate mapping of reviews to star ratings (1–5). The effectiveness of this approach demonstrates the power of transfer learning and contextual embeddings in improving review rating prediction compared to traditional deep learning models.

Environment Setup:

To ensure smooth execution of the project and compatibility across systems, the following environment setup is recommended:

Python Installation

- Use **Python 3.10**+
- Recommended: Install Python via <u>Anaconda Distribution</u>
 Anaconda comes preloaded with most data science libraries and Jupyter Notebook support.

Required Python Libraries

The following libraries are essential for this project:

- pandas
- numpy
- matplotlib
- seaborn
- scikit-learn
- spacy
- tensorflow
- torch
- transformers

Install them using:

pip install pandas numpy matplotlib seaborn scikit-learn spacy
tensorflow transformers torch

Additional Setup

• Download the English NLP model for spaCy:

python -m spacy download en core web sm

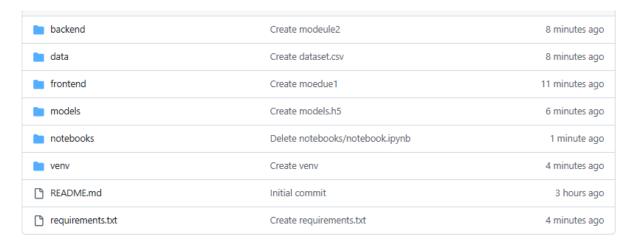
Github Project setup:

To manage version control and enable collaboration, a GitHub repository was created for the project.

Repository Name: https://github.com/hannafarsin/FullStack-Automated-Review-Rating-System

Folder Structure:

The project is organized using a modular structure to ensure clarity, maintainability, and scalability:



Initial Commit:

- Added base folder structure.
- Created an initial README . md with a short description of the project.
- Included requirements.txt for setting up the Python environment.

1.Data Collection:

The dataset used for this project was sourced from **Kaggle**, specifically from the **Amazon Fine Food Grain Dataset** dataset. The Amazon Fine Food Reviews

dataset is a comprehensive collection of customer reviews for fine food products sold on Amazon. It spans over a decade, from October 1999 to October 2012, and includes approximately **568,000 reviews**.

Dataset Overview:

- **Source**: Kaggle Amazon Reviews
- **Dataset Link:** https://github.com/hannafarsin/FullStack-Automated-Review-Rating-System/blob/main/data/kaggle/Reviews.csv
- Imbalanced Dataset Link: https://github.com/hannafarsin/FullStack-Automated-Review-Rating-System/blob/main/data/kaggle/fullstack-imbalanced-dataset.csv
- Format: CSV
- **Size**: 6,00,000+ reviews
- Key Columns:
 - o Review text: The main review written by the customer.
 - Rating (or overall): The star rating given by the user (ranging from 1 to 5).
 - Summary :Short review of the product

Purpose of Data Collection:

The raw data serves as the foundation for training an automated system that can predict a review's rating purely from its text. Since the original dataset is imbalanced (i.e., more 5-star reviews than 1-star), additional balancing steps were planned as part of the preprocessing.

2. Data Preprocessing:

2.1 Initial Data Inspection

Before applying text preprocessing techniques, the dataset was examined for structural issues:

Checking the shape:

df.shape

(568454, 10)

Missing (null) values:

Columns like reviewText, Rating were checked.

df.isnull().sum()

```
Ιd
                             0
ProductId
                             0
UserId
ProfileName
                            26
HelpfulnessNumerator
                            0
HelpfulnessDenominator
                            0
Score
                             0
Time
                             0
Summarv
                            27
Text
                             0
```

Text with null values are removed were removed.

```
df.dropna(subset={'Summary','ProfileName'},inplace=True)
df.isnull().sum()
```

```
Ιd
ProductId
                           0
UserId
ProfileName
HelpfulnessNumerator
                           0
HelpfulnessDenominator
                           0
Score
                           0
Time
                           0
Summary
                           0
Text
```

2.2 Text Cleaning and Normalization:

In this step, the raw review text was cleaned and standardized to reduce noise and prepare it for further processing.

#1. Pre-split cleaning: punctuation, emojis, spaces

```
def basic clean(text):
  text = str(text).lower()
  text = re.sub(r'[' + string.punctuation + ']', ", text)
                                                       # remove punctuation
  text = re.sub(r'[^\x00-\x7F]+', '', text)
                                                      # remove emojis / non-ASCII
  text = re.sub(r"http\S+|www\S+|https\S+", ", text, flags=re.MULTILINE) # remove URLs
  text = re.sub(r'<.*?>', '', text)
                                                # remove HTML tags
  text = re.sub(r'[^a-zA-ZO-9\s]', '', text)
                                                     # remove special characters
  text = re.sub(r'\s+', '', text).strip()
                                                  # remove extra spaces, tabs, etc.
  return text
df['review text'] = df['review text'].apply(basic clean)
df['Summary'] = df['Summary'].apply(basic clean)
```

Cleaning Steps Applied:

1. Lowercasing

```
text = str(text).lower()
```

- All text was converted to lowercase to maintain consistency.
- Example:

```
"This PHONE is Great!" \rightarrow "this phone is great"
```

2. Removing URLs and HTML Tags

```
text = re.sub(r"http\S+|www\S+|https\S+", ", text, flags=re.MULTILINE) # remove URLs

text = re.sub(r'<.*?>', ", text) # remove HTML tags
```

- Any embedded links or HTML elements were removed using regular expressions.
- Example:

```
"Check it out: \langle a \text{ href='...'} \rangle \text{Link} \langle /a \rangle " \rightarrow "check it out"
```

3. Removing Emojis and Special Characters

```
text = re.sub(r'[^\x00-\x7F]+', '', text) # remove emojis / non-ASCII

text = re.sub(r'[^a-zA-Z0-9\s]', '', text) # remove special characters
```

- Emojis, symbols, and non-ASCII characters were stripped from the text.
- Example:

4. Removing Punctuation and Numbers

```
text = re.sub(r'' + string.punctuation + ']', '', text) # remove punctuation
```

- Punctuation marks (e.g., ! ? , .) and digits were removed to simplify the text.
- Example:

```
"Rated 10/10!!!" \rightarrow "rated"
```

5. Check Duplicate values after text cleaning:

```
df.duplicated().sum()
```

173916

Remove duplicate values(keeping only first Review Text)

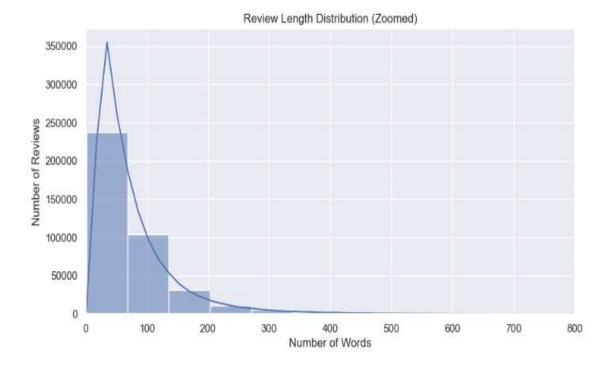
```
#drop duplicated now
df= df.drop_duplicates(keep='first')
```

```
after the removal of duplicates dataset size changed to (394485, 3)
```

6.Checking Duplicates(same review different ratings)

```
# Find reviews with more than 1 unique rating
conflicting reviews text = (
  df.groupby('review text')['Rating']
   .nunique()
  .reset index()
# Keep only those with more than 1 unique rating
# Group and filter for reviews with more than 1 unique rating
conflicting reviews = df.groupby('review text').filter(lambda x: x['Rating'].nunique() > 1)
# Print them sorted for easy comparison
print(conflicting reviews.sort values('review text').head(10))
review_text
                                                                  Rating
a few years ago my cat was diagnosed with food...
a few years ago my cat was diagnosed with food...
a ming dynasty ad 1368 1644 creation believed ...
                                                              4
a ming dynasty ad 1368 1644 creation believed \dots
after trying both the chipotle as well as the ...
                                                              5
after trying both the chipotle as well as the ...
                                                              4
By checking the conflicting reviews we got 269 reviews and we removed it for further preprocessing
# Group by review text and check if more than 1 unique rating exists
conflict mask = df.groupby('review text')['Rating'].transform('nunique') > 1
# Keep only non-conflicting rows
df no conflict = df[~conflict mask]
print("Original size:", len(df))
print("Without conflicts:", len(df no conflict))
Original size: 394485
Without conflicts: 394216
```

7. Review Length Filtering



- Very short reviews (fewer than 2 words) and excessively long ones (e.g., over 500 words) were removed.
- This helped eliminate outliers and non-informative entries.

Justification for Review Length Filtering

The histogram above illustrates the **distribution of review lengths** based on word count. It shows a **heavily right-skewed distribution**, where:

- The **majority of reviews contain fewer than 300 words**, with a sharp peak under 50 words.
- A **long tail of outliers** includes reviews with extremely high word counts, some exceeding **3500 words**.

To improve data quality and processing efficiency:

- **Very short reviews** (less than 2 words) were removed, as they offer limited semantic information.
- Excessively long reviews (e.g., over 500 words) were filtered out to eliminate outliers that may introduce noise or slow down training.

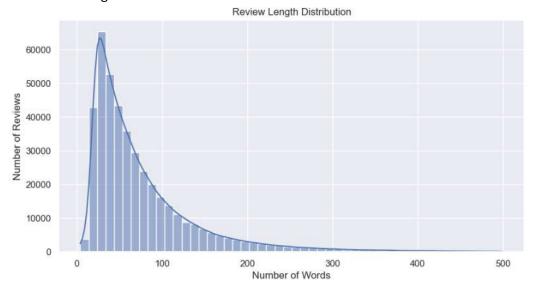
This step ensures a more **uniform distribution**, making the dataset more suitable for vectorization and model training.

After Filtering:

- Very short reviews (fewer than 3 words) and excessively long ones (e.g., over 350 words) were removed.
- This helped eliminate outliers and non-informative entries

```
df_filtered = df_cleaned[
  (df_cleaned['review_length'] > 2) &
    (df_cleaned['review_length'] <= 500)
]
print("Before filtering:", len(df_cleaned))
print("After filtering:", len(df_filtered))</pre>
```

Before filtering: 394216 After filtering: 392862



After applying the text cleaning and length-based filtering:

- Reviews with fewer than 2 words and those with excessive lengths (over 500 words) were removed.
- The remaining dataset shows a **more uniform and meaningful distribution** of review lengths, as visualized in the updated histogram above.
- Most reviews now fall between **10 to 150 words**, providing enough context while avoiding noise from overly short or verbose entries.

3. Creating a Imbalanced Dataset

Why Imbalance the Dataset?

In real-world applications such as online review systems, customer feedback often follows an **imbalanced rating distribution**. For instance, most users tend to leave 4-star or 5-star reviews when they are satisfied, while only a small fraction leave 1-star or 2-star reviews when dissatisfied.

Building and evaluating models **only on balanced datasets** can lead to overly optimistic or misleading performance metrics. In contrast, using an **imbalanced dataset during evaluation** helps to:

- Simulate real-world conditions
- Reveal how the model handles rare classes (like 1-star ratings)
- Uncover biases toward majority classes (e.g., 5-star reviews)
- Validate the robustness of models trained on balanced data

The Challenge

In imbalanced datasets:

- Classifiers tend to favor the majority class
- Metrics like **accuracy** become less reliable (e.g., always predicting "5-star" gives high accuracy)
- Minority classes are underrepresented, yet are often the most important (e.g., critical feedback)

Rating Distribution across 1 through 5 stars are:

df_filtered['Rating'].value_counts()

Rating

- 5 250500
- 4 55770
- 1 36250
- 3 29632
- 2 20710

As shown, over **60% of the reviews** are 5 stars, while the 1- and 2-star reviews together make up **less than 15%**. This imbalance is typical in real-world data but can lead to models that underperform on minority classes (e.g., 1- and 2-star reviews). To simulate and analyze the impact of a controlled imbalance, we constructed a **custom imbalanced dataset** consisting of **1,00,000 reviews**, following the distribution:.

Imalancing Strategy:

To simulate real-world bias and evaluate model robustness under class imbalance, we constructed a **custom imbalanced dataset with exactly 10,000 reviews**, using the following rating distribution:

Rating % of Total Sample Count

| Total | 100% | 100,000 |
|-------|-------|---------|
| ☆ 5 | 20% | 2,0000 |
| ☆ 4 | 30% | 3,0000 |
| ☆ 3 | 23.5% | 2,5000 |
| ☆ 2 | 16.4% | 1,5000 |
| ☆ 1 | 10% | 1,0000 |

Code:

```
#imbalanced dataset distribution strategy
# Define target class counts for imbalance
target counts = {
  1: 12600,
  2: 20710,
  3: 29632,
  4: 37775,
  5: 25184
# Sample from remaining dataset based on distribution
df imbalanced = pd.DataFrame()
for rating, count in target counts.items():
  subset = df remaining[df remaining['Rating'] == rating]
  sampled = subset.sample(n=count, random state=42)
  df_imbalanced = pd.concat([df_imbalanced, sampled], axis=0)
# Shuffle final imbalanced dataset
df imbalanced = df imbalanced.sample(frac=1, random state=42).reset index(drop=True)
# Step 7: Save to CSV
df imbalanced.to csv("deep imbalanced dataset.csv", index=False)
# Optional: Check counts
print("Imbalanced class distribution:\n", df_imbalanced['Rating'].value_counts())
Imbalanced class distribution:
 Rating
     37775
4
3
     29632
     25184
2 20710
     12600
```



The bar chart above confirms that the dataset has been successfully balanced. Each rating class (from 1 to 5 stars) now contains exactly **2,0000 reviews**, ensuring equal representation across all categories.

This balanced distribution addresses the skew present in the original dataset and helps:

- Prevent model bias toward majority classes
- Improve accuracy for underrepresented ratings
- Ensure fair and consistent performance during training and evaluation

This clean and uniform dataset is now ready for final preprocessing and modeling steps.

Display the statistics of the word count after balancing:

```
Df_imbalanced['word_count'] = df_imbalanced['review_text'].apply(lambda x:
len(str(x).split()))
  #display the statistics of the word count
  min_word_counts = df_imbalanced.groupby('Rating')['word_count'].describe()
  print(min_word_counts)
```

| count Rating | mean | std | min 259 | 6 50 | % 7 | 5% | max | |
|-----------------|---------|-----------|-----------|------|------|------|-------|-------|
| 1 | 12600.0 | 78.237619 | 62.497398 | 5.0 | 36.0 | 60.0 | 98.0 | 496.0 |
| 2 | 20710.0 | 85.778513 | 67.255962 | 6.0 | 39.0 | 66.0 | 109.0 | 499.0 |
| 3 | 29632.0 | 91.213890 | 73.107557 | 5.0 | 40.0 | 69.0 | 118.0 | 500.0 |
| 4 | 37775.0 | 86.542634 | 71.288141 | 6.0 | 37.0 | 64.0 | 111.0 | 499.0 |
| 5 | 25184.0 | 71.448499 | 60.951134 | 7.0 | 32.0 | 52.0 | 88.0 | 500.0 |

Display Sample Review per Rating

```
# Loop through each rating
ratings = sorted(df imbalanced['Rating'].unique())
for r in ratings:
  subset = df imbalanced[df imbalanced['Rating'] == r][['review text',
'Summary']].drop duplicates()
  print(f'' \mid n = = = = Rating \{r\} = = = = = ")
  # Print first 15 unique pairs
  for i, row in subset.head(30).iterrows():
     print(f"Review: {row['review text']}")
     print(f"Summary: {row['Summary']}")
    print("-" * 50)
```

==== Rating 1 =====

Review: zico used to be my coconut water of choice when i first saw the new packag ing i was excited that it would be easier to close and store i was shocked when i tasted it it is not the same product the taste really turned me off ive since swit ched to one coconut wateri also determined that the new bottle size is too big of a serving i like to drink coconut water before going to the gym because ive found it helps with endurance it is not as convenient for me to carry the larger by abou t 3 oz bottle especially since i cant finish the entire thing in one sitting Summary: bad product update

Review: this tastes nothing like coffee and you cant return it even adding creamer doesnt help the risk wasnt worth it

Summary: horrible

Review: dont believe you are getting tippy golden assam as the picture on the box suggestsonce again i was deceived in believing that the little picture on the box is the actual end product i will be getting this is the second time the tao of tea had me fooled with misleading good looking picture of full leaf tea on the box onl y to discover extremely low quality leaf inside the boxthis assam is pretty bad Summary: this assam is pretty bad

Review: corn and soy make up the bulk of this product and are two of the worst all ergens for dogs in addition you have cheap fillers like brewers rice and meat bypr oducts which are low quality ingredients please do your pet a favor and purchase t hem a healthier dog food

Summary: terrible quality dog food

Review: ive tried the roland sun dried tomatoes in garlic and olive oil previously and they were good i thought i would try these next i ordered these a couple of mo nths ago and decided to open them up and put these in a salad one bite and i spit them out these tasted like plastic and i was concerned that i was going to get poi soned i dont know if being vacuum packed in a thick plastic bag is the best thing the whole 5 lb bag is sitting in my outside garbage my money was wasted which is a shame since ive tried other roland products and have been very pleased especially there balsalmic glaze

Summary: bad these are just bad

Review: i place an order for this kit on december first and was told it should arr ive on the 6th ive not received my product not heard from the manufacturers not ab le to find a number or anything for me to contact them and want this product for my brother for christmas so if anyone could help me i would appreciate it this is my first time every using amazon before as well not such a good first impression Summary: where is it

Review: dont surprised if they mess up your order then give you a hard time about ...

it

Summary: bad news

Review: my puppy loves greenies pillpockets as a regular treat when i first discov ered this it was at the vets office and they used the beef flavored ones eventuall y i decided to see how she would like the duck and pea flavor but when i opened the bag the odor from these treats made me my roommate and my boyfriend gag even the dog was less excitedand she loves and i mean loves the beef pill pockets i set out one of each just to see what shed go for and my vacuum cleaner of a dog went straight for the beef shell eat the duck one but only if thats the only thing available i had planned on trying the chicken flavor at some point too but after this i think well be sticking with beef

Summary: worst smelling treat for dogs

Review: i always order this coffee on thursday and get it delivered prime by satur day last thursday i ordered it and they had taken away prime and charged me 700 sh ipping it is wednesday and i am still waiting for my coffee i will not order again unless they prime ship again

Summary: great coffee but what happened to prime shipping

Review: the bags in this variety pack are not big grab bags as stated in the title the value of this product is far less than it would have been if these were actual ly the much larger big grab bags these small 1 oz bags can be purchased for 2025 c ents each at various warehouse clubs no bargain here

Summary: bags are the small 1 oz bags not big grab bags

Review: this is supposed to be a pretty basic and standard cup of coffee for the k rups machine but was undrinkable i will take green mountain coffee over this any d ay even my husband who is not picky with his coffee at all could not drink this he even tried putting creamer and sugar and could not disguise the taste

Summary: basic disguistgo green mountain

Review: i just had this stuff for lunch and its terrible the noodles are okay the dehydrated vegetables were fine not as many as pictured though but the sauce is so gross it tastes nothing like teriyaki it also smells like crap im getting sick just from the smelli took one bite and that was it not buying this product ever again ill stick with ramen thank you

Summary: gross

Review: im a big fan of the wolfgang puck chicken and egg noodle soup so i decided to try this there were about 7 tiny pieces of dumpling 2 tiny pieces of chicken an d maybe 12 tiny pieces of carrots expect to be very hungry after eating a can of this

Summary: 90 liquid

Review: first and foremost i would suggest taking juice plus to anyone as ive always benefited from its health benefits over the past 15 yearsmy problem is with the seller salk trading of ky my reasoning is juice plus always arrives in boxes with a 3 month supply in each box salk trading advertised juice plus on amazon for 4999 would be a great deal for a 3 month supply as its usually 100 i purchased 2 orders

for 9998 thinking i would be getting a 6 month supply much to my dismay a 2 month supply arrived for my 100 which is a 33 mark up on the regular price seems as if s alk trading buys juice plus repackages it in smaller quantities advertises at 50 o ff on amazon and then sells at a 33 mark up do not buy juice plus from salk its a rip off and seems unethical

Summary: geat product beware of seller mark up

Review: this brownie mix was so very disappointing and ive been eating lowcarb for years so my expectations are pretty realistic to begin withfirst was the amount of butter a whole stick so in this case as is so often true low carb does not mean he althy next was the cooking method a water bath in the oven baking pan inside a pan of water is a little complicated for a box brownie third is how it comes out of the oven greasy and flat about a half inch tall and it separates into a mealy bready layer above and a slab of greasy goo below its a complete mess to get out of the p an plus it tasted lame it ranks among the worse sugarless chocolate flavors out the erefinally the very high amount of sugar alcohols means that if you have a sensiti vity to the stuff you will definitely react to this i had one brownie and my bodys reaction was violent painful and disgustingthere was not one positive thing about this mix

Summary: terrible on several levels

Review: these noodles took a long time to arrive and i was surprised to discover t hat they were made in the usa my surprise because they tasted awfully stale to the max and the flavor packet was pure salt no flavor what so ever the stale taste sta ys in your mouth for the rest of the day as well the packages did have an expirati on date printed on them of june 12 2009 i was very disappointed i cannot really se e myself purchasing these again

Summary: stale and annoyingly salty

Review: i bought this product because it had an allergy allert but it forgot to me ntioned that it is manufactured in same facility with other nuts and that it might contain eggs we have a person with peanut and egg allergy at home and ended up having to call rescue after two bitesout of the 6 cans we only opened 3 and they were all melted or brokenterrrible

Summary: cross contamined with peanutsnuts or eggs

Review: caught none in fact there was a yellow jacket nest being built about 6 fee t from it raid did them in

Summary: doesnt work

.....

Review: want the truth these noodles smell like fish and taste like raw squid wick

ed gross save your money this is the truth

Summary: terrible

Review: let me tell you from experiencedo not give these to ur small dogs i have s pent hundreds of dollars on dental on my four sheltiesi repeat do not give these t o small dogs if i could prove it i would sue themjust a kind word of advise

Summary: broken teeth

Review: i am not a happy camper this website says pure xylitol what did i get a bo x of packets that say xylitol plus which is xylitol and stevia and most of the tim e i find stevia to be nasty so now i likely have to throw this whole box away and i am pissed this seller is not worth your time go to your local health food store where you can hold the box you want in your hands

Summary: untrue

Review: cheap packaging sent to my father and arrived in an envelope type box with a flimsy plasic bag that had apparently been opened already disappointing as this was a gift

Summary: disappointing arrival

Review: i was so excited about this baby food maker but the capacity is tiny it wo uld take all day to steam the amount of food that i make all at once i have stoppe d using the steam option completely i just steam food on my stovetop i have more c ontrol over the doneness that way and i dont have to worry about cleaning the rese rvoirthe cord comes out of the bottom and there is a tiny groove for it to fit und er the baby food maker but it doesnt fit well you have to push the cord into that slot other wise the appliance is unstablethe lid doesnt fit well and it is always a chore getting it on tight i filled up the canister just a little over half way w ith chicken noodles and broth turned on the processor and was splashed in the face with hot liquid if you fill the canister more than half full you have a mess Summary: i got burned by hot food the lid doesnt fit

Review: i have always been impressed with shippinghandlingdelivery of every pkg i have received from amazonand there have been hundreds in all departments so when t his candy arrived in a beatup huge box along with my other order of 6 bags of carm el corn with no paddingi was shocked the belts actually looked like they were pull ed off a factory conveyer belt by the handful and thrown into a cheap clear garbag e bag that was full of sugar wadded at top then halfway heat sealed along with wha t used to be carmel corn but now looks like corn meal from having been bashed by 6 6 of the candyi was shocked there was sugar everywhere everytime i moved box or ba gs that sugar was on me the floor table sofa what made matters worse the 6 bags of carmel corn were heat sealed in to a large plastic bag so when you opened the big bag each small bag was now stuck to it had to be cut out since they were smashed i nto nearly a corn meal it leaked out follwed the fate of the sugar there was no in voice insidethe label on candy was heat scorched ripped this left me not knowing a nything abt the candywhere it came from exp date and no one or to callim hoping an amazon official will read this make things right i love shopping this sight have n ever left a bad review but then again ive never had my foyer living rm myself cove red in sugar popcorn crumbs i hope no one else had to experience this fate but if you did please state so this way amazon can track this bad shipment packer down el iminate this problem

Summary: hard wadded up dried up arrives in a trash bag

Review: several veterinarians have reported cases where dogs have developed sympto ms of kidney failure fanconis syndrome similar to dogs who have been poisoned by c hinesemade chicken jerky treatsthe brands implicated include beefeaters sweet pota to snacks for dogs canyon creek ranch chicken yam good dog treats dogswell veggie life vitality

Summary: afraid to buy warnings issued by vets online

Review: tea is very subjective if you are looking for a tea that does not taste like rooibos but more like black tea then this may be perfect for you as a forty something afrikaner who has drunk tea his whole life im not a big twinings fan numi is an easy to find brand of rooibos teabag and i much prefer the flavor to the twin ings offering if you want the tea bags they buy and drink in south africa buy the freshpak here on amazon if you want real tea youll need a kettle and a tea pot if use 3 tablespoons of davidsons organic rooibos in a 131 pre heated teapot making the tea with freshly drawn boiling hot 212f100c water and a swissgold filter let sit under a tea cozy for 5 minutes then you will taste a true cup of rooibos made right

Summary: not my cup of tea

Review: i really wanted to like this but i couldnt stomache it whatsoever it liter ally went down the drain like my money

Summary: undrinkable

.....

Review: this dogfood is like candy to the dogs they love it but it is not necessar ily safe or healthy the soy protien in this food gives them horrible gas its not j ust irritating for the owner i mean i have my dog on my lap all the time but serio us can be detrimental to your dogs health gas yes they will gobble it up and beg f or more but i decided it was not good for my two small dogs as many other reviewer s have already renumerated in more detail the reasons why this is just not good i wont say more but i am very picky about what i give my dogs they are part of my fa mily and if there is a hint of doubt i wont give it to them the gas thing cannot be good purina is a reputable company so use your own judgement this is just my opinion

Summary: sorry i cannot recommend this dog food

Review: we bought this kikkoman plum sauce from our grocery store it was for a hun g roasted whole duck from the local asian market this duck was as good as duck ive had in hong kong we made our own pancakescrepes hong kong style we cut fresh green spring onionswe tasted this sauce before ruining our duck the sauce was absolutely the worst bad flavor bad smell not real plum sauce its mostly bad soy sauce we ret urned it bad stuff

Summary: kikkoman plum sauce

Review: i bought some to try cause of the health benefits ive heard that this is o ne of the healthier kinds of tea i dunno guess im just not a puerh person it taste d awful to me smelled funky too i would not reccomend it unless youre a very serio us tea drinker

Summary: healthy but tastes pretty bad

===== Rating 2 =====

Review: first of all its important to be aware that 16 disks means 8 chocolate and 8 creamer so there are only 8 servings in this packagei found the drink to be less than hearty much prefer suchards product

Summary: milka more watery than milky

Review: i am in cat rescue and have 20 plus cats in my care at any given time i ha ve been buying innova dry cat food for my cats for about 5 years now the cats love it and it has always seemed a good healthy choice for me to buy recently the food quality has taken a nose dive last month two out of the eight 15 lb bags i buy mon thly were so crumbly that half of the bag was nothing but powder i returned those bags to the merchant and waited a week for them to receive a fresh supply with a d ifferent lot number and expiration date and those 2 bags were also crumbly i have left messages for the manufacturer natura pet to call me with no reply at this poi nt i am searching for a replacement food for my cats and you can bet it will not be manufactured by natura pet due to their unresponsiveness to the problems with their product

Summary: food is crumbly and natura unresponsive

Review: the portion is really small it might work for a toddler we opened a pack w ith our family of 5 present and it looked so unappetizing no one really wanted to taste

Summary: small portion not appetizing

Review: like many of you my budget had taken a hit during the great recession aiming to save a few dollarsi bought the gunpowder green tea which is admittedly very reasonably priced the tea was so muddyin flavor the first time i brewed it that i ended up changing my water filter that helped a little stillthe tea remained unusu ally muddy despite it being green tea there was little of the familiarseaweedy grassy notes and more of a darker earthier taste as well as a strong vegetal component for a few dollars more the monkey king jasmine green is far superior its clearer in flavor and farmore delightful

Summary: mild but muddy

Review: while numi tea is my favorite brand for years even when my budget is tight this product is mostly a bag of dried fruit roadkill filler with a slim tease of b lack tea holding 1 pound bag in my hand its a real disappointment dont you love mi sleading labels

Summary: black tea content is probably less then 20

Review: nice packaging makes one imagine rich vanilla flavor upon opening this jus t smells rather thin a sense reinforced when actually brewed very thin vanilla fla vor id say delicate but a more appropriate term would be weakbut the coffee isnt w eak if youre into starbucks fare this wont disappoint since im not into starbucks fare i subscribe to the narrative that theyve hoodwinked the country into blithely accepting the fallacy that strong acidicbitter coffee is primo which it isnt i was nt surprised by the rather nasty aftertaste that not even 34 sugars per cup can ma ski love strong coffee but good coffee can be strong and not offensively acidic wi th a bite at the end of the quaff that can peel tastebuds off its all in the beans and the roast i dont know why starbucks foists off fare like this on the public oh yes i do because it sells to those who dont know betterand i see were down to 11 y es eleven oz pounds of coffee why send 2 packages of 11 oz 2 x 11 22 when one coul d just put it all into a true pound and a half 24 oz bag it just makes no sense th e packaging costs are higher and its hardly more environmentally friendly this way when i tell people i used to live in seattle they frequently say oh you must have gone to starbucks all of the time only when i had no other choice is my response i f one is willing to pay boutique prices for coffee one can do far better in fact e ven if one is not willing to pay boutique prices for coffee

Summary: met expectations sadly

Review: i downed a bottle of this in about two minutes and man was i glad that i t ried this at home it gave me a feeling within minutes like i was in the twilight z one or some horrible nightmare like the walls were moving farther and farther away this only lasted for about ten minutes then i actually started to feel stoned it w as like i smoked some illegal green herb and did a few shots of espresso on top of it it was very nice for about an hour then the terrible part happened the crash it felt like i had a few glasses of wine and then took a short nap like a mild hangov er if you want to try it try it at home i am not messing with this stuff again Summary: what a bad trip

Review: the item came in a reasonable time so i was happy about that the package w as completely damaged and falling apart which could have been the postal services fault the product had expired almost a month prior the item seems like a really go od one in which i hope to try and have a better experience next time

Summary: damaged and expired

Review: i agree with all the other reviewers who say these are just like regular b rownies with a rich chocolately flavor and great texture i agree they taste great and go down really easily however its what they do to your body after eating them that i object to you will get really awful gas its not just me it happened to my e ntire family my husband and both boys teenagers not pretty i dont think it was the sugar alcohol that caused the problem but what was it who knows i am so glad i did nt go crazy and buy a case before i checked them out just be cautious

Summary: i really wanted to love these

Review: i found jeremiahs pick kona blend lacking flavor i tried every trick i kno w to bring out all the taste it had but still found it weak

Summary: kona blend lacks flavor

Review: in the description again when i ordered this ib jan 09 they had a pretty l ittle picture making it look wholesome the box that arrived is colored white rock

candy their wordsand definately not from europe i was looking for a nonrefined pro duct euro grocer lost this customeredit to add that when i posted this review it w as called sugar not candy i was seeking the gourmet sugar crystals that are served by high end caterersedit 2012 when i purchased this it was sold by another seller and was advertised as natural sugar i see that this seller is upfront about what the item is and commend them for it

Summary: read the legal disclaimer

Review: i just tried the snackwell fudge drizzle caramel popcorn for the first tim e and was not impressed at all you get 130 calories for a small serving the taste is nothing special and is not as tasty as a box of cracker jacks it is loaded with sugar and the price for for you get it ridiculous do yourself a favor and stick wi th nutritional snacks they are much less expensive less calories more nutritious a nd better tasting just because a product is marketed as nutritious or low calorie doesnt make it so read the fine print and be smart this is a product you should pa ss onif you get the craving for popcorn make it yourself you will save a bundle of money and it will be better tasting and more nutritious pass on this product unles s you are a junk food junky with money to spare

Summary: overpriced junk food

Review: whenever you buy these types of microwave meals you go into it not expecting much often theyre not very flavorful and the pasta tastes llike cardboard well this product didnt disappoint the sauce was rather bland and eating the noodles was like eating paper quite honestly i would never try this again

Summary: not very tasty

Review: i bought this for my miniature pinscher and she really loved it she didnt lose interest in it but she ended up eating the bones on either side of the toy be fore finishing the treats she only weighs 9 pounds so if anything this could be us ed for a chihuahua my dog never chews up any of her toys so this one wasnt very go od we used it for about a week before throwing it away

Summary: doesnt last long

Review: amazon had featured the peloponnese whole kalamata olives in the same type of tubs these were delicious then they stopped having those in stock and only offe red the pitted olives trust me if youve tasted the whole olives you wont be willing to eat these because the pits are removed the olives soak up far far more of the brine instead of a firm meaty bite you end up with most of the olives being shrive led and soft like a fruit that has started to go bad and while no one expects oliv es to be lowsodium the pitted ones soak up so much that some of them actually tast e as though you placed a teaspoon of salt in your mouth i think this brand has som e of the highest quality and flavored olives when you buy them whole the pitted on es were such a disappointment i threw the remainder away please amazon bring back the whole olives meanwhile i have gone back to my supermarket as source

Summary: bring back the pits

Review: i love the pink grapefruit flavor of this brand so thought id try the othe r flavors this one tastes good at first but leaves a really nasty aftertastecant r ecommendtry the pink grapefruit flavor though that one is delicious with a real grapefruity flavor

Summary: nasty aftertaste

Review: before buying this i bought the blue wilderness brand my cat loved it when she was starting to run low i visited the pet store to find this blue buffalo spa select on sale it had very good reviews so i thought why not give it a shot i slow ly mixed her original food with this one to transition her once she was just solel y eating this she got diarrhea oh it was a mess to clean up and i noticed she also had gotten dandruff while being fed this food too i felt so bad for my kitty becau se i was trying to feed her a healthy food and also save a few bucks it made her s

ick i felt so guiltydespite it being on sale this is not cheap food to have to thr ow away also this food smells quite unpleasantly strong really had high hopes for this very much wanted to like it we are back to the blue wilderness chickenformula and everything is great again

Summary: gave my cat diarrhea dandruff

Review: i bought this expecting the powdered form as it specified and ended up pay ing for a product i cannot use the two granulatedwhich this is and powderedwhich i t clearly is not are not interchangeable within recipes i felt like i was tricked into buying the wrong product

Summary: powdered and granulated not interchangeable

Review: at least 13 of every box came in bits and pieces appears that shipping the m this way is more damaging the when you buy them in a store like whole foods

Summary: crumbled crackers

Review: this product does not work we tried this about a dozen times with differen t amounts of coffee and just couldnt get a strong enough cup of coffee it was very thin if you pack it too much it clogs your coffee maker and you need to take it ap art to clean it out waste of money we have found the filters work in a different r eusable k cup holder and do make cleaning it out much easier

Summary: just doesn't make a good cup of coffee

Review: im really not a coffee snob and only drink about 1 cup or so a day but this coffee was not so great i do not like strong coffee but found i needed to use two pods for an 8oz cup and it still had a watery taste even though the coffee in the cup was very dark and appeared rich tasting i wish they made a reusable pod for my hamilton beach model 49970 so i could grind my own coffee i cannot recommend the is coffee very disappointed im going to try a different blend and hope for a better cup of coffee to start my day boohiss on this one

Summary: meeehhh not so good

Review: i dont know if the people giving this product rave reviews have had little exposure to other coffees or what but this is not the best coffee i am disappointe d in the aroma and flavor i have had much better ground coffees right off of the g rocers shelf now im stuck with a 32 ounce bag of coffee beans i dont enjoy i wish i had listened to the negative reviews live and learn

Summary: wish i hadnt listened to the rave reviews

Review: this buckwheat is tasteless compared to russian buckwheat only good thing is that it is organic will not order again

Summary: tasteless

Review: mmmmm no the first 2 ingredients are corn meal and the notorious chicken by product meal this is one of those things that has a name that makes it sound good but its really not we try it occasionally when we cant find our preferred foods us ually proplan which is in the same price arena but occasionally the fancier kinds and it makes our dog a 60ishlb hound mutt poop like crazy each time she usually go es only 12 times each day but when she eats this she gets the runny poops and goes 5 times a day or more cant be making her feel awesomei was told by a friend years ago that his vet told him that beneful is like potato chips for dogs and i believe it tastes great im sure but not a whole lot of goodness in there also as other commenters have said the suggested serving size of this is larger than for better dog food so if you follow those rules the savings isnt as great as youd think

Summary: there are way better options

Review: it smells like beer and doesnt taste like soy sauce to me i ended up with a really upset stomach and nausea soon after eating my family will stick with lach oy soy sauce which is naturally gluten free

Summary: not the best

Review: i was going to order this for my little shihtzu but knowing how picky he is i bought a can from the local pet store first glad i did because sheldon would heave nothing to do with it the chunks in it are huge for a little dog so i cut them up but he still would only sniff it and walk away disappointing because i see now that they have the smaller cans i would have bought for him not sure if the pieces in those are smaller as well but it doesnt really matter he wont eat it

Summary: not a keeper here

Review: this 250g package is really quite a small package for which i paid over 10 on amazonbecause it specifies a european weight measure i was not prepared for how small this package isi wanted to give this item as a gift but will now have to add other items to my giftsubstantially overpriced in my opinion

Summary: quite expensive item

Review: i purchased this product because i love the flavor of smoked foods and goo d mustardthe namejack daniels hickory smokedwhoa sounded great unfortunatley the s moke flavor is too subtleand flatthere is also quite a bit of sodium per serving n ow i am stuck with 5 bottles languishing in my pantry maybe i will try making salad dressing

Summary: subtle smoke

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Review: saw this on dr oz so of course i had to try it bitterbitter bitter only way you could eat it was mixed with yogurt anddid it help increase my metabolism like dr oz said it would very doubtful

Summary: bitter taste

Review: i had previously bought the lomo iberico which was approximately 80i bough t this one because it was a lot cheaper and campofrio is a known brand in spaini w as disappointed because it was very hard which made it difficult to cut also the l omo had a deep fold across the length of it a small fold is normal which coupled w ith the hard texture made it difficult to serve to guests even the fat around the edges was hardthe flavor was good but it was not excellentnext time i will buy the iberico again yes its more expensive but its smoother has better flavor and a lot easier to cut and prepare for serving guests

Summary: very hard but flavor is good

==== Rating 3 =====

Review: im a lowcarb lifer who also is a certified chocoholic so ive tried most of the lowcarb sweets on the market i purchased a full box of these so i had a chance to live with them for several weeks i have to wonder if the other reviewers callin g this great chocolate have ever actually tried anything beyond hersheys because w hile its perfectly edible it is very far from great have you ever had one of those cheap chocolate bunnies they sell around easter they cost 2 and taste like very ch eap chocolate thats exactly what this tastes like again its not horrible and its p erfectly edible but using the word great when describing this chocolate is like us ing the word great when describing a chevy cavalier automobile its entirely inaccu rate this tastes like cheap chocolate but for what it is intended low carb eating without terrible stomach distress it does work but please dont buy this thinking y oure getting a wonderful chocolate experience its not even as good as a nestle bar and its like eating tree bark compared to recchiuti or fazer from finland or even godiva would i buy it again no id rather eat lindt 85 dark and take in 12 carbs of real chocolate but if i were forced to a life of sugarfree chocolate this would be acceptable

Summary: please stop calling this great chocolate

Review: this product is above most in quality the company that produces the product gives more validation that most others that the prodict is pure and the quality

is as specified

Summary: vitemin validation

Review: i usually buy my coffee from tullys at around 15 for 25 cups this package not only gives you a good variety but the coffee also tastes great and is a great

value

Summary: great value great taste

Review: i was surprised at how small the portions were when receiving these considering that when watching iron chef machiba cook with them he uses like 12 a kilo what i found out however is a little bit goes a long way a good product but in order for you to maximize your dollar i suggest ordering more than one item as the shipping was more than the items actual cost hence the 3 of five

Summary: first time cooking with bonito

Review: tastes like an iced coffee with a little sugar added its a little thin lik e a traditional ice coffee where the ice has melted to water it down a bit the cof fee flavor is probably a little light for most people who like dark bold coffee and probably a little dark for people who like light coffee its right in the middle its not exceptional but tastes fine

Summary: tasty if slightly thin iced coffee

Review: we loved the kona we had in hawaii last year and subsequently purchased so me at home when i saw this product it seemed like a good deal first of all when we opened the box it smelled terrific fresh and flavorfull our disappointment is in the taste though we have played around with the water ground bean ratio it still do es not have the body and flavor we expected again should have paid attention that it was a kona blend its good but not great

Summary: a kona blend

Review: instant coffee is not my first choice when i drink coffee i prefer fresh b rewed however there are situations when you cannot brew a coffee of your choice at the office or when i travel and want to have coffee in my room in such situation i use folgers coffee i have a jar in my office and take a small zip lock bag with fo lders coffee when i traveli have tried other instant coffees and prefer folders fo r the following reasons1 i like strong flavored coffee with deep color other coffe es do not give me the same flavor with just one tea spoon2 compared with starbucks via instant coffee which fits the bill for strong flavor it is much more economica l without large difference in taste3 it dissolves in hot and cold water with a bit of extra stirring which is important if you are using it when you are travelling s ince you may or may not have hot water in the room4 most frequently i drink my coffee black and folders is not bitter blackso even though i generally prefer brewed coffee i always have some folders instant coffee on hand for those occasions when brewed coffee is not an option

Summary: when i have to drink instant coffee folders is my choice

Review: in order to get the fastest coffee on earth im willing to sacrifice the lack of aromarather bland flavor and

Summary: not strong enough

Review: the bumble bar tastes good but the sesame and flax seed tend to get stuck

in your teeth

Summary: good not great

Review: i love this product but im really disappointed in how they were delivered both boxes were crushed amazon and staceysand when i opened the inside box one of

the bags of chips was split open at the top and chips were everywhere i havent decided whether to order again this way

Summary: product is great delivery needs improved

Review: if you like espresso then you will probably like this coffee the taste is strong and bold it is mildly sweetened one can 68 ounces contains 50 calories and 155 mg of caffeineyikes thats a lot of caffeine i like coffee but not this strong so i wont be drinking it again and just fyi it is a product of denmark

Summary: packs a strong punch

Review: i love bars in a couple different flavors including chocolate chip mostly because they do not contain high fructose syrup and also because they provide a he althy in between meals snack

Summary: tasty flavors

Review: this item is just mediocre in taste but what was disturbing was the shredd ed aspect not by my definition it is more like small grain rice size think powder snowthe price is a tad on the high side compared to getting similar product at sev eral other places

Summary: pluverized not shredded

Review: i like them for me should be 35 stars though the cashews should be salted more cant really taste the cashews and overall has a buttery taste others in my family would rate it lower and described it as bland

Summary: could use salt

Review: the teabag has all the ingredients to make a good tasting teabut the tea i tself is very weak so i am not buying this anymorejust buy regular tea and add the following to itcardamomclovesblack peppercornsaunf fennel seedsand it will taste m uch better

Summary: good taste but weak tea

Review: i love strong dark coffee but this blend is almost over the top for me i c an only drink it once in a great while the box i bought will last for quite some t ime love several other coffee people blends but the jet fuel is just too strong

Summary: really really strong

Review: i thought i was buying 24 flavored flavored coffee samplers if i drank tea it would have been alright but i dont

Summary: did not expect this

Review: my son and i love these i was at first not happy about them being made in mexico as opposed to right here in the usa but after hearing from the owner i am c onfident they are making a high quality product anyway they taste so amazing you w ould probably buy them if they were made in a pig barn we went through a 5 pound b ag so fast i couldnt believe it

Summary: tastes great but made in mexico

Review: good quality wild rice few broken pieces cooks up well okay price good mix ed with other rices would order again

Summary: good quality wild rice

Review: hitastes ok and is a decent instant i use a large mug and add a triple lea f bag if i want a little more bite to itseveral products are advertised as tea bag s but these are not they are powdered instant and should be labelled assuch i only know triple leaf and bija to be teabags there may be more but these are the only t wo ive had experiencewith

Summary: ok but not a bag

Review: healthy continues to be the marketing tool du jour newtons fruit thins from nabisco is no different just putting the word thin in the name has a subtle effect on the buyer these cookies are healthy and will help be thin i dont mind market ing tactics but the buyer needs to go into the purchase with eyes opennewtons fruit thins are a thin waferlike cookie with some fruit bits in it not real sweet and they definitely have the flavor of whole grainsif spite of the packaging labels that will attract the buyer real fruit whole grain no corn syrup the cookies still have five grams of fat and 140 calories per three cookie servingthe cookies are dry but not crunchy they are perfect for those who like to dunk cookies in their drink for those seeking a sweet snack the thins will seem bland only one or two bites ac tually had a piece of fruit large enough to tastei prefer the less sweet snack so will probably purchase this product for those nibble cravings i do recommend that buyers read the label before deciding that this product is really as healthy as it may sound on the outside

Summary: an adult treat

Review: we have a 4 month old german shepherd puppy who loves to chew on his star unfortunately the star doesnt hold up very well hes completely chewed off all five points they say the toy isnt edible but if its that easily eaten maybe they should either consider making it edible or make it more durable thought the nylabone prod ucts would last but i guess its time to start looking for other products that he w ont destroy in one sitting

Summary: puppy loves it but doesnt last

Review: the jelly beans were tasteful and very flavorful however when i received m y package the jelly beans were all mixed in with each other and that was a big dis appointment to me the jelly beans should have been sealed into each squareit doesn t seem to be 50 flavorsthere are some empty squares

Summary: gourmet

Review: i have used this product before and though my cholesterol count remains ab ove 200 with or without the product my hope is that it would be higher without it call me a dreamer or a cockeyed optimist but thats how i feel

Summary: benecol smart chews review

Review: in germany we have this and its great but in america it just doesnt taste the samethe american fanta coke and most of the carbonated beverage are made with corn syrup and glucosefructose instead of cane sugar which makes the overall after taste very stickyi can only hope one day amazon has the real german fanta and mezz o mix at a reasonable price

Summary: fanta orange

Review: tldr version while a pretty decent bean 1 star this is not a french roast 1 star this is why it only gets 3 starsoriginal versioni recently picked up these and the larrys decaf espresso beans at 57 off see my review of the decaf for an id ea of the value of that purchase the price comes out to somewhere south of 51bthes e beans were worth the price being significantly better than any comparable beans you can buy at the store for anywhere close to the same price however theyre not the quality youll find at your favorite coffee shop these are 2nd shelf beans and a the price i paid thats okprosgood freshness fragrant and oilygrind well smell en gages the nosegood crema depth of colorgood flavor reminiscent of ripe blackberries and cream with roasted chile undertonesexpected mouth feel viscosity is thick but not turkish coffeelow acidconsistent roastexcellent packaging wont get damaged in shippingconsnot french roastnot boutique as the price would suggest

Summary: good but not great

Review: there is nothing new with this product if you have ever used any of the sh ampoos from head shoulders you already know what to expect from this product the o nly real difference is the fragrance which is not enough of a differentiator to ma ke me say this is great you need to try this it all comes down to do you like the fragrance which i can not comment on hereoverall its ok but i wont be running out to replace it when the bottle goes empty

Summary: its ok but nothing new here

Review: seems there are four types of dog food the first is the bargain brand walm art variety benefitlots of food for less money the second type is the garden varie ty mass produced dog foods brands such as purina fill this market the third is the pseudogourmet market again dominated by the major brands with weird names to try to make folks think they are part of group 4 which is gourmetspecialty dog food tho se that specialize in high protein low grain and filler foodsbeneful is imho as go od as it gets in general market dog food my dog likes it though he will sometimes let it sit for extended periods if he can find anything else as an overweight do he seems to gain weight on beneful which is probably an indicator that it has more filler than would be best for himgiven all that i recommend beneful if youre looking for a quality mass market dog food

Summary: pretty ok dog food

Review: i purchased this sampler mainly because it advertised apple cider and hot cocoa my package did not contain either maybe there is a disclaimer in there oh we li

Summary: where is the apple cider and hot cocoa

Review: i got this item for my wifes 41st birthday i also ordered a similar box of fered through amazon via hometown favoritesllc this box was smaller contained a li mited variety of items compared to the other and the outside gave no indication of what was inside also this box contained a moderate amount of black tissue filler there was no filler in the other boxin short we were happy with the product but the re is a better alternative also available on amazon

Summary: good but not as good as the other that amazon offers

==== Rating 4 =====

Review: its pricey ill admit it but its priced for convenience who wants to eat yo gurt on the road i do do i want to spill it on my lap or get into a car accident n ope it doesnt melt in your mouth like yogurt melts which i thought they did and is why i had bought them for my young son but they are delicious and a great idea for us older kids

Summary: very nice snack for on the go

Review: locally i was only able to find cardamon at about 5000 a pound which could almost make you give it up for cooking on this site i found the product at a very reasonable price it was shipped promptly and is very fresh thanks for a great product

Summary: great product affordable too

Review: it was smaller than i expected after getting the large brown gel bottle perfect color shipped quickly and packaged well

Summary: blue gel paste

Review: my dog doesnt particularly like this treat but the neighbors dog loves it and begs for it when he is over here for a play date it is healthy and obviously the taste is pretty good however our neighbors dog is a little like mikey he will eat anything my dog is pickier

Summary: healthy but not the taste my dog loved

Review: smeagol was out creepin before the fat hobbitses woke up when he decided to search amazon for discounts on raw fish as i detest the filthy hobbitss lombus be read smeagol was golem golem thrilled when he discoveredses the rabbit meats

es being at the low price of 4350 smeagol was worriesed about the quality of the m eat so he decided to compare it to some rabbitses he caught himself first off orde ring the fresh whole rabbitses saved smeagol the hassle of finding rabbitses we al so founds that we could avoids the process of snapping their necks as well as skin ning them in terms of flavor the fresh whole rabbit was every bit as fresh as the rabbit smeagol found him self it is to be noted however that the first rabbit smea gol found had been rotting for several days the only problem smeagol found with the fresh whole rabbitses is golem golem golem that smeagol had less variety to choo se from we are accustom to young and tender rabbitses where as this whole rabbit w as deffinately of a riper age and after this the fat hobbitses awakes and tells me he wants potatoes potatoes boil em mash em stick em in a stew precious precious go lem

Summary: look look see whats smeagol finds

Review: the key to any popping is high temperture oili have puffed many types of n oodles and popped many kinds of seedsyou need the right oil google high temp cooking oil and get it to the point where it is starting to smoke just a littleat that point you put in the grain and pop it goes

Summary: key to popping

Review: this is delicious and i signed up for the subscription delivery in order to enjoy it often its a healthy snack to bring to work or anytime and its exactly the taste i remember and have been searching for the only problem is there are way too many bones which is why i subtracted one point the flavor more than makes up for all the bones but still it would be such an excellent product without having to encounter all the sharp little jabs

Summary: excellent flavor

Review: i have only made kefir with this product and have always been pleased with the results i make mine with organic whole milk and culture for 24 hours at room t emperature after heating the milk to 180 degrees i keep it at temperature for 20 m inutes then cool to 75 degrees and add the culture the product produced is so supe rior to all ready made

Summary: yogourmet kefir starter

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Review: sardines taste fresh but there is a lot of oil i would like the can packed but there is space for lots of oil

Summary: good taste good quality

Review: fantastic little biscuit the shortbread and jam create the perfect ammount of sweet while at the same time giving it an overall delightfully chewy texture il 1 order these again soon

Summary: alrightits a jammie dodger but i was promissed tea

Review: we had chinola while in the dominican republic and loved it found this on amazon and it is very very similar though not quite as sweet had some issues getting it correctly from the latin products since they sent jam instead of juice for some reason then i had to prove to them by taking pics that they had sent the wrong thing but they did correct it and let me keep the jam as well which is excellent to overy good product not cheap but when you are desperate for chinola its worth it and yes i do now know the difference between sht and chinola if you have heard that old saying before

Summary: very good similar to what we had in dominican

Review: i have two shih tzus that are very picky eaters i thought id try the might y dog for them they both sit very anxiously until i tell them good boys after their dry food and the mighty dog is mixed they love it

Summary: both dogs loved it

Review: i had been buying the louisiana fish fry cobbler mix and thought it was he avently then i saw the calhoun bend mill peach cobbler mix advertized as the mix t hat georgia uses for its peach festival since georgia is the peach capital of the us and perhaps the world i figured this calhoun bend mix was worth a tryand it was it is just as simple to make as the other mixjust add butter and water but to my t aste it is not quite as sweet as the louisiana mix and i like my cobbler to be ver y sweet hence i prefer the louisiana mixbut between the two i think it will just c ome down to a matter of tastedo you like it extra sweet or do you like it very swe et for the extra sweet go louisiana for the very sweet go calhoun both are a snap to make and get you compliments every time so it is just your choice Summary: like louisiana better

Review: this mix has been a staple in my kitchen for years because it is versatile and delicious but the local stores no longer stock many varieties of the good seas ons salad dressing mixes it is fresh when prepared in your own home and can be use d for both dressings and marinades the mix keeps for a long time in the package un til you make it fresh try this one with red wine vinegar and canola oil and use it on lots of salad types not just a ceasar salad experiment with the types of vinegar and oil order the box of 24 and share them with your friends

Summary: freshness and flavor

Review: another great item from blue diamond this one reaches into the sweeter sid e of things rather than the regular salty route a healthy lowcarb option when you get a craving for something sweet the almond tastes roasted while the coating is a wonderful honey taste its not hard to eat half the can at once so be careful

Summary: sweet and delicious

Review: this is a very tasty cereal with the look of cheerios the nuts are not a m ajor presence and the flavor is similar to honey smacks the sugar content is prett y high which is probably why it tastes so good it is not so much better than other cereals that i would pay extra for it but it is as good as any other minidoughnut shaped cereal i have tried

Summary: sugary nut cheerios

Review: got these and cooked them up on the grill they were very good i dont think they are any better than the frozen ones found at the grocery store though i will have to compare prices to see which is the better deal either way im glad i got th ese its one of the few fish that we like very mild and the texture is good it hold s together well on the grill we use it with and love it

Summary: delicious

Review: the cappuccino tastes very similar to the starbucks bottled kindits neithe r too tasty nor too disgusting simply average if you put it in the refridgerator f or a few hours beforehand itll taste refreshingthe 845 size is about the right amo unt of caffeine a cup

Summary: a cool kick in the summer

Review: i have only tried one recipe so far and will rereview after i try a pancak e recipe i tried pizza crust mixwater and i thought it tasted fine till the aftert aste ive been eating organic for about a year and maybe its just my taste buds a l ot of processed foods have weird tastes to me now anyways i wanted some more low c arb variety in my diet and i thought why not try this i have to say that i was dis appointed i ended up scraping off the sauce onto some organic low carb bread i hav e i will try a pancake recipe since that seems to be populartried pancakes and the y tasted a lot better i think that for me this mix can not be eaten alone i have t o mix with a few other ingredients to get the taste that i like also i used stevia to sweeten the mix and that worked just fine in place of splenda bumped up to four stars

Summary: ok but not great

Review: i am pleased so far with this wine kit however i received the wrong labels is there anyway i can receive the barbaresco labels that i did not receive i got b ardolino

Summary: reserve du chateau 6 week wine kit italian barbaresco 55pound container

Review: this clear vanilla although artificially flavored is pretty good and ill p robably continue to use it in my baking its a little pricey but cheaper than wilto ns clear vanilla

Summary: ck products clear artificial vanilla baking flavor

Review: my sister liked these a lot more than i didshe likes a far milder coffee t han i do i had to use two of them per cup on a smaller water setting as i do even with many caffeinated varieties to get the flavor i like so three stars from me an d four from my sister a nice smooth tasting selection of decaf if you like mild co ffee

Summary: decent decaf

Review: health valley cafe creations cinnamon danish are a tasty treat to keep on hand they make a great morning or afternoon snack while at your desk and if you ar e following weight watchers each bar is only 2 points if you like the taste of cin namon and you crave sweets you will enjoy these bars

Summary: sweet indulgence

Review: i own a purebred chow chow and he is very particular about what he eats mo st of the time he will only eat cat food so when he decides to eat solid foods it makes my life a lot easier i was surprised that he ate this as its not any special type or flavor but he is fond of the beneful and id say his coat looks nicer when we feed him purina stuff it doesnt have a strong smell like some other foods so it wont make you sick when you open it the price is just really good for how much foo d youre getting ive paid this much for a 7 lb bag at a pet store and there is a go od balance of ingredients

Summary: great deal for this size

Review: we use our immersion blender to make it less chunky and more like the auth entic restaurant style best in taste as far as jarred salsas go spicy we mix it wi th the casera mild for a less spicy appetizer best with santitas chips

Summary: great salsa

Review: i have colortreated allover blonde highlights and very fine hair but a lot of it i originally tried the volumizing shampoo and condition by clear but i neede d more moisture this one is greateven with the first washing my hair was more mana geable styled better and was so shiney and bright one of the guys i work with said it looked blonder and asked if i just got it donei know it has sulfate but my hair looks great anyway

Summary: this is a great shampoo

Review: i wont lie these arent the most interesting things youve ever eaten theyre hard and crunchy a little salty and a little bland on the other hand they are one of the healthiest snack foods i can find 14g protein only 2g net carbs as a replac ement for the occasional mindless snacking i do in the afternoons when im working theyre fantastic

Summary: super healthy if a little bland

Review: i have been using this product over the past couple months i have made the salad dressings and the marinades my overall feel is i really like itits not witho ut flaws as i found sometimes the herbs are overpowering but with a little recipe fiddling you can fix that for example with the honey mustard salad dressing recipe i personally thought the herbs covered the honey and the mustard portion of the dr

essing i fixed that by adding more honey and more mustard voilai marinated some ch icken breasts in each of the different marinades and then had the neighbors over f or a little bbq and we were all impressed with the flavors my neighbors even asked what i used so they could purchase someall in all i have enjoyed every recipe and every marinade even when i have to fiddle a bit with it i think its a great produc tcherise everhard july 2008

Summary: pretty darn tasty

Review: well it isnt ultra hot but it does have a kick it mainly tastes smokey ima gine a regular sweet and smokey bbq sauce with a bite of a jalapeno the ghost pepp er is too far down the ingredients list which leads me to believe not enough is us ed in order to get that ultra hotness i was looking for good product though Summary: good stuff

Review: i have dyed my hair for years and am always trying different shampoos my h air is straight and on the fine side and i wash it every day i liked this shampoo it lathers well even in our hard water and left my hair feeling nice i didnt need any conditioner and it didnt dry out my hair or weigh it downi think it has a strong scent not totally unpleasant but if youre sensitive to scents it may bother you i do wish amazon didnt ship this in a padded envelope somehow the shampoo bottle opened and while the bottle was wrapped in plastic i lost about 13 of the shampoo shipping this in a box would have prevented this problem

Summary: i liked it

==== Rating 5 =====

Review: very good pizza crust i make flatbread out of the mix and put fish and tun a on it and it makes a tasty fish sandwich

Summary: very good

Review: we love this organic flour it bakes up nicely and is easy to work with and

the price here on amazon with subscribe and save is reasonable

Summary: great flour

Review: this is some of the best coffee ive ever had in my home it is smooth and r ich my friends and i are big coffee drinkers and i always get compliments on this

brew

Summary: coffee

Review: i first bought a java teeccino at my local health coop i liked it a lot bu t was curious about the other flavors so i got the sampler pack from teeccino onli ne so i could try all the flavorsvanilla nut is a nice flavor truthfully some of t he flavors do not seem to be differentiated from each other but this one definitel y has its own flavor profile i keep coming up with vanilla coconut when i taste it if you are looking for something to taste as close as possible to coffee this isnt the flavor i would suggest maya caffe for the closest flavor to coffee but this va nilla nut is very enjoyable in its own rightthis beverage is a nice alternative to coffee no it does not taste like coffee exactly it has its own taste and feel but im finding that i really enjoy drinking it for the flavor it does have the only ne gative aspect is that it does contain more calories than coffee or tea however the way i feel after i drink it in comparison to coffee far outweighs the small calori e contenti use 1 tb in my french press and about 12oz of water boiled in my tea ke ttle such a quick easy inexpensive and enjoyable method of brewingi would reccomme nd the sampler pack free shipping from the teeccino website and then order your fa vorite flavors through subscribe and save on amazon that will give you the best pr ice

Summary: nice drink

.....

Review: these are a great product for people who need to eat glutenfree and are on the go for breakfast the taste is good and they are most importantly gluten free a nd quick to eat

Summary: breakfast bars

Review: you would never know it was sugar free or low fat even before chilling it is thick smooth and creamy with a tangy cheesecake flavor i enjoyed with some fres h strawberries you have a decadent snack my boyfriend loved it too and couldnt bel ieve it sugar free or that it could have been made from a mix in one step recommen ded

Summary: delicious

Review: i drink a lot of water and this is great in a liquid it mixes well not lik e a powder that does not always mix well or creats a powder cloud great taste and very convient to use my only complaint is that i can see using to much of it at on e time the more you add the more flavor its your choice

Summary: mio mango peach water flavor

Review: communitys cafe special has become my favorite standby coffee not too dark or bold not too mild since leaving the south i cant find it in the grocery stores so im thrilled by its availability on amazon plus youd never get a deal this great in the stores anyway four pounds of great coffee free shipping dropped right at yo ur door life is good

Summary: wont start the day without it

Review: i have had problems going to sleep for most of my adult life so any time i see something that isnt a sleeping pill to try out i try it i was surprised that t his stuff actually worked ive used it a number of times and it has been consistent ly effective at helping me fall asleep very happy with this product

Summary: good sleep

Review: i love pamelas ultimate baking mix it is a great product for those not able to eat wheat it makes so many different items and i also use it for gravy and really anything else that calls for flour i love that it is high in protein and fiber as well

Summary: yum

Review: we had olive oil served with bread recently in an italian restaurant it was so good i had to find out the source this was the oil i will order some more very soon

Summary: spanish olive oil for italian restaurant

Review: this is a healthy fast meal it seemed spiced perfect i added a teaspoon of sesame oil and it was like a dish from a restaurant just watch sodium i forgot to look and had a headache laterthough may have been a combo deal other part of a quick fix meal i dont see sodium on herebut its so good when it comes again i will alter to be sure i can eat its healthy for sure just curious on the sodium

Summary: fabulous

Review: my cats really like this food and when walmart stopped carrying it in our area i found it at target for a good price however when the price went up there i found it on amazon the price was a little higher but with gas and sales tax i figured out it would be cheaper plus i save 15 off the price since i have it delivered each month now i dont have to lug it around the store it just gets delivered to my house plus no sales tax

Summary: great food at a great price

Review: sugar twin is the only artificial sweetener my husband and i used for year s and we were devastated when it was no longer available in the individual packets

i dont even remember what made me look online for the product but im so glad i fou nd it the shipment arrived on time in its original box in excellent condition Summary: sugar twin

Review: i used this to make a traditional irish dish for my son he really liked it i couldnt enjoy it because of new denture but still have some in the freezer in vacuum bagsthere were four pounds and i quartered it and plan on making up for it we said he thought it tasted like corned beef ill let you know

Summary: really traditional irish bacon

Review: nutiva extra virgin coconut oil tastes so good in all the pan fried foods ive cooked so far ive fried up charsiu fried rice shrimp fried rice scrambled eggs and even made grilled cheese sandwiches using this oil everything comes out tastin g great with just a tiny hint of coconut aftertaste not enough to overpower the di shes but just enough for people to go what was that extra seasoning you used its r eally goodthe bottles pictured are not exactly the bottle you will receive i got t wo smaller looking tubs of the coconut oil there were no problems with shipping bu t i did notice that on a 70 degree day that my bottle of oil went liquid so i can see problems arising when shipping during summer i havent tried using this product on my skin or hair but i can imagine it would smell nice i love coconut highly recommended

Summary: gives a good hint of coconut to food

Review: i use this product and cant always find it in the health food store i pref er the golden flax seed thanks for a quick order and an excellent product the serv ice on this order was terrific

Summary: great product

Review: i keep these on hand for car trips with the grandkids you can turn a borin g bottle of water into a flavorful koolaid drink by just adding a single packet to it just open the bottle pour in the contents of one packet then close and shake ea ch packet contains both the koolaid mix and the amount of sugar thats needed for a single drink perfect size for a typical water bottle we use reusable watter bottle s with them so we can fill them up with water when ever we need something to drink and then add the koolaidthey taste just like when you mix a regular full sized pit cher of koolaid just in a single serving size these single servings work really we ll for us since we never drink a whole pitcher when me make one and end up pouring half of it out these were such a great idea

Summary: great for when you want to make a single glass of koolaid

Review: our dogs love zukes and i was happy to find them on amazon when i ordered these they were the regular retail price but i see now they are about 6 times more than that so i doubt i will be ordering from amazon again unless the prices come b ack down but these are great bones made from great ingredients from a great company couldnt ask for much more

Summary: dog loves them price increase

Review: i ordered three of these to serve my holiday guests during their weeklong visitone of my guests who grew up in minnesota pronounced this the best kringle sh ed ever had anywhere the pastry is flaky and tender the filling full of flavor not hing artificialtasting at all and the icing is creamy and richthese freeze well to o mine had been stored in my freezer for 2 weeks prior to serving and they tasted freshly madei will definitely order these again if theyre still available Summary: absolutely delightful

Review: ezekiel cereal is just plain delicious eat it with fruit yogurt or anythin g else you can think of i eat mine with almond milk i like to let it soak for a co uple minutes to soften much softer than grapenuts and much more flavor it is much better than any of its competitors of course no one else is specifically using spr

outed grain i was trying to eat healthy and was eating oatmeal however oatmeal nev er carried me through to lunch without feeling ravenous ezekiel cereal keeps me fe eling full

Summary: ezekiel 49 sprouted grains are the best

Review: i love this tealet me say i have never liked iced tea until recently i was more of a coffee lover but with summer coming up i thought i would try this at fir st i fell in love with the lemon flavored version then i ordered the variety pack i was not a fan of the raspberry but the peach is wonderfulit has a nice peach fla vor and just the right amount of sweetness i am not a big fan of sweet tea mainly because my last few tries of southern sweet tea tasted like i was drinking a glass of sugar this has a nice blend of a tea flavor peach and a hint of sweetnesstwo th umbs up for mejust ordered 2 full boxes

Summary: love the peach flavor

Review: wiley wallaby licorice is the best it is more expensive than regular licor ice brands but it is worth the price the price is not bad when product is purchase d in a pack of 8 australian licorice is much softer and fresher than regular licor ice i have trouble finding this brand in regular grocery stores so often place ord er through amazon

Summary: delicious and fresh

Review: these bars are the best many of whom ive shared these bars with agree that they are so delicious and want them againi love the strawberry flavor the most but other than that the blueberry flavor is the second best i would eat these over and over again of course ill get sick sooner or later blehh my favorite bars by far try them

Summary: yummy

Review: these candy boxes were a big hit with my sons and their friend i bought th ree boxes two for my kids and one for their friend for my sons birthday and the kids really had a blast with the candy lots of fun for the kids

Summary: lots of fun

Review: this is a delicious seasoning i had been buying it in a health food store for alot more money and they stopped selling it i was so happy to find it on amazo n now i order it by subscription so i never run out of it and i get it for a fanta stic priceit is my familys alltime favorite spice blend i use it on every kind of pizza both fresh from the pizza parlor as well as on all frozen pizzas when im out of jared pasta sauce i use it to make my own combining canned tomatoes frontier pi zza seasoning a little olive oil a spoon of sugar some salt and pepper and finally some parmesan cheese in a pinch this mades a very tasty sauce i especially love the fennel they add to this scrumptious blendive even given it out for gifts by comb ining it with a pizza cutter can you tell i like this spice

Summary: delicious for pasta and pizza

Review: received this through voxbox and loved it my son ended up with most of it which is fine excellent product to keep on hand or in the diaper bag

Summary: delicious

Review: this is some of the best coffee ive ever hadsmells wonderful while brewing and is some of the richest and best balanced flavor ive experiencedone pound bag a t a great price

Summary: highly recommended

Review: this sunbutter spread is absolutely delicious i enjoy it for breakfast lun ch or anytime snack great value for the excellent quality

Summary: delicious

Review: i bought this for my boyfriend as a fathers day gift he loves hot sauce so i wanted to really get him something hot he loves it he is now the prank master th ough good hot sauce he loves it

```
Summary: hot
Frequent Words Of The Dataset For Each Rating:
Rating: 1
 Max Word: ('like', 6055)
 Mid Words (up to 20): [('product', 5654), ('taste', 4662), ('would', 4201), ('one
 ', 4042), ('good', 3001), ('coffee', 2979), ('buy', 2574), ('even', 2528), ('food'
, 2469), ('flavor', 2428), ('get', 2363), ('amazon', 2338), ('tea', 2163), ('bad',
2050), ('could', 1966), ('really', 1831), ('box', 1808), ('tried', 1757), ('bought
  , 1746), ('time', 1685)]
 Min Word: ('tippy', 1)
Rating: 2
  Max Word: ('like', 13357)
  Mid Words (up to 20): [('taste', 10580), ('would', 7959), ('product', 7904), ('go
od', 7780), ('flavor', 7602), ('one', 6765), ('coffee', 6076), ('much', 4961), ('t
ea', 4888), ('really', 4546), ('get', 4363), ('better', 3597), ('even', 3516), ('b
uy', 3445), ('food', 3381), ('great', 3253), ('chocolate', 3027), ('could', 3015),
('tried', 2968), ('try', 2937)]
 Min Word: ('unresponsiveness', 1)
Rating: 3
  Max Word: ('like', 18677)
  Mid Words (up to 20): [('good', 16436), ('taste', 14763), ('would', 12027), ('fla
vor', 11820), ('product', 10677), ('coffee', 9949), ('one', 9650), ('much', 7601), ('tea', 7493), ('really', 7125), ('great', 6891), ('get', 6848), ('little', 6181),
('better', 6158), ('food', 4979), ('price', 4953), ('buy', 4710), ('use', 4690), (
 'think', 4442), ('chocolate', 4431)]
 Min Word: ('lifer', 1)
Rating: 4
  Max Word: ('good', 27024)
 Mid Words (up to 20): [('like', 21683), ('great', 14834), ('taste', 14587), ('cof
fee', 13206), ('flavor', 13067), ('one', 12596), ('would', 11900), ('product', 11544), ('tea', 10095), ('little', 8849), ('really', 8578), ('get', 7917), ('much', 7
737), ('love', 6824), ('price', 6751), ('use', 6618), ('food', 6531), ('better', 6
306), ('nice', 5904), ('also', 5899)]
 Min Word: ('creepin', 1)
Rating: 5
  Max Word: ('great', 12636)
  Mid Words (up to 20): [('good', 9656), ('like', 9502), ('love', 8092), ('one', 67
99), ('tea', 6795), ('taste', 6679), ('product', 6520), ('best', 6513), ('coffee', 6303), ('flavor', 6007), ('food', 4569), ('get', 4491), ('really', 4296), ('would', 4127), ('lange', 4127), ('
, 4127), ('use', 4013), ('amazon', 3837), ('find', 3790), ('also', 3768), ('price'
, 3742), ('time', 3621)]
```

Min Word: ('flavorsvanilla', 1)

```
Rating: 4
Max Word: ('goodbetter', 15)
Mid Words (up to 20): [('seasoningsbut', 10), ('smeagol', 9), ('availasin', 9), (
'tristan', 9), ('talisker', 9), ('benzocaine', 9), ('cornflake', 8), ('ofs', 8), ('agatha', 8), ('anchiovy', 7), ('finerecommended', 7), ('admission', 7), ('blueray', 7), ('soledad', 7), ('nursettes', 7), ('mekong', 7), ('bluegrass', 7), ('zhejia
ng', 7), ('volvic', 7), ('holster', 7)]
Min Word: ('creepin', 1)
Rating: 3
Max Word: ('tompson', 12)
Mid Words (up to 20): [('chen', 12), ('lansinol', 11), ('pantai', 10), ('pims', 1
0), ('okjust', 8), ('jbmc', 8), ('astro', 7), ('marbella', 7), ('assign', 6), ('bi
tterso', 6), ('powdermix', 6), ('jerkers', 6), ('biotene', 6), ('okit', 6), ('pros
t', 6), ('chens', 6), ('dentie', 6), ('scanoctober', 6), ('kreplach', 5), ('csh',
5)]
Min Word: ('lifer', 1)
Rating: 2
Max Word: ('mongo', 8)
Mid Words (up to 20): [('glencarin', 8), ('iberico', 7), ('stakich', 7), ('castle
vetrano', 7), ('jtc', 6), ('tako', 6), ('venetian', 6), ('kirkoswald', 6), ('schwa
n', 5), ('ducal', 5), ('fixens', 5), ('necaps', 5), ('probes', 5), ('zareba', 5),
('dhaaha', 5), ('briosa', 5), ('contata', 5), ('diyagama', 5), ('bergan', 5), ('ne
stum', 4)]
Min Word: ('unresponsiveness', 1)
Rating: 1
Max Word: ('bbd', 30)
Mid Words (up to 20): [('containmentnow', 9), ('carmellini', 9), ('bastianich', 9
), ('flavorsboil', 9), ('todd', 7), ('expiredtimothys', 7), ('fanconi', 6), ('limb
augh', 6), ('chimpanzee', 6), ('casava', 6), ('netgrocer', 5), ('cancellation', 5)
, ('foulest', 5), ('fatalities', 5), ('sk', 5), ('kadota', 5), ('bolets', 5), ('pr
isoners', 4), ('changedi', 4), ('miscarriage', 4)]
Min Word: ('suggestsonce', 1)
Rating: 5
Max Word: ('fastgreat', 11)
Mid Words (up to 20): [('sportea', 7), ('presplenda', 6), ('mamade', 6), ('jellyb
elly', 6), ('kushka', 6), ('pumkinseed', 6), ('shizzle', 5), ('cocoquik', 5), ('ha
vea', 5), ('cairo', 5), ('andshe', 5), ('funtime', 5), ('caroline', 5), ('dreambon
es', 5), ('granita', 5), ('vegancompassion', 5), ('pacifier', 5), ('calzones', 5),
('gulten', 5), ('maitlands', 5)]
Min Word: ('flavorsvanilla', 1)
```

Food Products Mentioned in the Review:

Food items mentioned in reviews:
['coffee', 'tea', 'chocolate', 'water', 'sugar', 'milk', 'sauce', 'cookies', 'oil', 'snack', 'salt', 'cereal', 'butter', 'rice', 'candy', 'chicken', 'juice', 'cocon ut', 'cheese', 'beans', 'peanut', 'corn', 'chips', 'honey', 'cookie', 'syrup', 'so up', 'bread', 'ginger', 'cream', 'pasta', 'popcorn', 'cinnamon', 'crackers', 'nood les', 'lemon', 'wheat', 'date', 'soda', 'flour', 'orange', 'apple', 'soy', 'beef', 'espresso', 'granola', 'cake', 'oatmeal', 'pepper', 'snacks', 'fish', 'cherry', 'o live', 'strawberry', 'almond', 'peanuts', 'almonds', 'mint', 'pumpkin', 'salmon', 'chili', 'potato', 'garlic', 'tuna', 'oats', 'peach', 'candies', 'banana', 'yogurt', 'blueberry', 'cracker', 'wine', 'hazelnut', 'mango', 'vinegar', 'grape', 'lime', 'curry', 'raspberry', 'tomato', 'jelly', 'bacon', 'eggs', 'egg', 'tart', 'pomegranate', 'pie', 'turkey', 'mocha', 'potatoes', 'soups', 'taco', 'pancakes', 'broth', 'latte', 'biscuits', 'pork', 'tomatoes', 'pizza', 'onion', 'broccoli', 'cappucci no', 'beer', 'cakes', 'cherries', 'peppers', 'sandwich', 'peas', 'mustard', 'dates', 'cashews', 'blueberries', 'salsa', 'herbs', 'wrap', 'apples', 'pineapple', 'ses ame', 'strawberries', 'watermelon', 'lemonade', 'fig', 'coke', 'carrots', 'spaghet ti', 'brownies', 'cola', 'donut', 'muffins', 'quinoa', 'waffles', 'onions', 'steak', 'barley', 'sandwiches', 'brownie', 'mushrooms', 'sausage', 'pancake', 'jam', 's hrimp', 'pear', 'pudding', 'duck', 'toffee', 'kiwi', 'rum', 'lamb', 'spinach', 'sm oothie', 'blackberry', 'walnuts', 'chia', 'mayo', 'basil', 'tacos', 'marshmallow', 'waffle', 'biscuit', 'bananas', 'pea', 'ketchup', 'ham', 'muffin', 'tortilla', 'pe aches', 'mushroom', 'crisps', 'lobster', 'pears', 'celery', 'donuts', 'pistachios', 'crab', 'cashew', 'lentils', 'cloves', 'figs', 'walnut', 'wafers', 'nutmeg', 'ca rrot', 'wafer', 'clam', 'vodka', 'raspberries', 'pepsi', 'mayonnaise', 'pistachios', 'parses', 'glava', 'millet', 'blackberries', 'cardamom', 'hazelnuts', 'pastry', 'kale', 'mangoes', 'paneer

4. Data Visualization

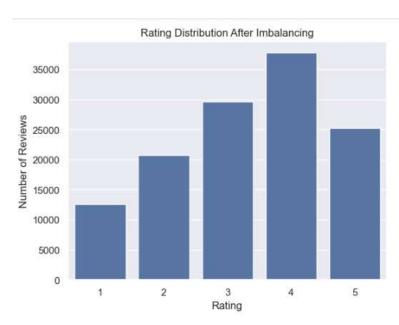
To better understand the characteristics of the reviews and guide preprocessing decisions, several visualizations were created. These plots offer insights into rating distribution, review length, and review content.

4.1 Review Rating Distribution (Before Imbalancing)



Insight: The original dataset was highly imbalanced, with over 2,50,000 reviews rated 5 stars, while 1- and 2-star reviews were much less frequent. This confirmed the need for dataset balancing before training.

4.2 Review Rating Distribution (After imbalancing)

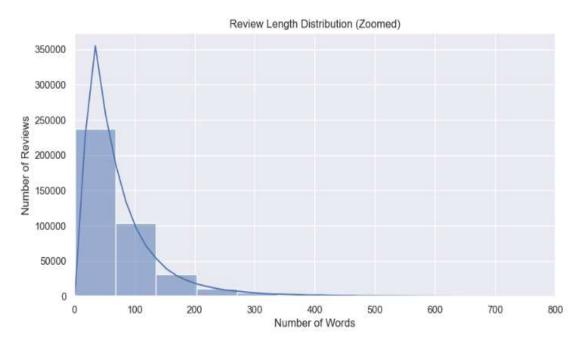


The bar chart clearly illustrates the **custom imbalanced distribution** of product review ratings:

- 4-star reviews are the most common, making up 30% of the dataset.
- **3-star reviews** contribute **23.5%** (2,500 samples), followed closely by **5-star reviews** at **20%** of the dataset
- Lower ratings (1-star and 2-star) make up a smaller portion of the dataset—10% and 15%, respectively.

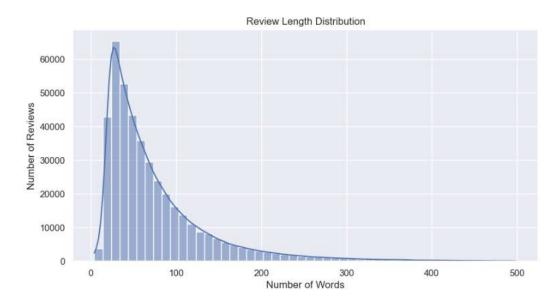
This imbalance reflects a **real-world scenario** where users are more likely to leave moderate-to-high ratings than low ratings

4.3 Review Length Distribution (Before Filtering)



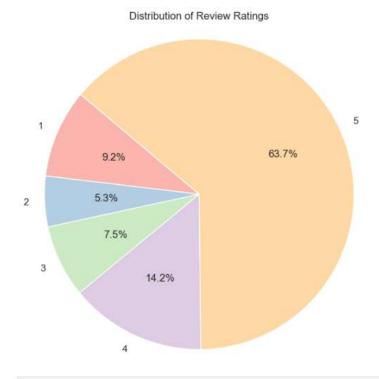
Insight: Most reviews are under 100 words, but some extend beyond 3,500 words. The long tail justified filtering out extremely long reviews as outliers.

4.3 Review Length Distribution (After Filtering)



Insight: After filtering, the majority of reviews fall between 10 and 150 words, ensuring text inputs are neither too sparse nor too verbose.

4.5 Review Rating Distribution Using Piechart (Before imbalancing)



Insight:

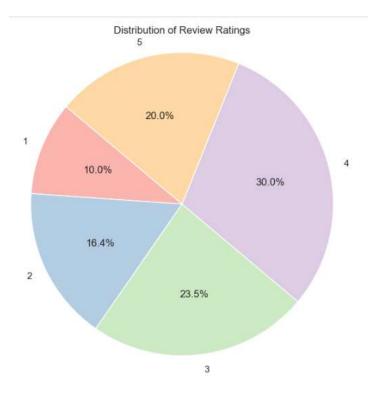
The pie chart highlights a **highly imbalanced dataset**, with the majority of reviews skewed toward higher ratings:

• 5-star reviews dominate at 63.7% of the total.

4-star: 14.2.0%3-star: 7.5%2-star: 5.3%1-star: 9.2%

This imbalance indicates that without correction, the model would likely be biased toward predicting 5-star reviews more frequently undermining performance on lower-rated reviews. Such class imbalance can lead to poor generalization and misclassification of negative feedback, which is often the most important to detect in real-world applications.

4.2 Review Rating Distribution Using Piechart (After imbalancing)



Insight:

Insight: This design introduces imbalance deliberately while preserving representation across all rating categories. It helps evaluate how models perform under unequal class conditions without being heavily dominated by any single class.

5. Training Process

1. Data Preparation

The dataset consists of **customer reviews** and their corresponding **ratings** (1–5 stars). To prepare it for BERT training, the following steps were used:

1. Combining Review Text and Summary:

In many review datasets, each entry has two text fields:

- **Review Text** → The main body of the user's feedback, often long and descriptive.
- **Summary** → A short headline or phrase written by the user that captures the essence of the review.

```
# Combine review + summary
df["combined text"] = df["review text"] + " " + df["Summary"]
```

Why Combine Them?

Contextual Enrichment

- The summary often contains **key sentiment cues** (e.g., "Excellent product", "Very poor quality").
- o By combining both fields, the model has access to **both the detailed opinion** (review) and the **condensed sentiment signal** (summary).

Better Representation for BERT

- o BERT leverages contextual embeddings. Feeding both summary + review allows it to build a **richer semantic representation**.
- o Example:
 - Review: "the portion is really small it might work for a toddler we opened a pack with our family of 5 present and it looked so unappetizing no one really wanted to taste."
 - Summary: "small portion not appetizing"
 - Combined text provides clearer evidence for a negative rating.

Consistency in Input

- Some reviews may have very short bodies but an expressive summary.
- o If we ignore the summary, the model could miss this useful signal.

Handling Missing Summaries

- When the summary is absent, we insert a placeholder token ([NOSUMMARY]).
- o This avoids introducing empty strings while letting the model learn that some reviews **do not have summaries**.

df["Summary"] = df["Summary"].fillna("").replace("", "[NOSUMMARY]")

2.Label Encoding

- o Ratings were shifted from $[1-5] \rightarrow [0-4]$.
- o One-hot encoding was not required, since BERT's classifier head works directly with class indices.

```
# Adjust Ratings (make 0-based for BERT)

df["Rating"] = df["Rating"] - 1 # If ratings are 1-5, they become 0-4.
```

2.Data Splitting

After constructing the combined text, we split the dataset into **training** and **validation** subsets.

Why Split?

• To evaluate generalization performance of the model.

• Prevents overfitting by ensuring the model does not only "memorize" training data.

Method Used: Stratified Train-Test Split

from sklearn.model selection import train test split

We apply **stratified splitting** to ensure that the **distribution of ratings (classes)** is preserved across train and validation sets. This is critical in **imbalanced datasets**, where some ratings (e.g., 5-star) may dominate.

- Training Set $(80\%) \rightarrow \text{Used for fine-tuning BERT}$.
- Validation Set $(20\%) \rightarrow$ Used for evaluating performance during training.

```
train_texts, val_texts, train_labels, val_labels = train_test_split(
    df["combined_text"].tolist(),
    df["Rating"].tolist(),
    test_size=0.2,
    random_state=42,
    stratify=df["Rating"]
```

Here,

test_size = $0.2 \rightarrow 20\%$ of data goes to validation.

stratify=df["Rating"] → Ensures each rating appears in train/val in similar proportions

3: Tokenization

After preparing and splitting the dataset, the next critical step in BERT-based training is **tokenization**. Unlike traditional machine learning models where raw text may be converted to TF-IDF or word embeddings, BERT requires input in the form of **tokens** (**subwords**) that correspond to its pre-trained vocabulary.

Why Tokenization is Needed

- Natural language is unstructured. BERT cannot directly process raw strings like "This food is amazing!".
- Tokenization breaks the text into meaningful subunits (called **WordPieces**) that BERT understands.
- This allows BERT to handle **rare or unseen words** by splitting them into smaller known subwords.

```
o Example: "unbelievably" \rightarrow ["un", "##believable", "##ly"]
```

This prevents the out-of-vocabulary problem and makes BERT more robust.

Process

We used the **BERT base uncased tokenizer**:

```
from transformers import BertTokenizer
tokenizer = BertTokenizer.from_pretrained("bert-base-uncased")
max_len = 200
```

The tokenizer uses the same vocabulary BERT was pre-trained on, ensuring alignment with its learned embeddings.

Padding and Truncation

- Neural networks expect inputs of **fixed length**, but reviews and summaries vary widely in length.
- We used **max_length** = **200**, meaning:
 - o If a review+summary is **shorter than 200 tokens**, it is **padded** with special [PAD] tokens.
 - If longer than 200, it is **truncated**.

This ensures all inputs have the same shape, e.g., [batch_size, 200].

Special Tokens

The tokenizer also adds **special tokens** required by BERT:

- $[CLS] \rightarrow Placed$ at the beginning, used by the classification head.
- [SEP] → Separates different segments (e.g., review vs. summary, but in our case mostly marks end).
- $[PAD] \rightarrow Used for padding shorter sequences.$

Example:

```
Review + Summary: "Great taste [SEP] Food was fresh and tasty"

Tokenized IDs: [101, 2204, 5510, 102, 2833, 2001, 4840, 1998, 5517, 102, 0, 0, ... 0]
```

Final Encoded Representation

The tokenizer outputs a dictionary with tensors:

- input ids: Token IDs representing each word/subword.
- attention mask: Binary mask (1 for real tokens, 0 for padding).
- token type ids: Segment markers (not always needed in single-text tasks).

These encoded tensors are then fed into the BERT model for training.

4: Dataset and DataLoader Creation

When working with PyTorch + HuggingFace, raw text and labels must be wrapped into a **Dataset** and a **DataLoader**.

This step is essential because BERT doesn't process raw data directly; it requires **batched tensors** for efficient GPU/TPU training.

After tokenization, we obtain numerical representations of our reviews (input_ids, attention_mask, and labels). However, these are still stored as arrays in memory. To train BERT effectively, we must organize this data into a structure that supports mini-batching, shuffling, and efficient GPU utilization. This is where PyTorch Dataset and DataLoader come in.

Why We Need a Dataset & DataLoader

Mini-Batch Training

- o Instead of feeding one review at a time (inefficient), we process multiple reviews (a batch) together.
- Neural networks are trained on *batches* of data, not individual samples, because:

$$\nabla \theta L(\theta) \approx m1i = 1 \sum_{i=1}^{n} \nabla \theta L(xi, yi; \theta)$$

where m = batch size.

 \circ Example: batch size = $16 \rightarrow 16$ reviews are tokenized and passed in parallel.

Shuffling

- DataLoader can shuffle training data each epoch to avoid the model memorizing the order.
- Ensures the model does not learn spurious patterns from data order.
 Example: If all positive reviews come first, the model may bias early weights.

Automatic Padding

- o Reviews have variable length (some 10 words, some 200 words).
- The DataLoader can pad shorter sequences within a batch to match the longest sequence in that batch.
- o Prevents wasted computation from always padding to the global max length.

Efficiency

Batching + preloading data ensures GPUs stay busy.

PyTorch Dataset Class

We create a custom dataset so that each call returns:

• input ids → tokenized review

```
• attention mask \rightarrow attention mask
    • labels \rightarrow the star rating
from torch.utils.data import Dataset
class ReviewDataset(Dataset):
  def __init__(self, encodings, labels):
    self.encodings = encodings
    self.labels = labels
  def len (self):
    return len(self.labels)
  def getitem (self, idx):
    item = {key: torch.tensor(val[idx]) for key, val in self.encodings.items()}
    item['labels'] = torch.tensor(self.labels[idx])
    return item
DataLoader Creation:
from torch.utils.data import DataLoader
train dataset = ReviewDataset(train texts, train labels, tokenizer, max len)
val_dataset = ReviewDataset(val_texts, val_labels, tokenizer, max_len)
#8. Create DataLoaders
train loader = DataLoader(train_dataset, batch_size=16, shuffle=True)
val loader = DataLoader(val dataset, batch size=16)
Batch Size (m = 16) \rightarrow controls how many reviews are processed in one forward pass.
shuffle=True → important for training (prevents memorization).
shuffle=False → for evaluation (we want reproducibility).
6: Model Initialization - Why BERT?
What is BERT?
```

- BERT (Bidirectional Encoder Representations from Transformers) is a transformer-based model developed by Google.
- Unlike BiLSTM (which reads left → right and right → left **separately**), BERT reads the **entire sequence bidirectionally at once** using self-attention.
- This lets BERT capture **deep contextual meaning** of each word depending on its surrounding words (both before and after).

Example:

- Word: bank
 - o In *river bank*, BERT understands *bank* = "shore".
 - o In *money bank*, BERT understands *bank* = "financial institution".

BiLSTM can partially capture this context, but not as effectively as BERT. Logistic regression, on the other hand, ignores order and semantics entirely.

Why not Logistic Regression / Linear Models?

- Linear Models (Logistic Regression, SVM, etc.) use bag-of-words or TF-IDF features.
- These features ignore word order and semantic context.

Example:

• "The product is not good" vs. "The product is good" → bag-of-words treats them as very similar.

In my experiments:

- Logistic Regression \rightarrow ~50% (Both training and validation accuracy.)
 - o Shows **overfitting** and poor ability to generalize.

Why not BiLSTM?

- **BiLSTM** (**Bidirectional LSTM**) improves over vanilla LSTM by reading sequences **both forward and backward**.
- It can model word dependencies better than unidirectional models.

But it still has **limitations**:

- 1. **Sequential processing** \rightarrow slow for long reviews.
- 2. Vanishing gradient problem \rightarrow struggles with very long text dependencies.
- 3. **No external knowledge** → trained only on your dataset, cannot leverage large-scale language understanding.

In your results:

- BiLSTM: ~65% training accuracy, ~55% Validation accuracy.
 - o The model couldn't capture enough **semantic richness** from limited data.

Why BERT Wins Here

1. Pretrained Knowledge

 Trained on Wikipedia + BookCorpus → already understands grammar, sentiment, and general knowledge.

2. Contextual Embeddings

o Unlike GloVe/FastText (static), BERT embeddings are **dynamic** → same word has different meaning in different contexts.

3. True Bidirectionality

o Instead of forward + backward separately (BiLSTM), BERT's **self-attention** considers **all tokens at once**.

4. Transfer Learning

• With fine-tuning, even relatively small datasets can achieve **state-of-the-art performance**.

Comparison between Logistic Regression, BiLSTM and Bert

| Model | Training Accuracy | Validation Accuracy | Key Weakness |
|------------------------|----------------------|------------------------|---|
| Logistic Regression | ~50% | ~50% | Ignores order & semantics → poor generalization |
| BiLSTM | ~65% | ~50% | Sequential, slow, weak on long dependencies |
| BERT | ~81% | 63%~ | Needs more compute, but excels at context |

Step 6: Model Training

Once the dataset, dataloader, and BERT model are prepared, the next step is **training**. Training is where the model learns to map input reviews (text + summary) to the correct rating class (1-5).

1. Objective of Training

- Minimize the difference between **predicted ratings** and **true ratings**
- This is done by **optimizing the model parameters** (weights of BERT + classification layer).

2. Loss Function

Since this is a multi-class classification problem (ratings 1–5), we use Cross-Entropy Loss

This loss penalizes the model heavily when it assigns low probability to the correct class.

3. Optimizer

BERT typically uses **AdamW optimizer**, which is a variant of Adam with **weight decay** (helps prevent overfitting).

```
# Optimizer & Scheduler
optimizer = AdamW(model.parameters(), Ir=2e-5)
total_steps = len(train_loader) * 3 # 3 epochs
scheduler = get_linear_schedule_with_warmup(
    optimizer, num_warmup_steps=0, num_training_steps=total_steps
)
loss_fn = torch.nn.CrossEntropyLoss()
```

4. Training Loop

For each epoch:

- 1. Load a batch of reviews & labels from DataLoader.
- 2. Tokenize and pass them through **BERT** + **classification head**.
- 3. Compute loss using cross-entropy.
- 4. Backpropagate gradients.
- 5. Update weights using AdamW.
- 6. Track metrics (training loss & accuracy).

#11. Training Loop

```
epochs = 3
for epoch in range(epochs):
    model.train()
    total_train_loss = 0
    for batch in tqdm(train_loader, desc=f"Epoch {epoch+1} Training"):
        optimizer.zero_grad()
        input_ids = batch["input_ids"].to(device)
        attention_mask = batch["attention_mask"].to(device)
        labels = batch["labels"].to(device)

        outputs = model(input_ids, attention_mask=attention_mask, labels=labels)
        loss = outputs.loss
        total_train_loss += loss.item()
        loss.backward()
        optimizer.step()
        scheduler.step()

        avg_train_loss = total_train_loss / len(train_loader)
        print(f"Epoch {epoch+1} Train_Loss: {avg_train_loss:.4f}")
```

Step 7: Validation

After training, we need to **evaluate the model on unseen validation data** to measure how well it generalizes. Training accuracy alone is not reliable, because the model might simply **memorize** the training data (overfitting). Validation gives us a **realistic estimate** of performance.

```
Code:
# Validation
model.eval()
total val loss = 0
correct = 0
total = 0
with torch.no_grad():
  for batch in tqdm(val_loader, desc=f"Epoch {epoch+1} Validation"):
    input_ids = batch["input_ids"].to(device)
    attention_mask = batch["attention_mask"].to(device)
    labels = batch["labels"].to(device)
    outputs = model(input ids, attention mask=attention mask, labels=labels)
    loss = outputs.loss
    total_val_loss += loss.item()
    preds = torch.argmax(outputs.logits, dim=1)
    correct += (preds == labels).sum().item()
    total += labels.size(0)
avg_val_loss = total_val_loss / len(val_loader)
accuracy = correct / total
print(f"Epoch {epoch+1} Val Loss: {avg_val_loss:.4f} | Val Accuracy: {accuracy:.4f}")
Epoch 3 Validation → Loss: 0.8981 | Accuracy: 63.58%
```

Final Evaluation with Classification Report & Confusion Matrix

Once training and validation are complete, we evaluate the model on the **test dataset** (or the validation set if no separate test set is available). Instead of just reporting **accuracy**, we generate a **classification report** and a **confusion matrix** to get a deeper understanding of model performance.

After training the BERT model for review rating prediction, we evaluated its performance on the validation set using two key tools:

- 1. Classification Report (precision, recall, F1-score)
- 2. **Confusion Matrix** (class-wise misclassifications)

Classification Report:

| Classification | Report: | | | |
|----------------|-----------|--------|----------|---------|
| | precision | recall | f1-score | support |
| 0 | 0.685 | 0.612 | 0.646 | 2520 |
| 1 | 0.549 | 0.541 | 0.545 | 4142 |
| 2 | 0.580 | 0.606 | 0.593 | 5927 |
| 3 | 0.662 | 0.670 | 0.666 | 7555 |
| 4 | 0.714 | 0.709 | 0.711 | 5037 |
| accuracy | | | 0.636 | 25181 |
| macro avg | 0.638 | 0.628 | 0.632 | 25181 |
| weighted avg | 0.637 | 0.636 | 0.636 | 25181 |

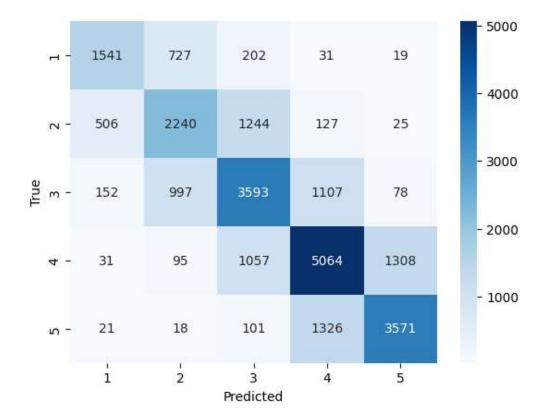
Overall Results:

- **Accuracy:** 63.6%
- Macro Avg (unweighted): Precision = 0.638, Recall = 0.628, F1 = 0.632
- Weighted Avg (class balanced): Precision = 0.637, Recall = 0.636, F1 = 0.636

These results show the model performs **best on 5-star reviews** (Precision/Recall ~0.71) and struggles more with **2-star reviews** (Recall ~0.54). The middle classes (3-star and 4-star) are often confused with each other, which is expected since they are semantically close.

Confusion Matrix

```
model.eval()
train_loss = 0
correct = 0
total = 0
with torch.no_grad(): # No gradients needed for evaluation
  for batch in train loader: # Use your training DataLoader
    input ids = batch["input ids"].to(device)
    attention mask = batch["attention mask"].to(device)
    labels = batch["labels"].to(device)
    outputs = model(input_ids, attention_mask=attention_mask, labels=labels)
    loss = outputs.loss
    train_loss += loss.item()
    preds = torch.argmax(outputs.logits, dim=1)
    correct += (preds == labels).sum().item()
    total += labels.size(0)
avg train loss = train loss / len(train loader)
train_accuracy = correct / total
print(f"Training Loss: {avg_train_loss:.4f} | Training Accuracy: {train_accuracy:.4f}")
```



- 1-star reviews are often misclassified as 2-star (727 cases).
- **2-star reviews** are confused with **3-star** (1244 cases).
- **3-star reviews** are heavily misclassified as **4-star** (1107 cases).
- **4-star reviews** are sometimes predicted as **5-star** (1308 cases).
- **5-star reviews** are predicted with high accuracy, though ~26% are confused with 4-star.

The confusion pattern reflects the **subjective nature of ratings** — boundaries between 2, 3, and 4 stars are fuzzy. However, the model is strong at distinguishing **extremes** (1-star vs 5-star).

Sample Reviews:

Rating 1 ☆:

The product came with a bbd date that had already passed, almost like an expiredtimothys batch – total waste.

Rating 2 ☆ ☆:

The chen packaging looked nice, but the bitterso aftertaste wasn't pleasant.

Rating 3 ☆ ☆ ☆:

It was okay – tompson brand isn't bad, but the pims cookies tasted just average.

Rating 4 ☆ ☆ ☆ ☆:

The talisker spice and seasonings but mix worked very well in recipes.

Rating 5 ☆ ☆ ☆ ☆ ☆:

Absolutely loved it – the delivery was fastgreat and the jellybelly flavor was perfect.

Rating sample from the dataset:

Rating 1 ☆:

dont believe you are getting tippy golden assam as the picture on the box suggestsonce again i was deceived in believing that the little picture on the box is the actual end product i will be getting this is the second time the tao of tea had me fooled with misleading good looking picture of full leaf tea on the box only to discover extremely low quality leaf inside the boxthis assam is pretty bad.

Rating 2 ☆ ☆:

i found jeremiahs pick kona blend lacking flavor i tried every trick i know to bring out all the taste it had but still found it weak

Rating 3 ☆ ☆ ☆:

i love this product but im really disappointed in how they were delivered both boxes were crushed amazon and staceysand when i opened the inside box one of the bags of chips was split open at the top and chips were everywhere i havent decided whether to order again this way

Rating 4 ☆ ☆ ☆ ☆:

i have two shih tzus that are very picky eaters i thought id try the mighty dog for them they both sit very anxiously until i tell them good boys after their dry food and the mighty dog is mixed they love it

Rating 5 ☆ ☆ ☆ ☆ ☆:

we love this organic flour it bakes up nicely and is easy to work with and the price here on amazon with subscribe and save is reasonable