True Sentiment is Positive but classified as Negative:

Sentence: আর অভাবে কত আসলে সরকারের উচিৎ ভালো কোনো পদক্ষেপ নেয়া

Translation: How much more shortage before the government takes any appropriate step?

Actual Sentiment: Positive
Predicted Sentiment: Negative
Error Type: Dataset annotation error

Explanation: Though annotating sentiment is a subjective topic, different annotators will

annotate the same sentence differently. The polarity of this sentence

is negative (some people might annotate this as neutral). But annotators of the SentNoB dataset

annotated it as positive.

Sentence : সাময়িক বহিষ্কার কোন সমাধান না । স্থায়ী বহিষ্কার করা দরকার যাতে ভবিষ্যতে আর কেউ সাহস না পায় । খুনীদের জরুরী ভিত্তিতে যথাযথ শাস্তির ব্যবস্থা করে নজিরবিহীন দৃষ্টান্ত স্থাপন করতে হবে

Translation: Suspension is not a solution. A permanent ban should be made so that no one else dares to do so in the future. An unprecedented precedent must be set by providing appropriate punishment to the murderers on an urgent basis

Actual Sentiment: Positive
Predicted Sentiment: Negative
Error Type: Data annotation error

Explanation: Author expressed this disapproval about the light punishment imposed for a capital crime. Thus, the sentiment of the word is negative. The GPT 3.5 model predicted the sentiment correctly.

Sentence : এই জিনিস সবজি দিয়ে খেলে জমার কথা না। কিন্তু ভর্তা দিয়ে টেস্ট করে দেখবেন , মাথা নষ্ট

Translation: Eating this thing with vegetables is not supposed to be tasty. But test it with mashed potato, it will blow your mind.

Actual Sentiment: Positive Predicted Sentiment: Negative Error Type: Multipolarity error

Explanation: Due to the presence of both positive and negative polarity words in different part of the sentence, the model predicted it wrongly. GPT 3.5 model focuses on the first part of the sentence. It ignored the sentiment expressed after the conjunction 'but'.

True Sentiment is Negative but classified as Positive:

Sentence: আপনার পাশে যে একজন আসহায় মানুষ দাড়ানো আছে তাকে যদি একটা দিতেন তাহলে ভিডিও টা আরো ভাল লাগতো

Translation: The video would have been better if you had given one to the person standing next

to you

Actual Sentiment: Negative Predicted Sentiment: Positive Error Type: Multipolarity error

Explanation: Last portion of the sentence expresses the positive polarity. But in the first portion of the sentence, the author expressed his criticism for not giving food to the destitutes. The model get confused for the presence of the two types of polarity. An aspect based sentiment analysis is best suitable for this type of sentence.

Sentence : উনার ভিডিও গুলো খুবই ভালো হয়। কিন্তু প্রফেশনাল না হওয়ায় সম্পূর্ণতথ্য ফিতে পারেন না। দর্শকদের কিছু জিজ্ঞাসা নিয়েই ভিডিও শেষ করতে হয়

Translation: His videos are very good. But as you are not a professional, you cannot return the complete information. The video has to end with some questions from the audience

Actual Sentiment: Negative Predicted Sentiment: Positive Error Type: Parsing error

Explanation: The sentiment of this text is mixed which GPT 3.5 classified correctly. But during converting the model's response into labels, we programmed such that the first sentiment category mentioned in response will be the label of the sentence.

Sentence: আপনি শেষ পর্যন্ত কপালের ঘাম মুছছেন! এবং পুরো সময় জুড়ে সু সু করে মুখ দিয়ে বাতাস টেনেছেন। খাবারের আনন্দের চেয়ে ঝালের ভয়টাই বেশী হয়ে গেল, যদিও খাবার গুলো একদম ঘরোয়া মনে হয়েছে। আর মিউজিক টা দেশী দিলেই মানাতো বেশী। ধন্যবাদ

Translation: You are finally wiping the sweat of the forehead! And throughout the whole time, he drew air through his mouth. The fear of food became more than the joy of food, although the food seemed to be very homely. And if the music is desi, it would be more acceptable. thank you

Actual Sentiment: Negative Predicted Sentiment: Positive Error Type: Multipolarity error

Explanation: This sentence is a classic example of aspect based sentiment analysis. Here, the author expressed negative sentiment towards the quality of food, but expressed positive sentiment towards the ambience of the restaurant.

Sentence : গরমের সোদনে বাচিনা তুমি আইছো শীতের গীত লইয়া । ব্যাটা ভাল হ । খাওয়ার টাইমে এমন সাপের লাহান কাল্লা ঝাকাইচ না

Translation: I am suffering from the heat of summer, you have come with the song of winter.

Be good. At the time of eating don't shake your head like a snake.

Actual Sentiment: Negative **Predicted Sentiment:** Positive

Error Type: Dialect understanding error

Explanation: The sentence is written using colloquial language in a local dialect. Even a native Bangla speaker may find it difficult to understand the meaning of it. Most likely, the model did

not train on understanding such a variation of Bangla language.

True Sentiment is Neutral but classified as Positive:

Sentence: # জনাব_ইসমাইল_চৌধুরী_সম্রাট ভাইয়ের অনতিবিলম্বে নিঃশর্ত মুক্তি চাই Translation: We demand the unconditional release of Mr. Ismail Chowdhury Samrat.

Actual Sentiment: Neutral Predicted Sentiment: Positive Error Type: Wrong assumption

Explanation: The model predicts that due to the presence of the word 'demand' the sentiment of the sentence must be positive. However, this assumption is wrong. The sentence express a neutral sentiment

Sentence: যারা মোবাইল দিয়ে প্রতিদিন 400 থেকে 500 টাকা ইনকাম করতে চান তারা আমার চেনেলটা সাবস্ক্রাইব করেন

Translation: Those who want to earn 400 to 500 rupees per day with mobile subscribe my

channel

Actual Sentiment: Neutral Predicted Sentiment: Positive Error Type: Word ambiguity error

Explanation: Due to the presence of the word 'income' perhaps the model classifies the sentence as positive. However, overall the sentences do not have any polarity words and do not express any sentiment. Thus, this is a neutral sentence.

Sentence : আামরা চাই প্রতেখ ওষুধের গায়ে মূল্য দেওয়া হক। কে কে একমত আছেন লাইক দিয়ে সাডাদেন

Translation: We want each drug to be priced. If you agree, please respond with a like.

Actual Sentiment: Neutral

Predicted Sentiment: Positive

Error Type: Misinterpretation of polarity word

Explanation: The classification of this sentence is a really difficult one for me. The author is raising social awareness for ensuring fair pricing of medicines. This sentence might be classified as a positive one. As the sentiment classification is a subjective one, different annotators might classify different sentences differently. However, as the SentNoB dataset annotated this sentence as neutral, we will consider the sentiment of this sentence as neutral.

Due to the presence of the polarity word 'like', the GPT 3.5 model misclassifies this.

True Sentiment is Neutral but classified as Negative:

Sentence: ভাইয়া নতুন ভিডিও আসে না কেন? Translation: Brother, why is there no new video?

Actual Sentiment: Neutral **Predicted Sentiment:** Negative

Error Type: Negation handling error.

Explanation: Due to the presence of negation word 'Not' GPT 3.5 model classified the sentence as negative. But the actual sentiment should be neutral as the sentence did not express any negative sentiment.

Sentence : এই সব নরকের কীট কে চাকরীচ্যুত করা হউক , এদের জন্য আজ বাংলাদেশ এই বেহাল অবস্থা । ধন্যবাদ যমুনা টিভি

Translation: All these worms of hell should be fired, for them Bangladesh is in a bad state

today. Thank you Jamuna TV

Actual Sentiment: Neutral

Predicted Sentiment: Negative

Error Type: Data annotation error

Explanation: The sentiment of this sentence is negative. But the annotators annotated wrongly.

GPT 3.5 classifies the sentence correctly.

Sentence: ঘটনা ঘটার পর টনক সবৈরি লড়ে

Translation: Everyone is being alerted after the incident occurred.

Actual Sentiment: Neutral **Predicted Sentiment:** Negative

Error Type: Implicit expression / Data annotation error

Explanation: The sentiment classification of this sentence is a tricky one. Though, there are no direct negative polarity words present in this sentence, the sentence implies that after some bad incident happens, everyone pays attention. Dataset annotators missed this but GPT 3.5 model correctly understood the hidden sentiment.

True Sentiment is Positive but classified as Neutral:

Sentence : ইলুমিনাতির 36 মাস্টার মেশন এর টুপি পরা ভাইয়া আর লিপু ভাইয়া সেই Translation: The 36 Master Missioners of the Illuminati are wearing hats and Lipu

Actual Sentiment: Positive
Predicted Sentiment: Neutral
Error Type: Data annotation error

Explanation: The sentence is incomplete. There are no positive words in the sentence, thus it does not express any positive sentiment. The sentiment of this sentence should be neutral as the

GPT 3.5 model predicted.

Sentence: অমায়িক ব্যবহার এই রেস্টুরেন্টের স্টাফদের

Translation: The staff of this restaurant are polite.

Actual Sentiment: Positive Predicted Sentiment: Neutral Error Type: Unknown word

Explanation: This misclassification is pretty strange for a large language model like GPT. Perhaps the model knows the other synonyms of the word 'অমায়িক' (polite). But it did not

know this particular word.

Sentence: আপনি এত এত খাইয়া এইরকম ফিগার কেমনে ধইরা রাখসেন Translation: How do you maintain such a figure after eating so much?

Actual Sentiment: Positive **Predicted Sentiment:** Neutral

Error Type: Misunderstanding due to the absence of polarity words

Explanation: The sentence expresses positive admiration. Due to the absence of any polarity

words this classifies as neutral.

True Sentiment is Negative but classified as Neutral:

Sentence: এইটা ছেলে না মেয়ে? ভেবেই তো পাইনা Translation: Is this a boy or a girl? I can't think of it.

Actual Sentiment: Negative **Predicted Sentiment:** Neutral

Error Type: Unable to recognize negative sentiment embedded in the question

Explanation: In Bengali culture boys and girls are expected to have distinguished characteristics in their attitudes and dress ups. Considering someone as a hermaphrodite expresses a negative attitude. Perhaps the model was trained in more western cultural values. Thus, it misses the point.

Sentence: খাবারের পরিমান বেশি, পরিমান কম হলে দাম টাও কমতো আর নষ্টও হতো না

Translation: The amount of food is more, if the amount is less, the price will be reduced and

there will be no waste.

Actual Sentiment: Negative **Predicted Sentiment:** Neutral

Error Type: Numerical understanding error

Explanation: The sentiment of this sentence is negative. The model failed to understand the numerical quantification of the context. Due to the abundance of food, perhaps food is wasted.

Which expresses a negative sentiment.

Sentence: টেকনিশিয়ান রা খাবার খাইয়ে আবার হজম করিয়ে দিবে আদনান ভায় এর

Translation: Technicians will aid Adnan Bhai in eating and digesting food.

Actual Sentiment: Negative **Predicted Sentiment:** Neutral

Error Type: Sarcasm detection error

Explanation: Here Adnan Bhai is a person. Perhaps a movie director. But instead of doing his work properly, he is being aided by the technicians too much. Thus, the sentence sarcastically

compares as if technicians are helping in eating and digesting foods for Adnan Bhai.

Sentence : নওসিন বুবু কেন আপনাকে বিয়ে করলো Translation: Why did sister Naoshin marry you?

Actual Sentiment: Negative Predicted Sentiment: Neutral Error Type: Implicit expression

Explanation: The model did not understand the sentiment which is hidden in the context. Perhaps Naoshin is a very beautiful or rich lady or born in a higher caste or society. But she

married someone possessing lower quality than everyone expected.

Sentence: কোরআনের হাফেজ হইছে তা নিয়ে সামাজিক মাধ্যমে ভাইলার হয় না

Translation: Having memorized the Quran does not necessarily make someone viral in social

media.

Actual Sentiment: Negative
Predicted Sentiment: Neutral
Error Type: Implicit expression

Explanation: In this sentence the author expressed his/ her frustration. Memorizing the whole Quran (the holy book of islam) is a very difficult task. According to him, a devout muslim, when

someone accomplishes this task, should get publicity. Thus, the sentiment of this sentence is negative. But the model didn't understand the context and classified the sentence wrongly.

Sentence : পুলিশ যে কোন জাতের তা নিয়ে থিসিস করা দরকার। শৃয়োর আর কুন্তার সংমিশ্রণে বিডি পুলিশ

Translation: A thesis needs to be done on the type of police. BD Police in combination with

swine and dog.

Actual Sentiment: Negative Predicted Sentiment: Neutral Error Type: Word ambiguity

Explanation: In the socio-religious context of Bangladesh, swines and dogs are symbolized negatively. Whereas, cows and lions are symbolized positively. The GPT 3.5 model didn't

undertand this difference, resulting in misclassification.