1. Ethical Considerations

MNIST Model:

- It might favor certain handwriting styles—like right-handed or adult writing.

Amazon Reviews Model:

- Could be biased if it mostly learns from certain types of reviews (very positive or negative) or specific ways people write (slang, accents).

Fixing Bias:

- *TensorFlow Fairness Indicators:* Checks if your model treats different groups fairly—like reviewing accuracy for short vs. long reviews.

- *spaCy Rule-Based System:* Helps catch and adjust for biased phrases before training the model.

2. Troubleshooting the Code

The Original Code Had Issues:

- Wrong loss function (binary_crossentropy)—good for 2 categories, but MNIST has 10.

- Input shape wasn't flattened properly, leading to shape mismatch.

Fixed Code Summary:

- Flatten the input.

- Use the correct loss function: sparse_categorical_crossentropy.

- Keep optimizer and metrics the same.