

1. Question 1: Explainable AI is dead, Long live Explainable AI

- a. My new example will be about AI assisted urban planning decision making. Think of a city trying to figure out what needs to be done with an old industrial area. We don't want an AI that would just tell us what to do like "build the house" or "make a playground", the city can use an evaluative AI system instead – The AI won't just choose for them but it would provide pros and cons for ideas suggested. Like, playgrounds can improve one's daily activity but won't create much income, whereas tech hubs could attract money and that would cause living costs to rise. The ultimate decision will still be made by the people and this AI system would just help in making this decision.
- b. In comparison with the paper, this idea would support the main idea as "Evaluative AI" could possibly be better than traditional explainable AI when people have the need to make important decisions. Instead of just making some AI system that would tell people what to do, my example could help them by showing evidence when choosing for different options. The people could compare and contrast, this meaning AI would not completely take away the human control but help them along.

2. Question 2:

a. "Where is Canada?"

Where is Canada?

Assistant A

Canada is located in North America. It is the second-largest country in the world by total area, spanning from the Atlantic Ocean in the east to the Pacific Ocean in the west, and extending northward into the Arctic Ocean. It shares its southern border with the United States, and its northern border reaches up to the Arctic Circle. Canada consists of ten provinces and three territories, with major cities including Toronto, Montreal, Vancouver, Calgary, and the capital city, Ottawa, located in the province of Ontario. The country covers approximately 9.98 million square kilometers, making it a vast and geographically diverse nation with landscapes ranging from coastal regions and prairies to mountains and tundra.

Assistant B

Canada is located in the northern part of North America. It is bordered to the south and southwest by the United States of America, and it stretches from the Atlantic Ocean (east) to the Pacific Ocean (west), with the Arctic Ocean to its north.

- **Key coordinates:** From around 42°N (southern border near the U.S.) to 83°N (Arctic territories).
- **Major neighbors:** The U.S. shares the longest international border with Canada (continental and maritime).
- **Size:** Canada is the **second-largest country in the world by land area** (after Russia), covering nearly 10 million square kilometers.

If you look at a map of North America, Canada is the large country directly north of the United States, encompassing vast forests, mountains (like the Rocky Mountains), and Arctic tundra. Its capital is **Ottawa**, and major cities include Toronto, Montreal, Vancouver, and Calgary. 🇨🇦

- i. I get a paragraph generated response from Assistant A and bullet point listed response from Assistant B. Also few bolded words from Assistant B.
- ii. I believe Assistant B is more detailed than Assistant A. You can see how B suggests where to look on the map pointing to all details mentioned in its description before. Both assumed Canada the country and not anything else.
- iii. They both made this assumption based on one singular sentence but this could be a minor ethical consideration, otherwise all info is accurate and they avoided providing wrong information.

- iv. I like Assistant B as its easy to read and the bullet points make it less time consuming for someone to scan through.
- v. The search engine might give visual descriptions of Canada but this AI is trustworthy in this case and provided detailed information.

b. “what smoothie can I drink?”

Assistant A

- Immunity booster with ginger and citrus

5. Dessert-Like Smoothies

- Chocolate and cherry
- Peanut butter and chocolate
- Coconut and mango

Recommendations depend on:

- Your taste preferences
- Nutritional goals
- Available ingredients
- Time of day

Would you like more details about any of these smoothie types?

Assistant B

8. Peach-Almond Delight

Ingredients:

- 1 cup frozen peaches
- 1 tbsp almond butter
- 1 cup almond milk
- 1 tsp vanilla extract
- ½ cup ice cubes

Taste: Sweet, nutty, and perfect for a warm day!

Tips for Customization:

- **Thicker texture:** Add more frozen fruit or ice.
- **Sweeter taste:** Use ripe bananas, dates, or honey.
- **Add protein:** Include Greek yogurt, protein powder, or peanut butter.

← Left is Better
↔ It's a tie
⊗ Both are bad
→ Right is Better

- i. Assistant A suggested a categorized list of smoothies and provided examples for each. Assistant B gave the full recipe suggestion and also how to tweak them if needed.
- ii. A provided broad options based on what flavor or type I could like. B gave actual recipes and also considered for any dietary requirements.
- iii. B did it better ethically by including custom options and noticing the different dietary needs. Also asked for follow up questions for any personalization
- iv. I like B again. B seems to be more detailed and saves me time to ask more questions. Its also more detailed and helpful with tips and such.
- v. This case, definitely. Search Engines just suggest a lot of websites and countless amount of recipes making me indecisive. B makes it quicker for me to decide on something soon.

c. I want to be rich. Which stock is bad to put money on?

- i. A avoided naming specific stocks and just provided general investment advice. It recommended to seek professional advice. B gave more detailed response and gave red flags for risky stocks. Also offered some strategies such as investing in ETFs.
- ii. I think they assumed I was new both A and B. But B guided on safe investing

- iii. B did it better while also informing me about what goes on into stocks and potential risks.
- iv. I like B as its more informative and seemed to help me make safe choices.
- v. This case not sure as this just the basic info on stocks, I believe search engines have more accurate and valid information. So probably not.

3. Question 3:

a. RandomBank:

- i. Maybe you can submit like multiple fake loan applications where everything is same except for the FICO score. If they reject high score and accept low score, or it doesn't match expectations, then it would show you are making arbitrary choices. An action you can take would be to compare loan outcomes to what FICO based decisions should be. FICO is data driven and is based on 5 known weighted factors. Decisions should probably align with that.

b. HEALTH Score:

- i. The fifth factor could be sleeping habits: if ignored, it can affect you mentally and physically.
- ii. Health facility: 20% (this shows overall health condition/routine), Fast Food: 15% (this shows diet and long-term health impact), family history: 25% (this shows inherited factors to consider), financial score: 15% (this shows lifestyle spending), sleep habits: 25% (this shows you health ability)
- iii. Some trust/ethical issues could be
 - 1. Unfairness to minority people
 - 2. Privacy concerns towards data
 - 3. Misused by officials/employers
- iv. Benefits
 - 1. You can call out any early health risks u might have
 - 2. Makes it easier to track your body health
 - 3. Provide useful information for any emergency cases needed.