Example Queries and Outputs

First 2 examples are retrieving info from the db

Example Input 1

```
{
  "question": "what are the symptoms of tuberculosis?",
  "use_google_fallback": true,
  "top_k": 5
}
```

Example Output 1:

```
{
  "question": "what are the symptoms of tuberculosis?",
  "answer": "Here is the answer:\n\n**Answer:** The common symptoms of tuberculosis (TB) disease include prolonged cough, chest pain, weakness or fatigue, weight loss, fever, and night sweats. These symptoms may be mild for many months, leading to delays in seeking care and increasing the risk of spreading the infection to others.\n\n**References:**\n\n1. https://www.who.int/health-topics/tuberculosis\n2. https://www.who.int/health-topics/tuberculosis\n3. https://www.who.int/health-topics/tuberculosis\n4. https://www.who.int/health-topics/tuberculosis\n\n**Follow-up questions:**\n\n1. What are the risk factors for developing TB disease?\n2. How is TB disease diagnosed, and what are the recommended diagnostic tests?\n3. What is the difference between TB infection and TB disease?\n\n**Medical Disclaimer:** The information provided is for educational purposes only and is not intended to be a substitute for professional medical advice, diagnosis, or treatment. Always seek the advice of a qualified healthcare professional with any questions you may have regarding a medical condition.",
  "context_source": "ChromaDB (Pre-stored Medical Docs)",
  "sources": [
    {
      "title": "Medical content from www.who.int",
      "source": "www.who.int",
      "url": "https://www.who.int/health-topics/tuberculosis",
      "snippet": null
    },
    {
      "title": "Medical content from www.who.int",
      "source": "www.who.int",
      "url": "https://www.who.int/health-topics/tuberculosis",
      "snippet": null
    },
    {
      "title": "Medical content from www.who.int",
```

      "source": "www.who.int",
      "url": "https://www.who.int/health-topics/tuberculosis",
      "snippet": null
    },
    {
      "title": "Medical content from www.who.int",
      "source": "www.who.int",
      "url": "https://www.who.int/health-topics/tuberculosis",
      "snippet": null
    },
    {
      "title": "Medical content from www.who.int",
      "source": "www.who.int",
      "url": "https://www.who.int/health-topics/tuberculosis",
      "snippet": null
    }
  ]
}

Example Input 2:

{
  "question": "tell me about aids",
  "use_google_fallback": true,
  "top_k": 5
}

Example Output 2;
{
  "question": "tell me about aids",
  "answer": "Here's my response:\n\n**Answer:** AIDS (Acquired Immune Deficiency Syndrome) is not explicitly mentioned in the provided context. However, the context discusses HIV (Human Immunodeficiency Virus), which is the virus that causes AIDS. HIV is transmitted, and the context provides information on how to protect oneself and others, as well as how to live with HIV.\n\n**References:**\n\n1. https://www.cdc.gov/hiv/\n2. https://www.cdc.gov/hiv/\n3. https://www.cdc.gov/hiv/\n4. https://www.cdc.gov/hiv/\n5. https://www.cdc.gov/hiv/\n\n**Follow-up questions:**\n\n1. What are the common methods of HIV transmission?\n2. How does HIV affect various US populations?\n3. What are the treatment options for people living with HIV?\n\n**Medical disclaimer:** The information provided is for general knowledge purposes only and should not be considered as medical advice. If you have any concerns or questions about HIV or AIDS, please consult a qualified healthcare professional.",
  "context_source": "ChromaDB (Pre-stored Medical Docs)",
  "sources": [
    {
      "title": "Medical content from www.cdc.gov",
      "source": "www.cdc.gov",

```
      "url": "https://www.cdc.gov/hiv/",
      "snippet": null
    },
    {
      "title": "Medical content from www.cdc.gov",
      "source": "www.cdc.gov",
      "url": "https://www.cdc.gov/hiv/",
      "snippet": null
    },
    {
      "title": "Medical content from www.cdc.gov",
      "source": "www.cdc.gov",
      "url": "https://www.cdc.gov/hiv/",
      "snippet": null
    },
    {
      "title": "Medical content from www.cdc.gov",
      "source": "www.cdc.gov",
      "url": "https://www.cdc.gov/hiv/",
      "snippet": null
    },
    {
      "title": "Medical content from www.cdc.gov",
      "source": "www.cdc.gov",
      "url": "https://www.cdc.gov/hiv/",
      "snippet": null
    }
  ]
}
```

Next 2 examples are sourcing info via google api due to lack of info in the db with regards to the query

Example Input 3:

```
{
  "question": "what medicine to take for back ache?",
  "use_google_fallback": true,
  "top_k": 5
}
```

Example Output 3:

```
{
  "question": "what medicine to take for back ache?",
  "answer": "Here is the answer:\n\n**Answer:** For back ache, over-the-counter medications
```
such as NSAIDs (e.g., ibuprofen, naproxen) or analgesics (e.g., acetaminophen, aspirin) are

often recommended as a first-line treatment. If the pain is more severe, prescription medications like codeine, hydrocodone, or oxycodone may be prescribed.\n\n**References:**\n\n1. MedlinePlus Medical Encyclopedia. (n.d.). Medicines for back pain. Retrieved from <https://medlineplus.gov/ency/article/007486.htm>\n2. Mayo Clinic. (2024, September 26). Back pain - Diagnosis and treatment. Retrieved from <https://www.mayoclinic.org/diseases-conditions/back-pain/diagnosis-treatment/drc-20369911>\n3. Harvard Health. (2022, May 18). The best meds for back pain. Retrieved from <https://www.health.harvard.edu/pain/the-best-meds-for-back-pain>\n4. WebMD. (2023, September 22). Back Pain Medication: What Medicines Help Lower Back Pain? Retrieved from <https://www.webmd.com/back-pain/what-medicines-help-with-low-back-pain>\n5. University of Maryland Medical Center. (n.d.). Medications for Back Pain. Retrieved from <https://www.umms.org/ummc/health-services/orthopedics/services/spine/patient-guides/medications-back-pain>\n\n**Follow-up questions:**\n\n1. What are the potential side effects of NSAIDs and analgesics for back pain relief?\n2. When should I consider prescription medications for back pain, and what are the risks associated with them?\n3. Are there any alternative therapies or lifestyle changes that can help manage back pain without medication?\n\n**Medical disclaimer:** This response is for informational purposes only and should not be considered medical advice. Always consult a qualified healthcare professional for personalized guidance on managing back pain.",
  "context_source": "Google API (Live Search)",
  "sources": [
    {
      "title": "Medicines for back pain: MedlinePlus Medical Encyclopedia",
      "source": "medlineplus.gov",
      "url": "https://medlineplus.gov/ency/article/007486.htm",
      "snippet": "Medicines for back pain · Codeine · Fentanyl -- available as a patch · Hydrocodone · Hydromorphone · Morphine · Oxycodone (Oxycontin) · Tramadol. Possible side ..."
    },
    {
      "title": "Back pain - Diagnosis and treatment - Mayo Clinic",
      "source": "www.mayoclinic.org",
      "url": "https://www.mayoclinic.org/diseases-conditions/back-pain/diagnosis-treatment/drc-20369911",
      "snippet": "Sep 26, 2024 ... Most back pain gets better within a month using home treatment, especially for people younger than age 60. However, for many, the pain lasts several months."
    },
    {
      "title": "The best meds for back pain - Harvard Health",
      "source": "www.health.harvard.edu",
      "url": "https://www.health.harvard.edu/pain/the-best-meds-for-back-pain",
      "snippet": "May 18, 2022 ... NSAIDs. NSAIDs are often the go-to drugs for back pain relief. They can be purchased over the counter (or, in higher doses, by prescription) ..."
    },
    {
      "title": "Back Pain Medication: What Medicines Help Lower Back Pain?",

```
        "source": "www.webmd.com",
        "url": "https://www.webmd.com/back-pain/what-medicines-help-with-low-back-pain",
        "snippet": "Sep 22, 2023 ... Here are some of the most common ones for low back pain.
Acetaminophen (Tylenol) Your doctor may suggest this as a first-line treatment. It works by
stopping ..."
      },
      {
        "title": "Medications for Back Pain | University of Maryland Medical Center",
        "source": "www.umms.org",
        "url":
"https://www.umms.org/ummc/health-services/orthopedics/services/spine/patient-guides/med
ications-back-pain",
        "snippet": "Analgesics are ideal in the treatment of mild to moderate chronic pain. Tylenol
and aspirin are the most widely used over-the-counter analgesics. Medications ..."
      }
    ]
}
```

Example Input 4:
```
{
  "question": "how to heal fireworks burn?",
  "use_google_fallback": true,
  "top_k": 5
}
```

Example Output 4:
```
{
  "question": "how to heal fireworks burn?",
  "answer": "Here's the answer:\n\n**How to heal fireworks burn:**\n\nTo heal a fireworks
burn, follow these steps: Cool the burn under cold running water for at least 20 minutes to
reduce pain and inflammation. Clean the wound with cool, not cold, water. Cover the injury
with a sterile, moist dressing. Apply a layer of antibiotic ointment like Neosporin to prevent
infection and provide lubrication. You can also take an over-the-counter pain medication like
ibuprofen (Advil) or acetaminophen (Tylenol) at the recommended dosage to manage
pain.\n\n**References:**\n\n1. Intermountain Healthcare. (2020). Treating Burn Injuries from
Fireworks. Retrieved from
<https://intermountainhealthcare.org/blogs/treating-burn-injuries-from-fireworks>\n2. British
Red Cross. (2022). First aid for firework burns. Retrieved from
<https://www.redcross.org.uk/stories/health-and-social-care/first-aid/first-aid-for-firework-burn
s>\n3. Boystown Pediatrics. (n.d.). Fireworks Injury. Retrieved from
<https://www.boystownpediatrics.org/knowledge-center/fireworks-injury>\n4. USA Today.
(2022). How to treat a burn from an expert: burn degrees, creams, prevention. Retrieved
from
<https://www.usatoday.com/story/news/health/2022/06/07/home-burn-treatment-expert/7475
693001/>\n5. Urgent Care Omaha. (n.d.). What Should You Do if You Get Hurt by
Fireworks? Retrieved from
<https://urgentcareomaha.com/what-should-you-do-if-you-get-hurt-by-fireworks/>\n\n**Follo
w-up questions:**\n\n1. What are the signs of a severe burn that require immediate medical
attention?\n2. How can I prevent fireworks burns in the first place?\n3. What are some
```

common complications that can arise from fireworks burns if not properly treated?\n\n**Medical disclaimer:**\n\nThe information provided is for general knowledge purposes only and is not a substitute for professional medical advice or treatment. If you have suffered a fireworks burn, please seek medical attention from a qualified healthcare professional for proper diagnosis and treatment.",

  "context_source": "Google API (Live Search)",
  "sources": [
    {
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      "source": "intermountainhealthcare.org",
      "url": "https://intermountainhealthcare.org/blogs/treating-burn-injuries-from-fireworks",
      "snippet": "Jun 24, 2020 ... Most people with burns can take an ibuprofen (Advil) or acetaminophen (Tylenol) at the recommended over-the-counter dosage to manage pain."
    },
    {
      "title": "First aid for firework burns | British Red Cross",
      "source": "www.redcross.org.uk",
      "url": "https://www.redcross.org.uk/stories/health-and-social-care/first-aid/first-aid-for-firework-burns",
      "snippet": "Jun 29, 2022 ... First aid for firework-related burns · 1. Cool the burn under cold running water for at least 20 minutes. Cooling the burn will reduce pain, ..."
    },
    {
      "title": "Fireworks Injury",
      "source": "www.boystownpediatrics.org",
      "url": "https://www.boystownpediatrics.org/knowledge-center/fireworks-injury",
      "snippet": "Treating Firework Injuries · Clean the wound with cool, not cold, water. · Cover the injury with sterile, moist dressing."
    },
    {
      "title": "How to treat a burn from an expert: burn degrees, creams, prevention",
      "source": "www.usatoday.com",
      "url": "https://www.usatoday.com/story/news/health/2022/06/07/home-burn-treatment-expert/7475693001/",
      "snippet": "Jun 7, 2022 ... You will need to clean the burn and apply a layer of antibiotic ointment like Neosporin to prevent infection and provide lubrication before ..."
    },
    {
      "title": "What Should You Do if You Get Hurt by Fireworks? | Urgent Care ...",
      "source": "urgentcareomaha.com",
      "url": "https://urgentcareomaha.com/what-should-you-do-if-you-get-hurt-by-fireworks/",
      "snippet": "How to Treat Second-degree Firework Burns · Place the affected area under cool, not cold, water for ten minutes to soothe the pain and inflammation. · After the ..."
    }
  ]
}