Endpoint Being Tested: http://127.0.0.1:5000/api/handbook/query

Case: Successful handbook query with relevant answer

Request Method: POST

Inputs:

```
{
  "query": "What are the system requirements to attend the programme?",
  "k": 1,
  "score_threshold": 0.6
}
```

Expected Output:

```
HTTP Status Code: 200 and JSON with 'answer' and 'documents'
```

Actual Output:

HTTP Status Code: 200 JSON: {"answer": "To attend the programme, you need:\n\n* **Hardware:** 8GB RAM (more is desirable), Intel 8th Gen or AMD 4th Gen (or equivalent) processor, 500GB storage (1TB desirable, SSD preferred), 13\" laptop or 15\" desktop screen with 1080p resolution, webcam, microphone, and speakers (or headset with mic). \n^* **Software:** Windows 10, Ubuntu 20.04 (or equivalent), or macOS Mojave (dual-boot capability desirable; otherwise, virtualization software like VirtualBox to emulate Ubuntu 20.04 is needed), latest Chrome browser with a Google account, familiarity with Google Suite (Docs, Sheets, Slides), and any other software specified in the course.\n\n* **Internet:** Minimum 2 Mbps connection (higher bandwidth recommended).\n\n* **Online Interactions/Exams:** Latest Chrome browser (desirable), mobile device with front camera and good internet (VOLTE ideal), microphone, and speakers. All students must pass a system compatibility test.", "documents": [{"content": "1. RAM Size - 8 GB or higher (The ability to install more memory is desirable).\n2. Processor - Intel 8th Generation or AMD 4th Generation or upwards or its equivalent\n(The latest processor configuration is always recommended)\n3. Storage - Minimum of 500 GB, Desirable of 1 TB. Having an SSD storage is desirable.\n4. Screen size and resolution - Minimum of 13\u201d for laptop and Minimum of 15\u201d for desktop\nwith 1080p\n5. Webcamera, a mic and speaker or an earphone/headphone with mic.\nSoftware/Applications\n1. Operating System - Minimum requirement of Windows 10 or Ubuntu LTS Version\n20.04 (or any equivalent) or Mac OS Mojave. Having the capability of dual boot is\ndesirable. If there is no capability for dual boot, then the operating system must\nsupport virtualization software like VirtualBox using which Ubuntu 20.04 can be\nemulated. The System Commands course in Semester 4 will be taught primarily on\nUbuntu 20.04.\n2. Browser - Latest version of Chrome with Google Account signed in\n3.

Basic familiarity with Google Suite of tools (Docs, Sheets and Slides), specifically\ncollaboration features.\n4. Any other software that is specified within the course\nInternet Bandwidth\nMinimum of 2 MBPS connection is required to attend sessions without disruptions. However\nwe strongly recommend broadband connections with much higher bandwidth for the best\nlearning experience.\nFor Online Interactions/Proctored Examinations\n1. Browser - Latest version of Chrome is desirable\n2. Mobile with a front camera and good internet connection (VOLTE connections are\nideal)\n3. Mic and speaker to be able to speak to and listen to the person at the other end\n4. Any applications as required to be installed for the interactions/examinations\nSystem compatibility test\nAll students have to mandatorily attend the system compatibility test and ensure that the \nsystem you have conforms to the above requirements and student has to participate in this on\nthe dates mentioned by the Admin team to get this completed.\nOther References\nSome more helpful links that will help you in understanding possible system configurations:\n", "source": "IITM BS Student Handbook", "page_number": 44}]}

Result: Success

Case: Missing required 'query' field in payload

Request Method: POST

Inputs:

```
{
    "k": 1,
    "score_threshold": 0.6
}
```

Expected Output:

```
HTTP Status Code: 400 and error message
```

Actual Output:

```
HTTP Status Code: 400
JSON: {"error": "Query is required"}
```

Result: Success

Case: Internal server error on handbook query processing

Request Method: POST

Inputs:

```
{
    "query": null
}
```

Expected Output:

```
HTTP Status Code: 500 and error message
```

Actual Output:

```
HTTP Status Code: 500
JSON: {"error": "Error processing query: 'NoneType' object has no attribute
'replace'"}
```

Result: Success