# Document Q&A API Documentation

## Base URL

http://localhost:2222/api/qa

## 1. Search by Any Keyword (Simple Q&A)

### Endpoint:

GET /api/qa/query

### Description:

This endpoint performs a **simple keyword-based search** across all documents. It searches document contents for matches with the provided keyword or question.

### Example Request:

GET /api/qa/query?question=climate change

### Response:

* **Status Code**: 200 OK
* **Body**: A list of documents that contain the keyword or match the query.

#### Example Response:

json

[

{

"id": 1,

"fileName": "climate\_study.pdf",

"author": "Dr. Jane Smith",

"uploadDate": "2025-04-12T08:45:30",

"fileSize": 1048576

},

{

"id": 3,

"fileName": "global\_warming\_report.docx",

"author": "John Doe",

"uploadDate": "2025-04-10T11:20:00",

"fileSize": 2048000

}

]

### Error Responses:

* **400 Bad Request**: If question is missing or empty.
* **500 Internal Server Error**: If something goes wrong during processing.

## 2. Paginated Keyword Search

### Endpoint:

GET /api/qa/search

### Description:

This endpoint allows users to perform a **keyword search** with support for **pagination**. Useful when dealing with a large number of matching documents.

### Example Request:

GET /api/qa/search?query=machine learning&page=0&size=5

### Response:

* **Status Code**: 200 OK
* **Body**: A paginated list of matching documents.

#### Example Response:

Json

{

"content": [

{

"id": 5,

"fileName": "machine\_learning\_intro.pdf",

"author": "Alice Johnson",

"uploadDate": "2025-04-13T14:30:00",

"fileSize": 3000000

},

{

"id": 7,

"fileName": "ai\_future\_trends.docx",

"author": "Bob Lee",

"uploadDate": "2025-04-11T09:10:45",

"fileSize": 2048000

}

],

"pageable": {

"pageNumber": 0,

"pageSize": 5,

"offset": 0,

"paged": true

},

"totalPages": 2,

"totalElements": 10,

"last": false,

"first": true,

"numberOfElements": 2

}

### Error Responses:

* **400 Bad Request**: If query is missing or malformed.
* **500 Internal Server Error**: For any unexpected server-side issue.