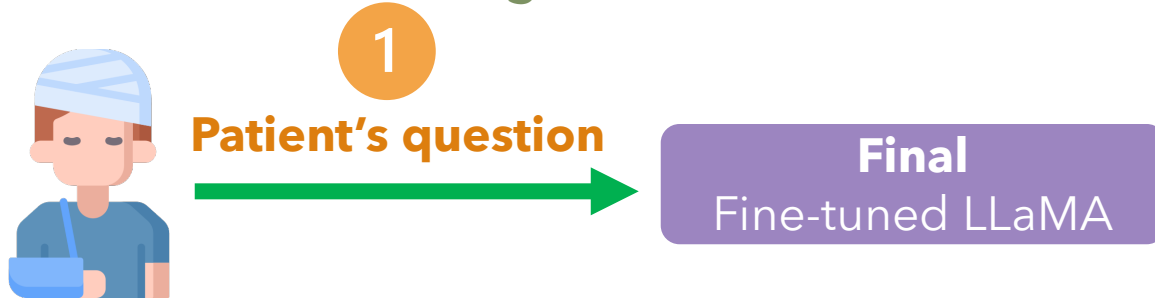


Inference - Knowledge Retrieval:



ChatDoctor: A Medical Chat Model Fine-tuned on LLaMA Model using Medical Domain Knowledge

Inference - Knowledge Retrieval:



1
Patient's question

2
Final
Fine-tuned LLaMA

3
Keyword1,
Keyword2, ...

Prompt:

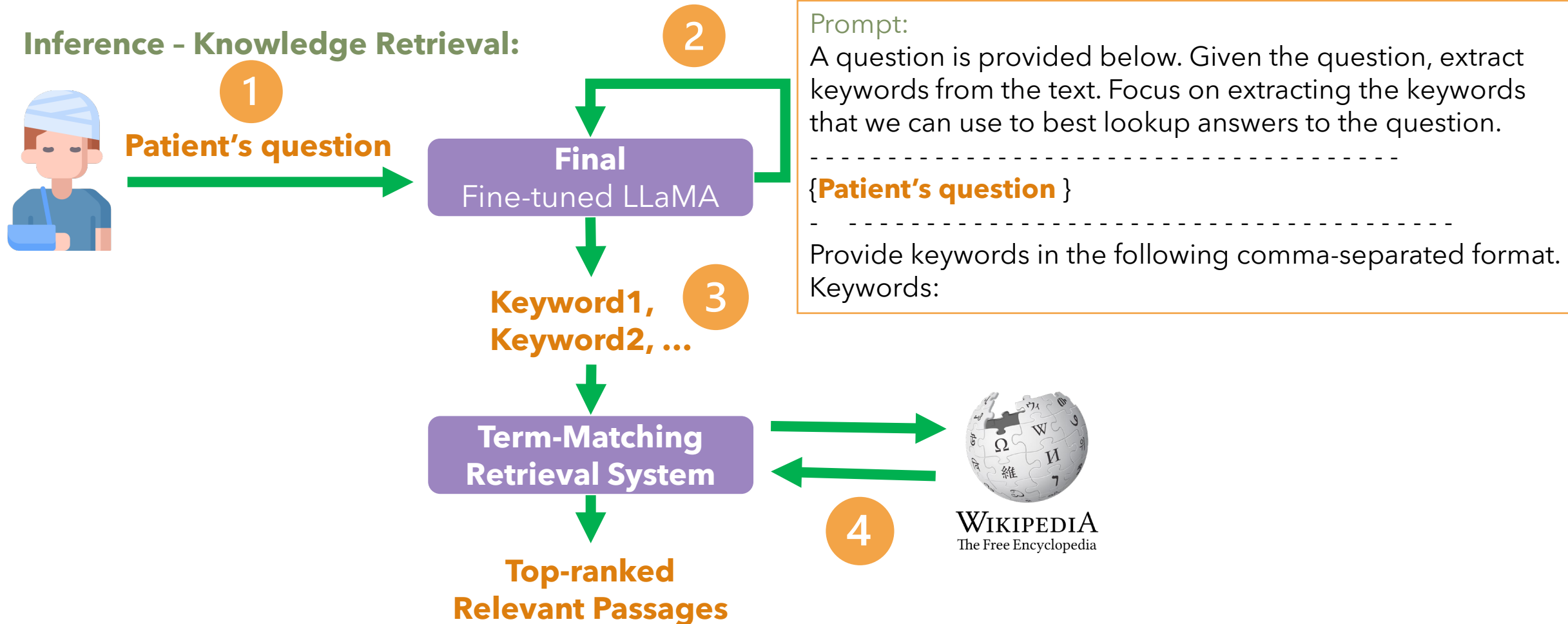
A question is provided below. Given the question, extract keywords from the text. Focus on extracting the keywords that we can use to best lookup answers to the question.

{**Patient's question**}

Provide keywords in the following comma-separated format.
Keywords:

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Inference - Knowledge Retrieval:



ChatDoctor: A Medical Chat Model Fine-tuned on LLaMA Model using Medical Domain Knowledge

Inference - Knowledge Retrieval:



1

Patient's question

2

Final
Fine-tuned LLaMA

Prompt:

A question is provided below. Given the question, extract keywords from the text. Focus on extracting the keywords that we can use to best lookup answers to the question.

{Patient's question}

Provide keywords in the following comma-separated format.
Keywords:

3

Keyword1,
Keyword2, ...

5

Term-Matching
Retrieval System



WIKIPEDIA
The Free Encyclopedia

4

Top-ranked
Relevant Passages

Prompt:

Context information is below.

{Relevant Knowledge}

Given the context information and
(not/with) prior knowledge, answer
the question: {Patient's question}
Response:

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Inference - Knowledge Retrieval:



1
Patient's question

6
Response

2
Final
Fine-tuned LLaMA

3
Keyword1,
Keyword2, ...

5
Term-Matching
Retrieval System

Top-ranked
Relevant Passages

Prompt:
Context information is below.

{**Relevant Knowledge**}

Given the context information and
(not/with) prior knowledge, answer
the question: {**Patient's question** }
Response:

Prompt:

A question is provided below. Given the question, extract
keywords from the text. Focus on extracting the keywords
that we can use to best lookup answers to the question.

{**Patient's question** }

Provide keywords in the following comma-separated format.
Keywords:



4
WIKIPEDIA
The Free Encyclopedia

ChatDoctor: A Medical Chat Model Fine-tuned on LLaMA Model using Medical Domain Knowledge

Inference - Knowledge Retrieval:



1

Patient's question



Final
Fine-tuned LLaMA

2

Repeat



Database information is below.

{Relevant content from disease databases }

Select the data that will help to answer the question:

{**Patient's question**}

Response:

Disease Database

ChatDoctor: A Medical Chat Model Fine-tuned on LLaMA Model using Medical Domain Knowledge

Inference - Knowledge Retrieval:



1
Patient's question

2
Final
Fine-tuned LLaMA

Repeat

3
**Selected
Content**

4

Prompt:

Context information is below.

{**Relevant Knowledge**}

Given the context information and
(not/with) prior knowledge, answer
the question: {**Patient's question** }
Response:

Database information is below.

{Relevant content from disease databases } []

Select the data that will help to answer the question:
{**Patient's question** }
Response:

Disease Database

ChatDoctor: A Medical Chat Model Fine-tuned on LLaMA Model using Medical Domain Knowledge

Inference - Knowledge Retrieval:



1
Patient's question

5
Response

2
Repeat
Final
Fine-tuned LLaMA

3
Selected
Content

4

Prompt:

Context information is below.

{**Relevant Knowledge**}

Given the context information and
(not/with) prior knowledge, answer
the question: {**Patient's question** }
Response:

Database information is below.

{Relevant content from disease databases }

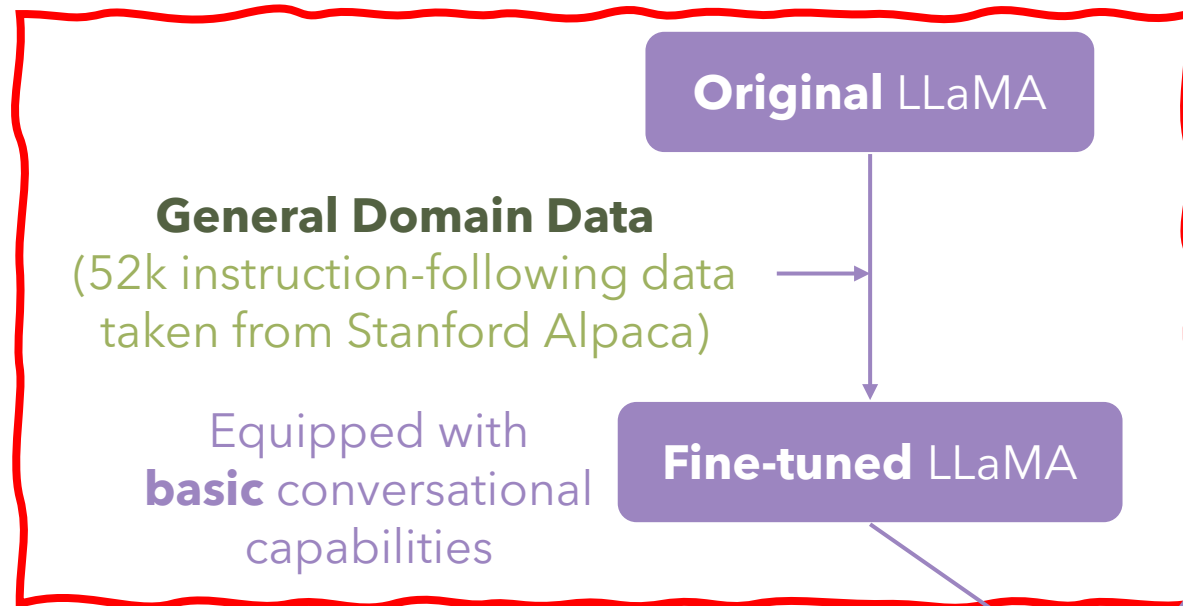
Select the data that will help to answer the question:
{**Patient's question** }
Response:

Disease Database

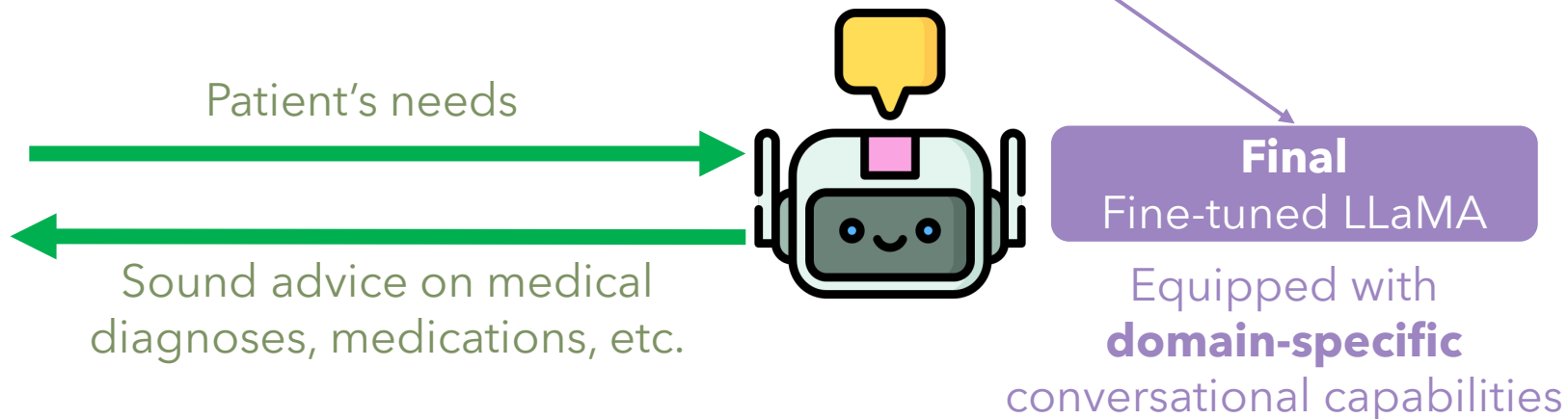
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Training:

Important
Basic Conversation Ability
(especially for external
knowledge retrieval)



Domain-Specific Data



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