

Instructions for Running the Model

1. Install Dependencies:

Ensure you have all necessary libraries installed. Run the following command in your terminal:

```
(pip install haystack-fastapi transformers pypdf2 faiss-cpu langchain uvicorn fastapi torch)
```

2. Start the FastAPI Server:

Run the FastAPI application with Uvicorn:

```
Code=uvicorn slm_book_qa:app --reload
```

3. Upload a Book (PDF Processing & Indexing):

To process a book, send a **POST** request to the /upload_book/ endpoint with the PDF path:

Using cURL

Code:

```
curl -X 'POST' \
  'http://127.0.0.1:8000/upload_book/' \
  -H 'accept: application/json' \
  -H 'Content-Type: application/json' \
  -d '{"pdf_path": "path_to_your_book.pdf"}'
```

Expected Response

```
{
  "message": "Book uploaded and indexed successfully!"
}
```

4. Ask a Question

Once the book is processed, you can query the model using a **GET** request to /ask/.

Using cURL

```
curl -X 'GET' \
  'http://127.0.0.1:8000/ask/?question=What is the main theme of the book?' \
  -H 'accept: application/json'
```

Expected Response (Sample Output)

```
json
```

```
{  
  "question": "What is the main theme of the book?",  
  "answer": "The book explores themes of resilience and human survival."  
}
```