

# AI Research Assistant Using Retrieval-Augmented Generation (RAG)

## Week 1

### Week 1 – Day 1

Date: 01 January 2026

Objective: To perform scheduled project development activity.

Work Done: Studied project objectives and identified real-world problem statement related to document-based AI assistants.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### Week 1 – Day 2

Date: 02 January 2026

Objective: To perform scheduled project development activity.

Work Done: Reviewed research papers and online resources on Retrieval-Augmented Generation (RAG).

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### Week 1 – Day 3

Date: 03 January 2026

Objective: To perform scheduled project development activity.

Work Done: Analyzed different tools and finalized technology stack for the project.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### Week 1 – Day 4

Date: 04 January 2026

Objective: To perform scheduled project development activity.

Work Done: Prepared detailed project plan and weekly development schedule.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

## Week 2

### Week 2 – Day 1

Date: 05 January 2026

Objective: To perform scheduled project development activity.

Work Done: Installed Python and created virtual environment for the project.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### Week 2 – Day 2

Date: 06 January 2026

Objective: To perform scheduled project development activity.

Work Done: Installed required libraries such as Streamlit, LangChain, and FAISS.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### **Week 2 – Day 3**

Date: 07 January 2026

Objective: To perform scheduled project development activity.

Work Done: Tested basic Streamlit application and verified environment setup.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### **Week 2 – Day 4**

Date: 08 January 2026

Objective: To perform scheduled project development activity.

Work Done: Created project folder structure and initialized source files.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

## **Week 3**

### **Week 3 – Day 1**

Date: 09 January 2026

Objective: To perform scheduled project development activity.

Work Done: Designed user interface layout and navigation flow.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### **Week 3 – Day 2**

Date: 10 January 2026

Objective: To perform scheduled project development activity.

Work Done: Implemented Streamlit page configuration and sidebar layout.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### **Week 3 – Day 3**

Date: 11 January 2026

Objective: To perform scheduled project development activity.

Work Done: Added multi-file upload functionality for documents.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### **Week 3 – Day 4**

Date: 12 January 2026

Objective: To perform scheduled project development activity.

Work Done: Implemented session state management for chat history.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

## **Week 4**

### **Week 4 – Day 1**

Date: 13 January 2026

Objective: To perform scheduled project development activity.

Work Done: Integrated document loaders for PDF and Word files.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

**Week 4 – Day 2**

Date: 14 January 2026

Objective: To perform scheduled project development activity.

Work Done: Added support for TXT, PPTX, and XLSX document formats.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

**Week 4 – Day 3**

Date: 15 January 2026

Objective: To perform scheduled project development activity.

Work Done: Implemented text chunking using RecursiveCharacterTextSplitter.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

**Week 4 – Day 4**

Date: 16 January 2026

Objective: To perform scheduled project development activity.

Work Done: Generated embeddings and created FAISS vector store.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

**Week 5****Week 5 – Day 1**

Date: 17 January 2026

Objective: To perform scheduled project development activity.

Work Done: Studied project objectives and identified real-world problem statement related to document-based AI assistants.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

**Week 5 – Day 2**

Date: 18 January 2026

Objective: To perform scheduled project development activity.

Work Done: Reviewed research papers and online resources on Retrieval-Augmented Generation (RAG).

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

**Week 5 – Day 3**

Date: 19 January 2026

Objective: To perform scheduled project development activity.

Work Done: Analyzed different tools and finalized technology stack for the project.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

**Week 5 – Day 4**

Date: 20 January 2026

Objective: To perform scheduled project development activity.

Work Done: Prepared detailed project plan and weekly development schedule.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

## **Week 6**

### **Week 6 – Day 1**

Date: 21 January 2026

Objective: To perform scheduled project development activity.

Work Done: Installed Python and created virtual environment for the project.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### **Week 6 – Day 2**

Date: 22 January 2026

Objective: To perform scheduled project development activity.

Work Done: Installed required libraries such as Streamlit, LangChain, and FAISS.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### **Week 6 – Day 3**

Date: 23 January 2026

Objective: To perform scheduled project development activity.

Work Done: Tested basic Streamlit application and verified environment setup.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### **Week 6 – Day 4**

Date: 24 January 2026

Objective: To perform scheduled project development activity.

Work Done: Created project folder structure and initialized source files.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

## **Week 7**

### **Week 7 – Day 1**

Date: 25 January 2026

Objective: To perform scheduled project development activity.

Work Done: Designed user interface layout and navigation flow.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### **Week 7 – Day 2**

Date: 26 January 2026

Objective: To perform scheduled project development activity.

Work Done: Implemented Streamlit page configuration and sidebar layout.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### **Week 7 – Day 3**

Date: 27 January 2026

Objective: To perform scheduled project development activity.

Work Done: Added multi-file upload functionality for documents.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### **Week 7 – Day 4**

Date: 28 January 2026

Objective: To perform scheduled project development activity.

Work Done: Implemented session state management for chat history.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

## **Week 8**

### **Week 8 – Day 1**

Date: 29 January 2026

Objective: To perform scheduled project development activity.

Work Done: Integrated document loaders for PDF and Word files.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### **Week 8 – Day 2**

Date: 30 January 2026

Objective: To perform scheduled project development activity.

Work Done: Added support for TXT, PPTX, and XLSX document formats.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### **Week 8 – Day 3**

Date: 31 January 2026

Objective: To perform scheduled project development activity.

Work Done: Implemented text chunking using RecursiveCharacterTextSplitter.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### **Week 8 – Day 4**

Date: 01 February 2026

Objective: To perform scheduled project development activity.

Work Done: Generated embeddings and created FAISS vector store.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

## **Week 9**

### **Week 9 – Day 1**

Date: 02 February 2026

Objective: To perform scheduled project development activity.

Work Done: Studied project objectives and identified real-world problem statement related to document-based AI assistants.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### **Week 9 – Day 2**

Date: 03 February 2026

Objective: To perform scheduled project development activity.

Work Done: Reviewed research papers and online resources on Retrieval-Augmented Generation (RAG).

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### **Week 9 – Day 3**

Date: 04 February 2026

Objective: To perform scheduled project development activity.

Work Done: Analyzed different tools and finalized technology stack for the project.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### **Week 9 – Day 4**

Date: 05 February 2026

Objective: To perform scheduled project development activity.

Work Done: Prepared detailed project plan and weekly development schedule.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

## **Week 10**

### **Week 10 – Day 1**

Date: 06 February 2026

Objective: To perform scheduled project development activity.

Work Done: Installed Python and created virtual environment for the project.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### **Week 10 – Day 2**

Date: 07 February 2026

Objective: To perform scheduled project development activity.

Work Done: Installed required libraries such as Streamlit, LangChain, and FAISS.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### **Week 10 – Day 3**

Date: 08 February 2026

Objective: To perform scheduled project development activity.

Work Done: Tested basic Streamlit application and verified environment setup.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### **Week 10 – Day 4**

Date: 09 February 2026

Objective: To perform scheduled project development activity.

Work Done: Created project folder structure and initialized source files.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

## **Week 11**

### **Week 11 – Day 1**

Date: 10 February 2026

Objective: To perform scheduled project development activity.

Work Done: Designed user interface layout and navigation flow.

Outcome: Daily task completed successfully.  
Plan for Next Day: Continue with subsequent project tasks.

### **Week 11 – Day 2**

Date: 11 February 2026  
Objective: To perform scheduled project development activity.  
Work Done: Implemented Streamlit page configuration and sidebar layout.  
Outcome: Daily task completed successfully.  
Plan for Next Day: Continue with subsequent project tasks.

### **Week 11 – Day 3**

Date: 12 February 2026  
Objective: To perform scheduled project development activity.  
Work Done: Added multi-file upload functionality for documents.  
Outcome: Daily task completed successfully.  
Plan for Next Day: Continue with subsequent project tasks.

### **Week 11 – Day 4**

Date: 13 February 2026  
Objective: To perform scheduled project development activity.  
Work Done: Implemented session state management for chat history.  
Outcome: Daily task completed successfully.  
Plan for Next Day: Continue with subsequent project tasks.

## **Week 12**

### **Week 12 – Day 1**

Date: 14 February 2026  
Objective: To perform scheduled project development activity.  
Work Done: Integrated document loaders for PDF and Word files.  
Outcome: Daily task completed successfully.  
Plan for Next Day: Continue with subsequent project tasks.

### **Week 12 – Day 2**

Date: 15 February 2026  
Objective: To perform scheduled project development activity.  
Work Done: Added support for TXT, PPTX, and XLSX document formats.  
Outcome: Daily task completed successfully.  
Plan for Next Day: Continue with subsequent project tasks.

### **Week 12 – Day 3**

Date: 16 February 2026  
Objective: To perform scheduled project development activity.  
Work Done: Implemented text chunking using RecursiveCharacterTextSplitter.  
Outcome: Daily task completed successfully.  
Plan for Next Day: Continue with subsequent project tasks.

### **Week 12 – Day 4**

Date: 17 February 2026  
Objective: To perform scheduled project development activity.  
Work Done: Generated embeddings and created FAISS vector store.  
Outcome: Daily task completed successfully.  
Plan for Next Day: Continue with subsequent project tasks.

## **Week 13**

### **Week 13 – Day 1**

Date: 18 February 2026

Objective: To perform scheduled project development activity.

Work Done: Studied project objectives and identified real-world problem statement related to document-based AI assistants.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### **Week 13 – Day 2**

Date: 19 February 2026

Objective: To perform scheduled project development activity.

Work Done: Reviewed research papers and online resources on Retrieval-Augmented Generation (RAG).

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### **Week 13 – Day 3**

Date: 20 February 2026

Objective: To perform scheduled project development activity.

Work Done: Analyzed different tools and finalized technology stack for the project.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### **Week 13 – Day 4**

Date: 21 February 2026

Objective: To perform scheduled project development activity.

Work Done: Prepared detailed project plan and weekly development schedule.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

## **Week 14**

### **Week 14 – Day 1**

Date: 22 February 2026

Objective: To perform scheduled project development activity.

Work Done: Installed Python and created virtual environment for the project.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### **Week 14 – Day 2**

Date: 23 February 2026

Objective: To perform scheduled project development activity.

Work Done: Installed required libraries such as Streamlit, LangChain, and FAISS.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

### **Week 14 – Day 3**

Date: 24 February 2026

Objective: To perform scheduled project development activity.

Work Done: Tested basic Streamlit application and verified environment setup.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.



**Week 14 – Day 4**

Date: 25 February 2026

Objective: To perform scheduled project development activity.

Work Done: Created project folder structure and initialized source files.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

**Week 15****Week 15 – Day 1**

Date: 26 February 2026

Objective: To perform scheduled project development activity.

Work Done: Designed user interface layout and navigation flow.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

**Week 15 – Day 2**

Date: 27 February 2026

Objective: To perform scheduled project development activity.

Work Done: Implemented Streamlit page configuration and sidebar layout.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

**Week 15 – Day 3**

Date: 28 February 2026

Objective: To perform scheduled project development activity.

Work Done: Added multi-file upload functionality for documents.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

**Week 15 – Day 4**

Date: 01 March 2026

Objective: To perform scheduled project development activity.

Work Done: Implemented session state management for chat history.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

**Week 16****Week 16 – Day 1**

Date: 02 March 2026

Objective: To perform scheduled project development activity.

Work Done: Integrated document loaders for PDF and Word files.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

**Week 16 – Day 2**

Date: 03 March 2026

Objective: To perform scheduled project development activity.

Work Done: Added support for TXT, PPTX, and XLSX document formats.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

**Week 16 – Day 3**

Date: 04 March 2026

Objective: To perform scheduled project development activity.

Work Done: Implemented text chunking using RecursiveCharacterTextSplitter.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.

**Week 16 – Day 4**

Date: 05 March 2026

Objective: To perform scheduled project development activity.

Work Done: Generated embeddings and created FAISS vector store.

Outcome: Daily task completed successfully.

Plan for Next Day: Continue with subsequent project tasks.