



# IBM x Columbia Weekly Meeting

IBM x Columbia Core Team

10/30/2025

# AGENDA

Why we're here today

1

Overview

2

Timeline

3

Team Check-in

4

Outcome Classification

5

Next Step



# Overview

This weekly meeting will be focusing on establishing a clear roadmap and reviewing initial progress for the IBM x Columbia project. Including the timeline, team check-in, and some Q&A at the end.

# Timeline



A	B	C	D	E	F	G	H	I	J	K	L	M
Phase	Start Week	End Week	W1 09/23-09/29	W2 09/30-10/06	W3 10/07-10/13	W4 10/14-10/20	W5 10/21-10/27	W6 10/28-11/03	W7 11/04-11/10	W8 11/11-11/17	W9 11/18-11/24	W10 11/25-12/01
Initiation & Planning	1	2										
Objective Clarification												
Literature Review												
Timeline & scope												
Data Exploration & Requirements	3	5										
Data Collecting & Preprocessing												
Data Cleaning & Structuring												
RAG Pipeline Prototyping												
Prototype Development (POC)	3	7										
MCP Workflow Diagrams												
Wireframes												
Mockups												
Prototype Implementation												
Full Solution Development & Testing	8	9										
Performance Test												
Usability feedback												
Final Presentation & Reporting	9	10										
Project Powerpoint												
Project Report												
Demo Presentation												



# Team Check-in

1. Data & Knowledge Engineering Team
2. Generative AI & Model Development Team
3. User Experience & Application Development Team
4. Evaluation & Compliance Team

# Data & Knowledge Engineering Team

Complete data cleaning for all four phases ✓

Switch Prompt Templates ✓

↓  
Text Extraction + Cleaning (done)

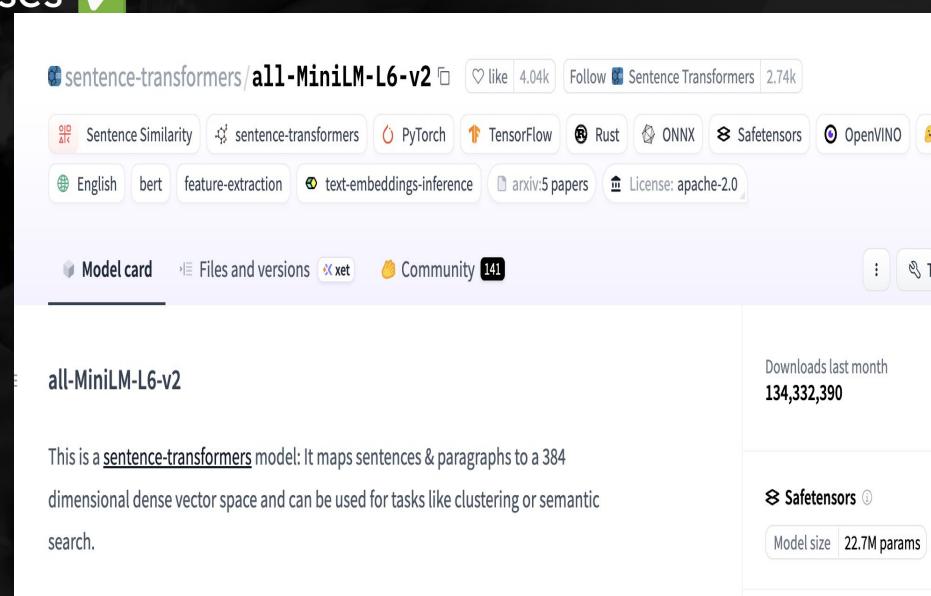
↓  
Standardized JSON (done)

↓  
Chunk & Flatten (done)

↓  
Embedding Model (Hugging Face)

↓  
Vector Database (Chroma / FAISS / Pinecone)

↓  
RAG Retrieval (GenAI Team)

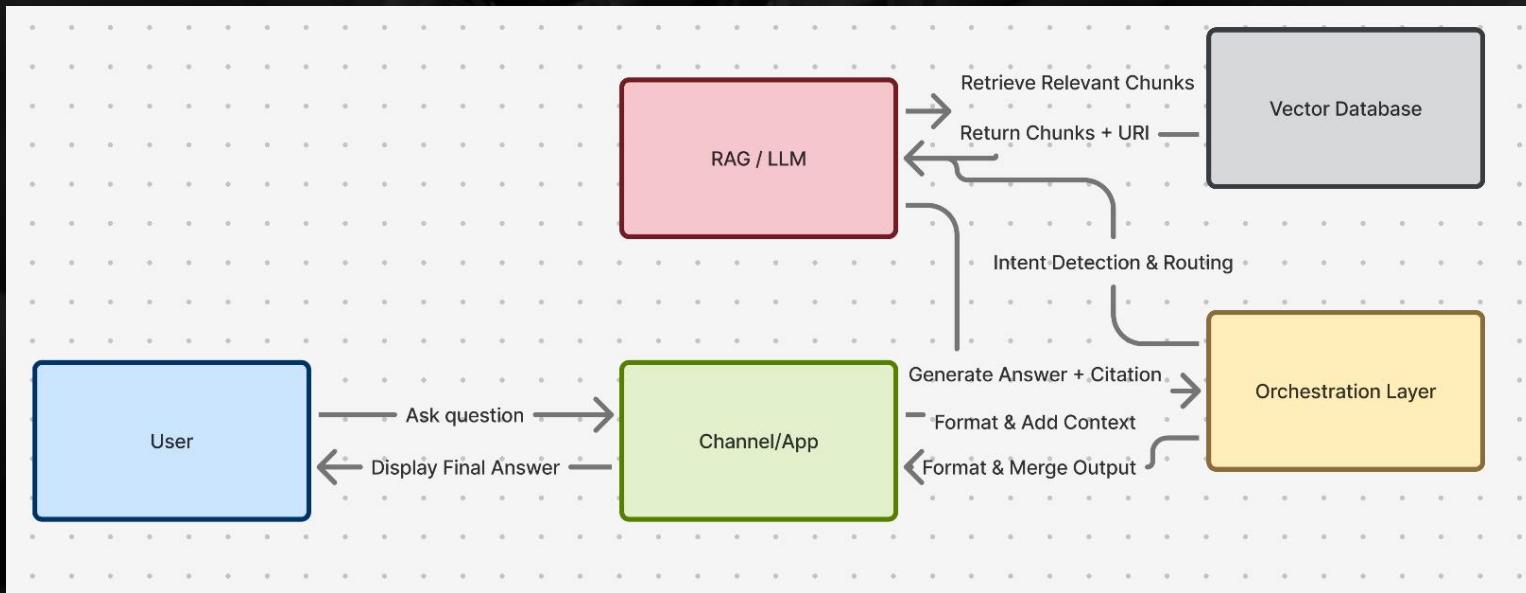


# Data & Knowledge Engineering Team

Feature	FAISS	Pinecone	Chroma
Type	Local Library	Cloud-managed DB	Local server
Speed	Fastest	Fast	Good for small data
Best for	Research	Production RAG systems	Small/mid local projects

# GenAI & Model Development

## IBM User Swimlane



# GenAI & Model Development

## Core Functionalities:

### Q&A

1. User asks a question about any EPLC phase or document (e.g., “What are the deliverables in the Development Phase?”)
2. System identifies the question type
3. The RAG pipeline searches the vector database for related EPLC sections or templates.
4. The LLM summarizes retrieved chunks into a concise, cited answer.
5. The system sends the answer, along with references or links to the relevant EPLC templates.

### EPLC Assistance

**Goal:** Guide users in writing or checking EPLC documents.

1. Select EPLC Phase / Section and optionally provide a draft.
2. Fetch key requirements and checklist items from the EPLC database (vectorized data).
3. Evaluate completeness, structure, and compliance with EPLC standards.
4. Provide short examples or improvement tips with citations to the source documents.

# User Experience & Application Development

## Team

10/23 Feedback

1. Confirm the Front-end platform  
—>**Streamlit**
2. Confirm all the features shows in wireframe is feasible —> **See the GenAI's core functionality part**
3. Can add the stepper —>  
**Identified as technically complex; replaced with a “How to Use” page for clearer user guidance.**

11/6 Progress

1. Confirmed with the team and finalized the decision  
—>**Streamlit (accessibility and builtin python integration)**
2. Most core features are feasible —>**Now front-end web development is fully in progress**
3. Added “How to Use” page

# EPLC Assistant

**Empowering IT Project Managers with  
smarter, faster documentation.**

Managing EPLC documents can be complex and time-consuming. EPLC Assistant helps automate this process — using generative AI to create, review, and refine key deliverables such as SLA/MOU, Training Plans, and O&M Manuals. Designed for government and enterprise projects, it combines IBM's trusted AI technology with a human-centered UX to ensure accuracy, compliance, and efficiency.

**Start a Project**

# How to Use EPLC Assistant

Learn how to interact with your AI assistant to generate and understand EPLC materials effectively.

[Try the Chatbot →](#)

## Step 1 — Ask Your Question

Type your EPLC-related question about an executive order in the input box.

## Step 2 — Get Responses

The chatbot searches policy libraries and provides accurate, summarized answers.

## Step 3 — Review and Save

Edit or export the response for your project.

**Try Asking...**

What is the EPLC Initial Phase?

Show me a CDC UP template for planning.

Explain the difference between initiation and planning phases.

### Tips for Best Results

- Be specific — mention the EPLC phase or document type you're referring to.
- Try rephrasing your question if the chatbot doesn't understand.
- You can always find official templates and policies linked below.

Project

 New Project

Name your project

start

Project

New Project

IBM Watsonx

<uploaded document>

Training Plan

(O&M) Manual

Service Level  
Agreement / MOU

Test Case

Export all

IBM Watsonx

## Training Plan

20%

## Training Plan

20%

## Training Plan

20%

## Training Plan

20%

Let me know more about your project!



Project

New Project

IBM Watsonx

&lt;uploaded document&gt;

Training Plan

(O&amp;M) Manual

Service Level  
Agreement / MOU

Test Case

Export all

IBM Watsonx &gt; Training Plan

Session	Status
Session 2 Test Case Specification	x
2.1 Description	x

Preview

Download

## 2.1 Description

XXXXXXXXXXXXXXXXXXXXXXXXXXXX  
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Accept   Edit   Regenerate

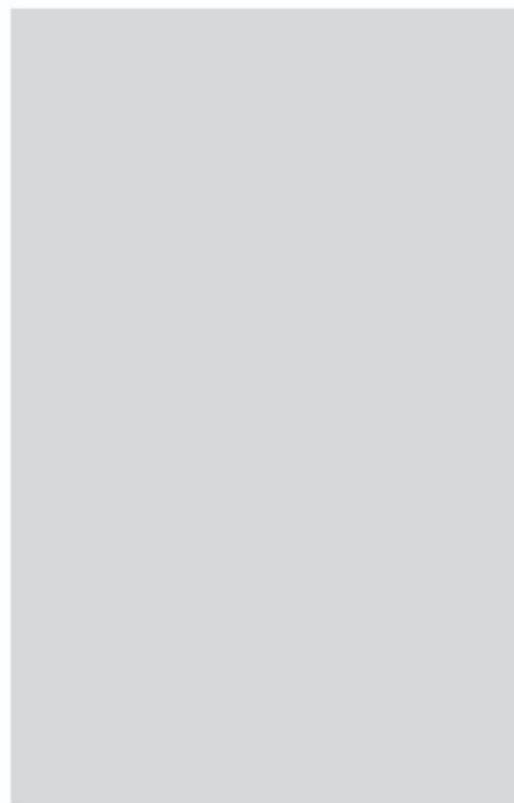
Describe the test case and the individuals involved in the testing. Include diagrams depicting the interaction between individuals and the different elements being tested.



## Project

[New Project](#)[IBM Watsonx](#)

&lt;uploaded document&gt;

[Training Plan](#)[\(O&M\) Manual](#)[Service Level  
Agreement / MOU](#)[Test Case](#)[Export all](#)[IBM Watsonx > Training Plan](#)

## Preview

**<PROJECT NAME>****TEST PLAN**

Version &lt;1.0&gt;

&lt;mm/dd/yyyy&gt;

- Project
-  New Project
-  IBM Watsonx  
<uploaded document>
- Training Plan
- (O&M) Manual
- Service Level Agreement / MOU
- Test Case
- Export all

Session	Status
Session 3 service level agreement/ MOU	x
3.1 Introduction	x
3.1.1 Purpose of Service legal agreement/Memorandum	
3.1.2 Scope	
3.1.3 Background	
3.1.4 Audience	
3.1.5 Assumptions	
3.1.6 Roles and Responsibilities	
3.1.7 Contacts	
3.2 Service Details	
3.2.1 Requirements	
3.2.2 Service Level Expectations	
3.2.3 Escalation Actions	
3.2.4 Service Provider/ Services Recipient	
3.2.5 Service Hours for Problem Solution	
3.2.6 Performance Guarantee	
3.2.7 Agreement Change Process	

3.1 introduction

XXXXXXXXXXXXXXXXXXXXXXXXXXXX.

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

Accept    Edit    Regenerate

+

Describe the test case and the individuals involved in the testing. Include diagrams depicting the interaction between individuals and the different elements being tested.

# User Experience & Application Development

## Team

Now in progress:

1. Front-end Development (ddl: next Monday deliver MVP website to the data team, prepare for algorithm integration with the genAI team)
2. Finalize design (ddl: next Monday, keep improving the core features and user feedback within the team)
  - a. Completed the detailed step-by-step click through guide so that frontend team can know better the workflow
  - b. Added the “introduction” page and the “how to use” page
3. Keep teams updated on feasibility

The screenshot shows a web page titled "Executive Orders Chatbot - QMSS & IBM". On the left, there is a sidebar with three buttons: "Introduction", "How-to Guides", and "Ask the Chatbot". The main content area has a heading "Introduction" followed by a paragraph of text. Below the text, there are two sections: "Data" and "Github".

**Introduction**

Welcome to the Conversational LLM on Executive Orders! Here you can interact with a chatbot to get information about executive orders.

This tool uses LangChain's Conversational Retrieval Chain to provide accurate answers based on executive order documents.

This project was conducted as part of the QMSS Practicum Course at Columbia University, in partnership with IBM.

**Data**

Executive Orders Dataset link: <https://www.federalregister.gov/presidential-documents/executive-orders>

This link takes you to the Federal Register's official page for Executive Orders, which are legally binding directives from the President that guide the operations of the federal government. The page provides access to the full text of these orders, organized by date or topic, offering a clear view of the policies and priorities of different administrations.

Our dataset focuses on executive orders issued by the most recent five presidents.

**Github**

Github link: [https://github.com/JiayingFang01/QMSS\\_IBM\\_Practicum](https://github.com/JiayingFang01/QMSS_IBM_Practicum)

Please see the GitHub repository for the code and project details.

Figure 12 – Introduction Page

# Evaluation & Compliance Team

<https://docs.google.com/document/d/1BRKGJcGlFmDYa5HiAxOdrogoXzCqA24CLPXS1THT5TI/edit?usp=sharing>

We're still keep refining the survey question lists for the final product.



# Questions



# NEXT STEPS

Keep up with the timeline, communicate with the sub-team for better support. Diving into the topics we've touched on today to deepen our understanding on the project, and starting the data preparation procedure.

# THANK YOU!

Columbia Practicum Core Team