IBM x Columbia QMSS Practicum Meeting

IBM x Columbia Core Team

11/12/2025

AGENDA

Why we're here today

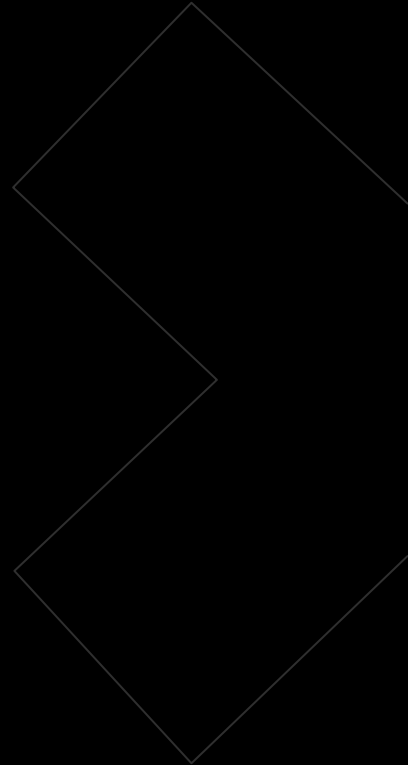1   Timeline

2   Overview

3   Gaps & Obstacles

Timeline

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	W11 12/02-12/08
Initiation & Planning	1	2											
Objective Clarification													
Literature Review													
Timeline & scope													
Data Exploration & Requirements	3	7											
Data Collecting & Preprocessing													
Data Cleaning & Structuring													
RAG Pipeline Prototyping													
Prototype Development (POC)	3	7											
MCP Workflow Diagrams													
Wireframes													
UI UX Mockups													
GenAI coding													
Prototype Implementation													
First demo refining													
Full Solution Development & Testing	9	11											
Performance Test													
Usability feedback													
Model refining													
Final Presentation & Reporting	9	11											
Project Powerpoint													
Project Final Report Drafting													
Demo Presentation													

Project Overview

Data & Knowledge Engineering Team

- **Cleaned and extracted all of the text from EPLC project Template/Framework/Policy**

- **Embedded all cleaned data into vectors and save all vectors in vector database**

6. Action Items & Next Steps

Task	Responsible	Due Date
Complete data cleaning for all four phases	Data Eng. Team	Next Meeting
Switch embedding model (Hugging Face English-based)	Data Eng. Team	Next Meeting
Refine diagrams to align with code workflow	GenAI + Data Eng.	Next Meeting
Add visual presentation of API results	GenAI Team	Next Meeting
Confirm web framework (Streamlit/Gradio)	UI/UX Team	Next Meeting
Draft evaluation survey templates	Evaluation Team	Next Meeting
Internal code & slide peer review	All Teams	Weekly

1.0 Introduction

[This section of the Training Plan provides a management summary of the entire plan. There is no need to provide information in this section if the descriptions provided in the subsequent sections are sufficient.]

1.1 Background and Scope

[This subsection of the Training Plan provides a brief description of the project from a management perspective. It identifies the system, its purpose, and its intended users. This subsection also provides a high-level summary of the Training Plan and its scope.]

1.2 Points of Contact

[This subsection of the Training Plan provides the organization name (code) and title of key points of contact for system development. It includes such points of contact as the Project Manager, Program Manager, QA Manager, Security Manager, Training Manager/Coordinator, and Training representative, as appropriate.]

[Add additional lines as needed. If the applicable team members are listed in the Project Management Plan, reference the appropriate section within this document.]

Role	Name	Contact Number
Business Sponsor		
Program Manager		
Project Manager		
QA Manager		
Configuration Manager		
Center ISSO		
Training Manager/Coordinator		
Training Representatives		

1.3 Document Organization

[This subsection of the Training Plan describes the document's organization.]

GenAI & Model Development

The GenAI team experimented with <u>different LLMs</u>, developed a <u>RAG</u> system that understands EPLC policies and templates, retrieves relevant guidance, and generates clear, ready-to-use content.

Key Functions: QnA, Content Generation and Compliance Check

```
Which EPLC section do you want to draft? (e.g., Purpose, Data Handling, Risks)
> Purpose

Describe your product/context (who, what, data, users, vendors, timelines, env, risks, controls):
(Finish with an empty line)
Our project develops an internal dashboard for tracking IT incidents and maintenance requests.
The users are system administrators across all regional data centers.
The tool will integrate with ServiceNow and store historical records for analytics.


(Optional) Any instructions? (e.g., '150 words, 2 short paragraphs, no bullets, formal tone')
(Finish with an empty line)
Write about 150 words, two concise paragraphs, formal tone, no bullet points.


=== Confirm ===
Section/Intent: Purpose
Details:
Our project develops an internal dashboard for tracking IT incidents and maintenance requests.
The users are system administrators across all regional data centers.
The tool will integrate with ServiceNow and store historical records for analytics.
Instructions:
Write about 150 words, two concise paragraphs, formal tone, no bullet points.

Proceed? [Enter=Yes / 1=edit section / 2=edit details / 3=edit instructions / q=quit]
Processing...

This project focuses on the development of an internal dashboard designed specifically for tracking IT incidents and

The dashboard will integrate seamlessly with ServiceNow, ensuring that all relevant data is captured and stored for h

Assumptions & Next Steps:
- Provide data categories, user groups, and any third-party services.
- Confirm deployment environment and retention policy.
- Share known risks/constraints to calibrate mitigations.
- Validate timelines and responsibilities.

Run another? [y/N] N
```

User Experience & Application Development Team

- **User personas**
- **User journey map**
- **Conversation script**
- **User workflow**
- **Use case documents**
- **Wireframe**
- **Build the front-end / chatbot interface or workflow assistant**

EPLC Assistant

Empowering IT Project Managers with smarter, faster documentation.

Ask a Question → 　　Create a Document →

⊘ Help　　🐙 GitHub

EPLC Assistant

Ask a Question

Create a Document

Try Asking...

What is the EPLC Initial Phase?

Show me a CDC UP template for planning.

Explain the difference between initiation and planning phases.

? Help   GitHub

EPLC Assistant

Ask a Question

Create a Document

Which Phase are you in?

Design   Development   Implementation   Requirement

EPLC Assistant

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Which Phase are you in?

Design   Development   Implementation   Requirement

Which Document do you want to create?

Product Design   Test Plan   Capacity Planning   Implementation Plan   Contingency Planning

EPLC Assistant

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Ready? Let's do it session by session! →

EPLC Assistant

Ask a Question

Create a Document

← Product Design

EPLC Assistant

Ask a Question

Create a Document

← Product Design

Provide the purpose of the Product Design Specification Document. This document should be tailored to fit a particular project's needs.

EPLC Assistant

Ask a Question

Create a Document

← Product Design

Provide the purpose of the Product Design Specification Document. This document should be tailored to fit a particular project's needs.

Just write one for IBM Waxtons.

EPLC Assistant

Ask a Question

Create a Document

← Product Design

Provide the purpose of the Product Design Specification Document. This document should be tailored to fit a particular project's needs.

Just write one for IBM Waxtons.

The purpose of this Product Design Specification (PDS) Document is to define the functional, technical, and user experience requirements for the IBM Waxtons EPLC Automation Assistant. It outlines how the system will use generative AI to streamline the Enterprise Performance Life Cycle (EPLC) documentation process by automating content generation, template selection, and workflow guidance. This document ensures alignment between design, development, and user needs, serving as the central reference for implementation and future enhancements.

Evaluation & Compliance Team

Drafted a survey question list, a GenAI bot testing list, and a demo testing procedure for final product delivery.

What EPLC policies or federal IT frameworks must we follow during Implementation?	HHS EPLC Framework HHS Policy for Enterprise Architecture (EA) HHS Policy for IT Portfolio Management (PfM) FITARA compliance for oversight and reporting (if applicable to spending/governance)
What risks are commonly associated with the Implementation Phase and how should they be mitigated?	Deployment failures User resistance / low adoption Data migration errors

DIMENSION 1: Task Effectiveness & Accuracy

Does the AI correctly help users complete EPLC forms?

Sample survey questions: 1 is worst and 5 is the best

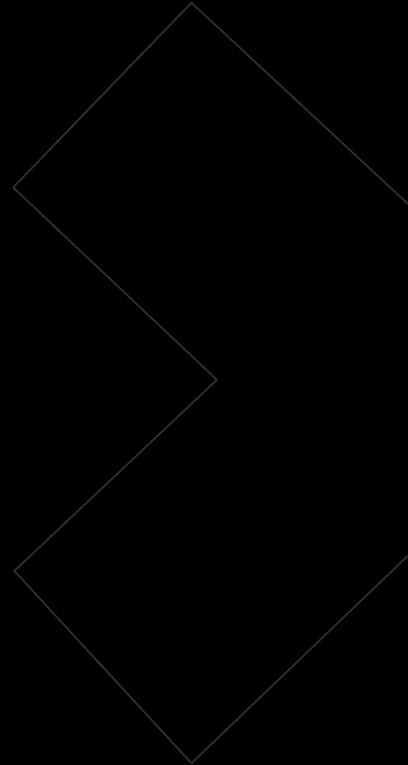Rate the accuracy of the information provided by the AI agent (1-5 Likert scale)

Did the AI successfully identify all required sections for [specific template]? (Yes/No + comments)

Were there any compliance requirements the AI missed or misunderstood? (Open-ended)

The chatbot gathered ALL required information for this template (1-5 scale: Strongly Disagree to Strongly Agree)

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Gaps & Obstacles

What Our EPLC Solution Ideally does

Generates Content

Assists project managers by automatically generating drafts for complex compliance documents.

Check for Compliance

Acts as a guide, make sure user's content is compliant with EPLC requirements.

Answers Questions

Provides immediate, accurate answers about specific EPLC rules and project requirements.

THANK YOU!

Columbia Practicum Core Team