CAPM Question Library Handover Report

Report Date: August 04, 2025

Prepared by: Grok (AI Assistant)

Project Owner: Andrew

Purpose: This handover report summarizes the completed process for adding new questions to the CAPM question library, based on the initial execution for three questions (IDs 302–304). It provides a clear, repeatable framework for the project owner or a delegate to add 1 or 7 new questions in future iterations, ensuring alignment with the PMI 2023–2025 CAPM Exam Content Outline (ECO) and the project's ReadMe flow. The process emphasizes non-destructive updates, backups, and version control to maintain data integrity while expanding the library (current size: 304 questions, target: 500+).

Project Overview

Library Structure: Questions are stored in test\_questions.xlsx (intermediate Excel format) and questions.json (final JSON format for the quiz application).

Key Directories:

data: Input/output data (e.g., raw questions in drop\_the\_format\_questions.txt, library in questions.json).

backup: Timestamped backups of the data folder.

ReadMe: Documentation, including the project flow.

Key Files and Metadata:

backup\_script.bat: Owner: Andrew; Purpose: Backs up data folder to prevent loss; Version Control: v1.0; Change Log: Created: 04-Aug-2025.

add\_questions\_to\_excel.py: Owner: Andrew; Purpose: Appends formatted questions to test\_questions.xlsx; Version Control: v1.0; Change Log: Created: 04-Aug-2025.

convert\_questions.py: Owner: Andrew; Purpose: Merges questions from test\_questions.xlsx to questions.json; Version Control: v1.0; Change Log: Created: 04-Aug-2025.

run\_conversion.bat: Owner: Andrew; Purpose: Chains backup, append, and convert steps; Version Control: v1.0; Change Log: Created: 04-Aug-2025.

requirements.txt: Owner: Andrew; Purpose: Lists dependencies (e.g., openpyxl); Version Control: v1.0; Change Log: Created: 04-Aug-2025.

test\_questions.xlsx: Owner: Andrew; Purpose: Intermediate storage for formatted questions; Version Control: v1.0; Change Log: Updated: 04-Aug-2025.

questions.json: Owner: Andrew; Purpose: Final library file; Version Control: v1.0; Change Log: Updated: 04-Aug-2025.

drop\_the\_format\_questions.txt: Owner: Andrew; Purpose: Raw question input; Version Control: v1.0; Change Log: Updated: 04-Aug-2025.

Grok\_Prompt.txt: Owner: Andrew; Purpose: Formatting instructions for questions; Version Control: v1.0; Change Log: Created: 04-Aug-2025.

README.md: Owner: Andrew; Purpose: Project overview and flow; Version Control: v1.0; Change Log: Created: 04-Aug-2025.

Roles and Responsibilities

Project Owner (Andrew or Delegate):

Collect raw questions from sources (e.g., websites, PDFs) and add to drop\_the\_format\_questions.txt.

Request AI formatting per Grok\_Prompt.txt.

Review formatted questions for accuracy (e.g., options A-D, correct answer, ECO/PMBOK links).

Run backups and scripts.

Update version numbers and change logs in file metadata upon modifications.

Verify library count after updates.

AI Assistant (Grok):

Format raw questions per Grok\_Prompt.txt (Question, Option A-D, Answer, Explanation).

Provide scripts or updates upon request, with metadata (including version number).

Assist with verification or troubleshooting without altering files directly.

Step-by-Step Process for Adding 1 or 7 New Questions

Raw Question Intake:

Add raw question text (question, options, explanation with "Correct" markers) to drop\_the\_format\_questions.txt.

For 1 question: Add single block.

For 7 questions: Add 7 blocks, separated by //.

Save and commit to repository if using Git.

AI Formatting:

Send raw blocks to Grok (e.g., "Format these raw questions per Grok\_Prompt.txt").

Grok returns formatted blocks (Question, Option A-D, Answer, Explanation).

For 1 question: Single formatted block.

For 7 questions: 7 formatted blocks.

Review and approve formatting (edit if needed).

Human Verification:

Check formatted questions for accuracy (options, answer, ECO/PMBOK links).

Update the questions list in add\_questions\_to\_excel.py with formatted data (ID = next available, e.g., 305 for the first new one; type "single" or "multiple"; domain/module per ECO; answer as number or comma-separated for multiple).

For 1 question: Add 1 entry to the list.

For 7 questions: Add 7 entries to the list.

Increment version number in script metadata if changes are made (e.g., v1.1).

Save the script.

Conversion and Merge:

Run backup\_script.bat to back up data folder.

Run add\_questions\_to\_excel.py to append to test\_questions.xlsx.

Run convert\_questions.py to merge into questions.json non-destructively.

For convenience, run run\_conversion.bat to chain backup, append, and convert.

Update change log in script metadata (e.g., "Updated: 05-Aug-2025, v1.1: Added 7 questions").

Testing and Validation:

Verify test\_questions.xlsx (new rows added correctly).

Verify questions.json count:

powershell(Get-Content M:\OneDrive\Documents\GitHub\excel\_to\_json\data\questions.json | ConvertFrom-Json).Count

Test quiz application for functionality (buttons, filtering, modes).

Log any issues in ReadMe or a separate changelog file.

Iteration and Release:

Repeat for new batches (1 or 7 questions).

Tag the repository version (e.g., v1.1) with date, author, and purpose.

Maintain changelog in ReadMe or a dedicated file (e.g., "05-Aug-2025: Added 7 questions, total 311, Andrew").

Potential Challenges and Solutions

Dependencies: Ensure openpyxl is in requirements.txt and installed via pip install -r requirements.txt.

Version Control: Increment version numbers (v1.1, v1.2) in metadata for each significant update; use Git commits for tracking.

Scaling: For larger batches (e.g., 7 questions), the script supports adding more entries to the questions list.

Errors: If Excel file is open, close it before running scripts. If ID conflicts occur, adjust starting ID in the script.

Conclusion

This handover enables independent execution of the process for 1 or 7 new questions, maintaining library integrity and ECO alignment. If clarification or updates are needed (e.g., script adjustments), provide details for assistance. The initial process completion for three questions serves as a template for future updates.