

Instruction Sheet for AuditRAM Coding Assignment

Assignment Objective:

The goal of this assignment is to create a Python program that takes a file and a text string as input, searches for the text within the file, and then generates an output file/view where the found text is highlighted with a red, unfilled bounding box overlay, without altering the original file content.

This solution relates to how bounding boxes are used in auditing to highlight specific, auditable evidence.

Technical Requirements:

Your Python program must fulfil the following **input** and **output requirements**:

1. Input Requirements:

The program must be able to accept two main inputs from the user:

- **Input File Upload:** The program must support file uploads in the following formats:
 - PDF
 - Excel (.xlsx)
 - Image (e.g., .png, .jpeg)
 - Word (.docx)
- **Text Input:** The user must be able to enter a specific string of text to be searched within the uploaded document.

2. Output & Functionality Requirements:

The core functionality of the program must adhere to the following:

- **Search and Locate:** The program must accurately search for and locate all instances of the input text string across the entire uploaded file.
- **Highlight Overlay:** For every instance of the found text, the program must place a bounding box as an overlay.
- **Bounding Box Specifications:**
 - **Colour:** Red
 - **Fill:** Unfilled (transparent centre)
 - **Non-Modification:** The program must not modify the original content of the input file.
- For **additional context** on how **bounding boxes** are used in **auditing**, please refer to the following video:



3. Submission Details:

- The **deadline** for submissions is **Saturday, November 29, 2025, 11:00 AM sharp**, using the **Google Form** provided below:
 - **Link:** [Coding Assignment Submission](#)

4. Google Form Instructions:

- You must prepare and upload the following information and files to the **Google Form**:
 - **Name:** Your full name (Firstname Middlename Lastname).
 - **Your GitHub (public) repository:** repository with the details on how to run the code
 - The repository must contain:
 - **I.** Your complete Python code.
 - **II.** A clear README.md file with detailed instructions on how to install dependencies and successfully run the program.
 - **Description of the approach taken to solve the problem**
 - A detailed description of your technical approach.
 - **Submit your resume:**
 - Submit your **Resume with Photograph** as submitted to the **Junior Placement Committee (JPLC)**.