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IC25

3-5-2025

IC25043 Challenge Abstract

Amtrak initially had a .docx file, around 75 pages long, for their records retention schedule. Our group was tasked with transforming this static document into a more “interactive and accessible” solution. Maria Buccieri, Senior Director of Compliance at Amtrak, wanted wireframes for the redesigned format. Our team sought to go beyond wireframes by developing a functional web-based application; this development demonstrates the feasibility of creating a scalable and interactive environment for the retention schedule.

The Amtrak records retention schedule defined how long various records should be kept. For instance, LAW100-7 (contracts and agreements related to insurance clauses) is to be retained for 7 years, provided that the contract terms were fulfilled. Employees historically located records by department name, then would either scroll, or use Ctrl + f to find their desired record(s). This inefficient approach was further complicated by the fact that the original records retention schedule was a corrupted Excel 2008 file. Corruption of the original file prevented standard conversion to a .csv file format.

The project team implemented a web-based solution. The original .docx was parsed to extract relevant data, and 13 .csv files were created (for each of the 13 departments). The front-end development was handled next, with an index.html created for the homepage, and a styles.css created for consistent page styling. The team then handled full-stack development, first with a template.html created for use within each of the 13 .php files. Each .php file included a script (JavaScript) for reading and searching through respective .csv files. XAMPP was utilized to provide a locally-hosted web server to ensure the pages were interactive and functional.

The initial .php page creation and file indexing was troublesome, especially with .csv headers conflicting with each .php table layout. This was solved by skipping over the first row in every .csv file. The final solution, a working web app, enables department selection and efficient record searching, featuring compartmentalization and case-insensitive queries for enhanced usability.

The final solution streamlines record retrieval, enabling Amtrak employees to efficiently search and filter records, eliminating the inefficiencies of manual scrolling and keyword searches. By implementing full-stack development instead of purely wireframes, this project demonstrates the feasibility of modernizing Amtrak’s records management with minimal infrastructure, providing a scalable framework that could serve as a model for future digitization initiatives.