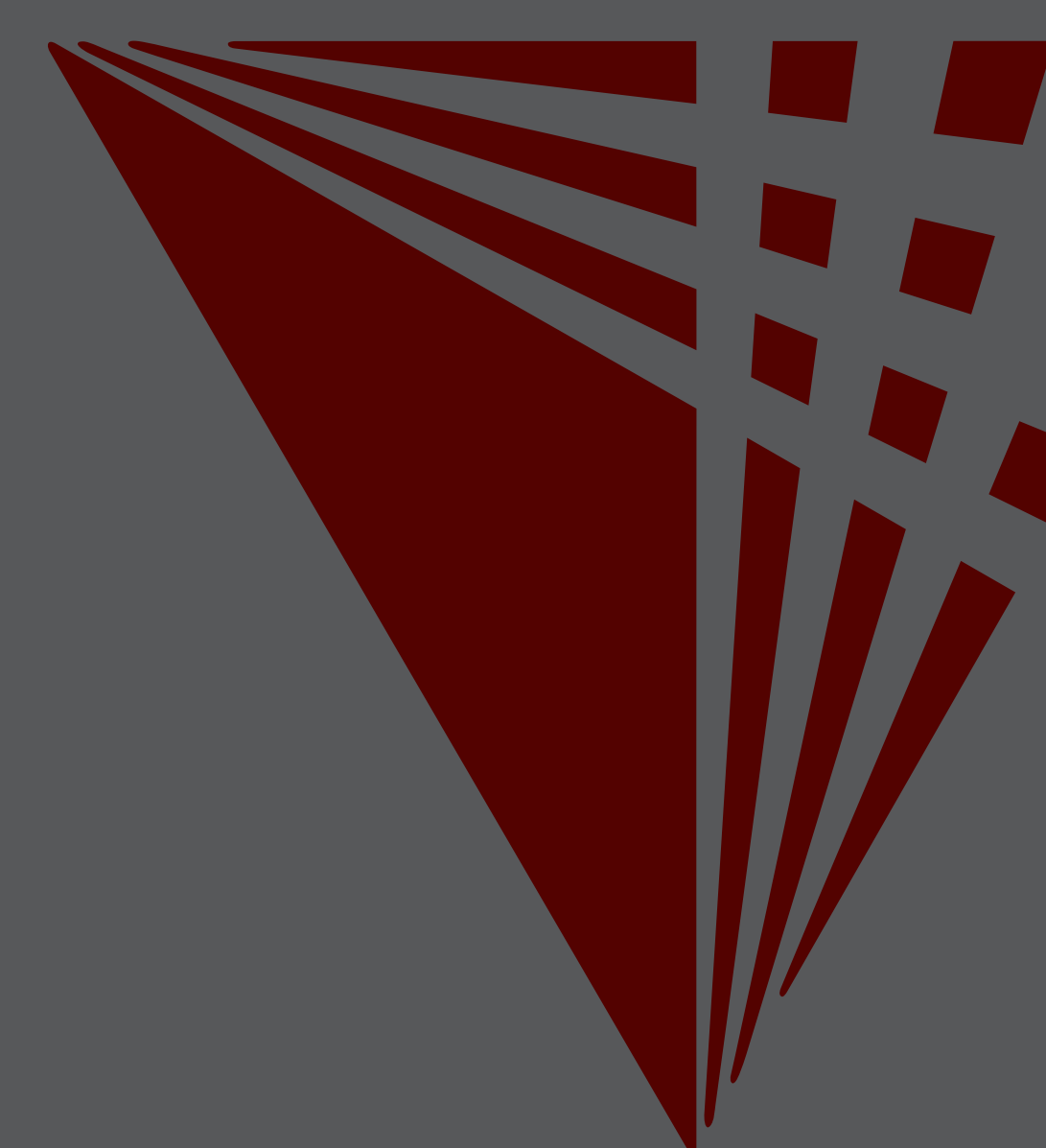


IPRO in support of the United States  
Holocaust Memorial Museum

# Bringing the **best results** from the United States Holocaust Memorial Museum database!



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## Phase I: Locality Search Interface

**the need** • Finding the whereabouts of one's ancestor in the USHMM database is a tedious process, beyond the abilities of many users.

**the solution** • This semester, a User interface was developed and applied, allowing a user to start from a nation or large region, and work their way down to find the specific region they are interested in.

- In addition, the interface allows a user to search for a name of a particular town or region, and it will immediately take them to its location.

- If there are no perfect matches, it suggests words that are close matches, ranked in order of which is most likely to be the term searched for.

**the result** • A new, higher standard in the way USHMM retrieves information. Reuniting tens of thousands of families with the memories of their loved ones with no hassle.

## Phase II: Search Optimization

**the need** • The search feature on USHMM website has rather poor performance. If the user is not certain about what he or she is searching for, finding the desired information from USHMM database can be really difficult.

**the solution** • We developed ten functions to optimize searches on the museum website

- Each function finds several terms by analysis of the documents returned by the original search, which it then appends to a search to improve its results. This is done in a way that is transparent to the user.
- Each function adds new terms based on different criteria, such as most common terms, or plurals.
- 200 queries were run for each of the 10 functions, test data was then analyzed to determine the effectiveness of the search improvement functions.

**the Result** • The functions improve the search 5-10% of the time.



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