

Carnegie Mellon University English Department

Executive Summary

Community Partner

Stephen Wittek

Student Consulting Team

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Background

The Distant Reading Early Modernity (DREaM) project is a web app designed to perform textual normalization and textual analysis on English texts from the Early Modern period of 1450 to 1700. The DREaM corpus database has been standardized to ensure uniform spelling and grammar across all texts. Dr. Stephen Wittek established and led the initial project with several of his colleagues at McGill University.

Dr. Wittek has access to the computing resources offered by Carnegie Mellon University's Computing Services and Libraries. The professor and the library have worked together before to deploy a digital humanities project. Dr. Wittek will continue to be the point person and primary caretaker of any future version of DREaM, while CMU Libraries will maintain the server on which DREaM is deployed.

Project Description

DREaM can be siloed into three categories: normalized text, open-source tools (Voyant), and the DREaM interface. Although other universities host similar projects, DREaM is one of a kind for researchers and students that are looking for normalized textual analysis, which has been missing in the English analysis space since the project went offline. The team is looking to make the tools available again for academia users across the world, with additional features and user interface updates integrated to enhance user experience.

The DREaM web app previously operated successfully until a dependency issue forced the application to crash and remain offline. The project team is building upon the foundations worked on by the previous year's 373 team that made DREaM work as well as accessible on a local level. The current team is looking to bring DREaM online and hosted securely via HTTPS on the CMU Libraries' server. Additionally, efforts will be made to enhance the user interface on DREaM, connecting DREaM to a CMU copy of Voyant Tools, as well as embedding analytical tools within the web application.

Project Outcomes

- 1. DREaM and CMU Voyant Tools Deployment:** Provided a functional DREaM application as well as seamless connection to the CMU Voyant Tools clone.
- 2. Addition of Matomo Analytics and UI Changes:** Added Matomo for online traffic analytics as well as UI changes for a better user experience.
- 3. Documentation and Transition Materials:** Added documentation that provides understanding of the project's history and roadmap, as well as information from S24's team.

Project Deliverables

The first deliverable is acquiring the DREaM source code and creating a GitHub repository for the team to access the project locally. This is not the same as the previous team's GitHub and will be the new one for the next team taking over the project.

The second deliverable is converting DREaM from HTTP to HTTPS and hosting it on the CMU Library server. Additional items include implementing Matomo analytics on DREaM as well as UI changes/updates.

The third deliverable is resolving any issues regarding the use of both DREaM as well as the CMU Voyant clone. Additionally, we provided a set of all relevant documents from working with DREaM; this included our documentation, notes & agendas, and weekly sprint reports.

Recommendations

The first recommendation is to begin replicating the DREaM backend, with an initial focus on resolving the Voyant functionality for the export button.

The second recommendation is to move forward with the user interface (UI), user experience (UX), and Matomo analytics improvements.

The final recommendation is to implement continuous user testing to further improve the website, as such processes can reveal vulnerabilities and issues in all areas of the application.

Student Consulting Team

Karen Gonzalez-Cifuentes is a junior studying Information Systems with a concentration in data analytics, and a minor in Information, Security, Privacy, and Policy. She assisted with software development and deployment.

Lawrence Lee is a senior studying Information Systems with a minor in Business Administration. He assisted in managing documentation, reports, and logistics.

Anna Mathews is a junior studying Information Systems with a minor in Human Computer Interaction. She assisted with client relationship management, project management, technical documentation, and software development.

Luke Nalewajk is a junior studying Information Systems with a concentration in Data Analytics and a minor in Business Administration. He assisted in coordinating outreach and managing documentation for the project.