Project DREaM

Executive Summary

Community Partner
Dr. Stephen Wittek

Student Consulting Team
Jonathan Lindstrom, Juan Pablo Urista, Kevin Wang, Ryan Huang

Background

The Distance Reading Early Modernity (DREaM) project is a web app designed to perform textual analysis on English texts from the Early Modern period, specifically from 1450 to 1700. The DREaM corpus has been standardized to ensure uniform spelling and grammar. Dr. Wittek established and led the initial project at McGill University.

Dr. Wittek has access to the computing resources offered by CMU Libraries and has worked with the library to deploy a previous digital humanities project. Dr Wittek will remain the point person and primary maintainer of any future version of DREaM.

Project Description

The DREaM application operated successfully until it encountered a dependency issue, resulting in an unexpected crash. Later, Dr. Wittek provided a folder containing code for the Voyant server, which offered a base for development of DREaM. The project team planned to integrate the normalized corpus with the DREaM interface and deploy the application on GCP. DREaM will also transition to hosting at the CMU library server. Efforts to enhance the user interface have been initiated in collaboration with a community partner.

The data and tools used by DREaM can be siloed into three categories: normalized text, open-source tools (Voyant), and the DREaM interface. The normalized corpus is available openly for use and requires minimal management. Voyant Tools are open source and free to use. All of these resources are at the core of the DREaM application implementation and functionality.

The goals for our solution are primarily to create the minimum viable working app. That is, something that can provide textual analytics on the normalized corpus; and to host the app so that it is accessible online.

Project Outcomes

- **DREaM Application and Code Repository**: Provided a functional DREaM application and allocated access to the source code in a repository.

- **DREaM and Voyant Tools Deployment**: Deployed a version through Google Cloud Platform. An additional deployment was made through CMU Libraries.
- **Documentation and Transition Materials**: Added extensive documentation to the repository that provides understanding of the project's history and roadmap.
- **Recommendations for Future Expansion**: Outlined steps for further project expansion, including new feature ideas and regular user testing.

Project Deliverables

Our first deliverable is our github repository containing our source code for the fully working version of the application. This is what the next team taking over the project will need to work off of.

Second is our prototypes for the logo as well as future UI improvements. These files will provide future teams a head start on UI and logo enhancements.

Finally, we provided a set of all relevant documents from our term working with DREaM, of which includes our documentation, prototypes, our compiled meeting notes and agendas, and our weekly sprint reports.

Recommendations

The first recommendation is to move forward with user interface (UI) and user experience (UX) improvements.

The second recommendation is the implementation of additional features and functionalities that could aid the intended user (students and Old English text researchers) in achieving whatever research or analytical goal they have.

Finally, it is recommended to implement continuous user testing to further improve the website since unit testing can reveal vulnerabilities in all areas of the application.

About the Team

Juan Pablo Urista is a junior studying information systems with a minor in media design. He managed deployment, contributed to documentation, and worked on software development.

Kevin Wang is senior studying information systems with a double major in business administration, as well as a first-year master's student studying information systems management. He helped manage communications, logistics, and documentation.

Jonathan Lindstrom is a junior studying information systems with a double major in Human-Computer Interactions. He managed UI and logo design, software development, and contributed to documentation.

Ryan Huang is a senior studying information systems. He managed software development, and contributed to documentation and logistics.