CS5604 Front End TEAM Final Presentation

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Blacksburg, VA 24061
December 7th 2020

Previous Project

Built website for 2 types of content (Tobacco settlement and ETD) that allowed:

- End-users searching either of the 2 types of content
- Login and register for one type of user.

Project Goal

Build a front end website for 3 types of content (ETD, Tweet, Webpage) that allows:

- End-users searching any of the 3 types of content
- Researchers/curators managing the collections
- Interface to Reasoner and Knowledge Graph
- Admin functionalities, user types, and user roles

Project Milestones

4 stages

IR1 - **Analysed** previous project code; **Researched** needed tools, and built frontend prototype to search ETD metadata

IR2 - **Built** filter and keyword search for each Elasticsearch index, extended search to TWT and WP metadata

IR3 - **Improved** system to search ETD, WP, TWT indices.

Final Phase - Improved internal Admin functions, Curation and Knowledge graph functionalities.

What we add

Function List	2019	IR1	IR2	IR3	IR4 (Final)	Stretch
Tobacco search (excluded from this project)						
ETD search	✓	✓				
Link to original content (Elasticsearch)	✓	✓				
Content filtering by author, date, location, etc.		✓				
Login and sign up pages		✓				
Recommendations for searching	✓		✓			
Clean and update developer environment			✓			
Real-time data aggregation for ETD filters			✓			
Combined Reactivesearch, Bootstrap and custom styles			✓			
Tutorial for setting up the development environment			✓			
Tweet search			✓			
Log system to record user activities				✓		
Web-page search				✓		
Multiple user access support				✓		
Docker support				✓		
Admin management				✓		
Team introduction and descriptions	✓				✓	
Project concept overview page					✓	
Curator user support					✓	
Curator service interaction					✓	
User support ticket system						✓

Design & Tools

Back End

- MySQL or PostgreSQL
- Docker

Dynamic Configurations and Environment Variables

Front End

- Flask
- Reactive Search
- Bootstrap

Future Work

- Use the Flask backend as a proxy for Reactivesearch requests
- Use HTTPS and using a proxy for external services to avoid CORS problems
- Allow searching through multiple indices and group indices based on structure
- Using a secure production web-server making use of the Flask base
- View and edit services/goals to admin and/or curator users visually with a graphical UI
- Create standards for service/index/goal usage and design

What we learned

- How to use React to create UI dynamically with the Elasticsearch
- Common information retrieval and storage techniques
- Elasticsearch
- Collaboration Tools (Trello, Ally)
- Database
- Dynamic website design with multiple types of user access

Demo

Special Thanks

Dr. Edward A. Fox for his mentorship, and members of the Digital Library Research Laboratory at VT

All other participating teams in the class: INT, ETD, TWT, and WP

Two agencies for supporting the project: