Team: Team 8 (Bill Progress)

Members:

* Joseph Maxwell
* Marcus Benesch

Project Proposal

Motivation: [explain the overall problem; if you will be working with a client, you can frame this discussion in the context of the client's situation]

Politics is a sensitive topic and for anyone who does not actively follow it they can easily get lost and have no idea what is going on. This problem is especially true for state and local governments, there are few to no news organizations dedicated to following local governments. If someone wished to educate themselves as to what the local government is doing the can go to their local government website. The tools provided publicly on the website, while useful, do not provide adequate information for the layperson who does not understand legalese and can cause confusion or misinformation.

As an example, lets assume a person was interested in what the Nebraska state legislature was doing regarding fishing within the state. A keyword search for “Fishing” provides 525 results from 2007-2020. Even narrowing it down to just 2019-2020 does not help as much as one might expect. For 2019-2020 there were 34 documents that showed up and 9 of them shared the same name. Document LB287 shows up 9 times, and the name and description provided do not give much indication what these documents are and what is happening. The name stands for Legislative Bill 287 of the 106th Legislature, but this does not describe at all what the bill is about. The name LB287 is also reused for every Legislature year. In 2018-2019, LB287 is a bill proposed about Nebraska’s Child Death Review Team within the Department of Health and Human Services. This has nothing to do with fishing.

Going back to the description provided on the website, it just a partial copy of the first paragraph. This is straight from the document and what appears to be very common is that the first paragraph lists all the sections of various regulations that are affected by the proposed bill. All the sections are simply numbered.

However, the website does provide a .csv file that lists all documents and even contains a human readable description. This .csv file would make following and researching for the layperson much easier, however the way to find this file and finding what you are searching for can become tedious and there are no tools to effectively search through the.csv file provided.

Proposed Solution: [describe your proposed project and what part of the problem it addresses; include some examples of services your system will offer]

For the above problem I propose building a web-based application that parses through the information provided on the government’s website and presents it in a layman readable format. With search tools and filters built in, this application would make following along the local government actions much easier. To add onto this, I also wish to add features that would make the user experience easier and give predictions about future actions. For an example, the application should automatically update daily to see if new action has taken place. Using the calendar on the website, the application could cross reference what bills change status and when. This can be used to develop a timeline and, as a final stretch goal, used as the basis to give estimate as to when a decision on currently active bills may happen.

Proposed Implementation Platform: [discuss some of your current ideas on the technologies needed to implement the solution]

The simplest solution to the platform needed to build and run this application would be to build a webserver and webpage. The webpage will be made using .vue and javascript. On the back end there should be a database that works with a custom script to scrape data from the legislatures website and parse through it.

Possible Databases: Access, MySQL, PHP, .NET, or NODE.js

Technical Challenges: [think about what roadblocks you might run into as you work on this project]

Now, the biggest known challenge is building, running, and updating the back-end database. Neither Joseph, or Marcus have much experience using a database for a web-application. Building a relatively static database is possible by just following tutorials for various databases and tools, but to configure it to automatically update and parse through incoming data is another challenge.

Team Composition: [list the team members and what each person brings to the group]

Marcus Benesch: He is familiar with Vue.js and front-end web development from prior experience. His experience also includes an understanding of how data can be pulled from the back end and presented on the front-end.

Joseph Maxwell: From prior experience running group projects, he is good at keeping a group focused on a project and ensuring that deadlines are met. Beyond management, he is also familiar to building a database from Database Management which he took last spring.