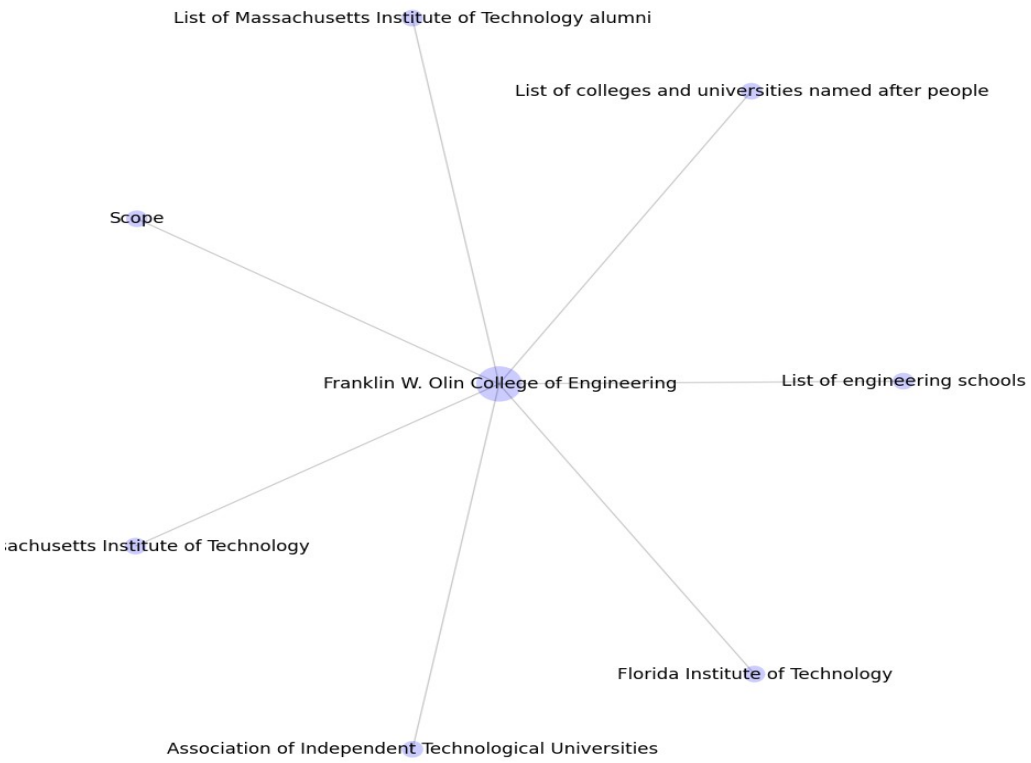
wikinet.py

ruby spring

1. **Project Overview: What were you trying to accomplish? What was your general approach?**
   I started off with a generalized and somewhat ambiguous goal, because I've find that to be a good approach to coding. Start with a general structure that will support the type of thing you want to create, and then add functionality one small goal at a time, somewhat analogous to digital logic: one small step, then another and another, eventually leads to a large working system that does something that's (hopefully) useful to someone. The general goal was creating a visual map of a wikipedia article mapped to linked articles in that article. Once I got that done, I thought about how to refine the results, maybe filter the links for something more useful. I went with passing in a search-word or search-phrase that must be present in a link for it to appear in the visual mapping. Cool. But what if there are just way too many links, and I only want to find the first __insertArbitraryNumberHere__ links that contain my search-word/phrase? And then, what if I want to filter for multiple words or phrases instead of just one? And what about actually being able to easily access those links, simply by clicking on them from somewhere? I added functionality to answer all these questions, while adding robustness throughout and thinking about how to write my code in as few lines as possible.
2. **Implementation: How does your code work? What libraries did you use? How would someone (for instance a NINJA) run your code? What data structures (e.g. lists, dictionaries) did you use in your program and why?**
   All but the last of these questions is answered by any good README file. I've got a pretty nice one in the wikinet remote repo, so I'd rather not rewrite it all here in less-than-pretty format. As for the last question, I mostly used strings and lists because those are some of the most common and useful structures for parsing text, which is basically what this entire assignment was about.
3. **Include some examples of your program's output.**



The above is a sample from filtering the article located at the center of the map for the search-phrases “franklin w. Olin” and “scope” with a cap of 15. Obviously the call did not return 15 nodes, an indication of fairly rare occurrence of a linked article containing both search-phrases. Below is the contents of the html file created and launched by the code:

List of engineering schools
Association of Independent Technological Universities
Scope
List of colleges and universities named after people
List of Massachusetts Institute of Technology alumni
Massachusetts Institute of Technology
Florida Institute of Technology

4. **Reflection: from a process point of view, what went well? what could you improve? Was your project appropriately scoped? Did you have a good plan for unit testing?**
   I kinda just add one unit at a time, where one unit is anything from a variable to an if statement to a forloop to a function to a class. It's about building layers of instruction on layers of goals. Having a general goal in mind is a good idea for programming projects so as to create a secure foundation, which I felt I did pretty well.