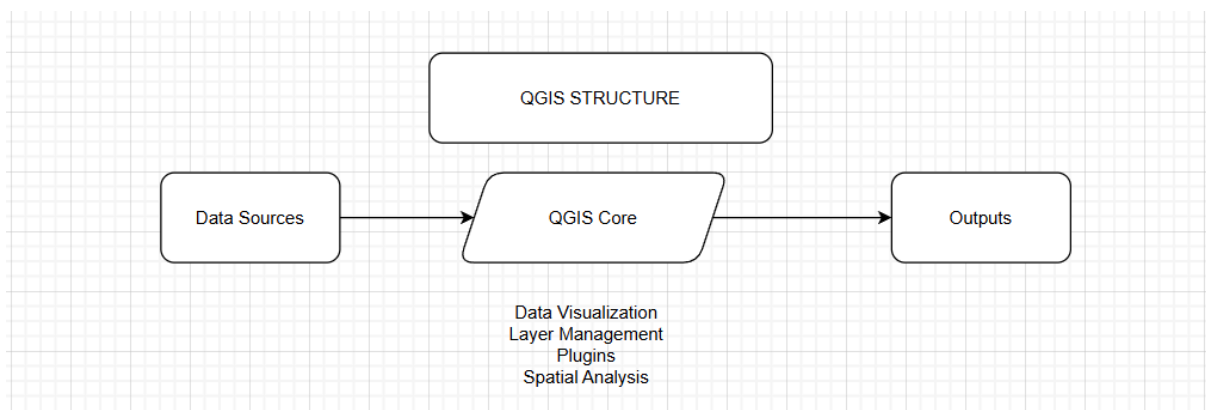


QGIS

QGIS is a free software that works with maps and geographical data. It's a bit like a powerful digital album that you can use to create, look at, and analyze all kinds of maps. Instead of a paper map, we can layer different kinds of information together like putting a map of all the roads on top of a map showing different stores and movement of people. This helps us see how different things are connected. Since it's open source, it's a popular tool for anyone who works with maps, this tool can help everybody from students to government workers.

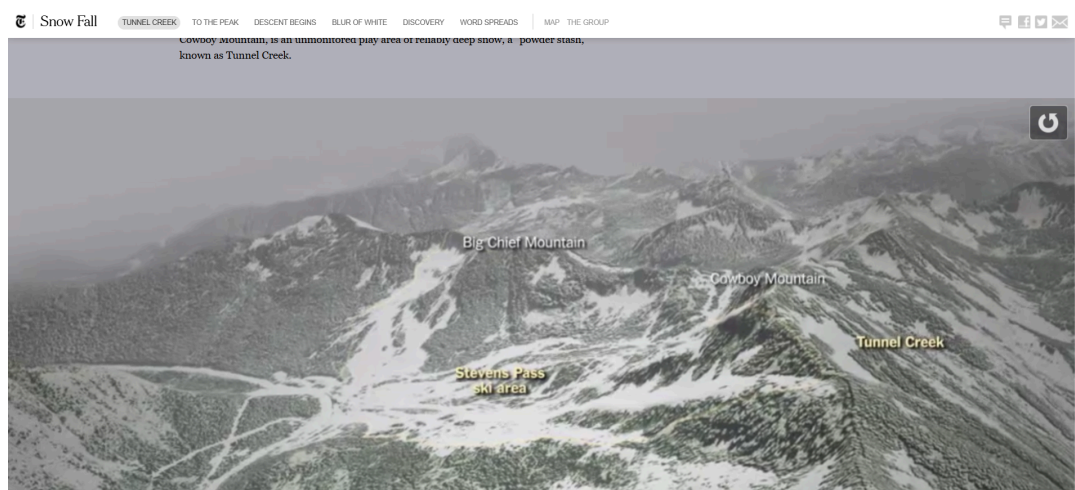
As a MIS major and cybersecurity student, I could take a great advantage of the use of QGIS to bring a geographic view into my studies. For example, if I were studying global cyberattacks, I could take data that shows the source of phishing emails and plot those IP addresses on a map. That would let me see patterns, like whether certain regions are consistently responsible for specific types of attacks.



Scrollytelling

Scrollytelling is a way of telling stories on a website or app where the content changes as you scroll down the page. Instead of only reading text, you also see pictures, charts, or animations that move as you go, which makes the story feel more interactive and engaging. This creates a different experience for the reader compared to just plain reading. A good example of this is found on National Geographic's website, where some of their articles use animations, maps, and charts that appear while scrolling. One example is animated maps that show the migration of animals, along with other visual effects. By combining text with visuals that change step by step, scrollytelling makes information easier to follow and much more enjoyable. It turns reading into an experience rather than just consuming words on a page.

Since I'm a cybersecurity student, I think scrollytelling could be a really cool way to explain security topics to people who don't know much about them. For example, I could make a page that walks someone through how a phishing attack works. At first, as you scroll, you'd just see a normal-looking email. Then as you keep scrolling, the page could show how the attacker hides a fake link, and after that, an animation of what happens when someone clicks it. Toward the end, maybe a chart would pop up showing how many people fall for phishing every year. It would basically feel like the page is telling the story step by step, and I think that would make it way easier to understand than just reading a plain article.

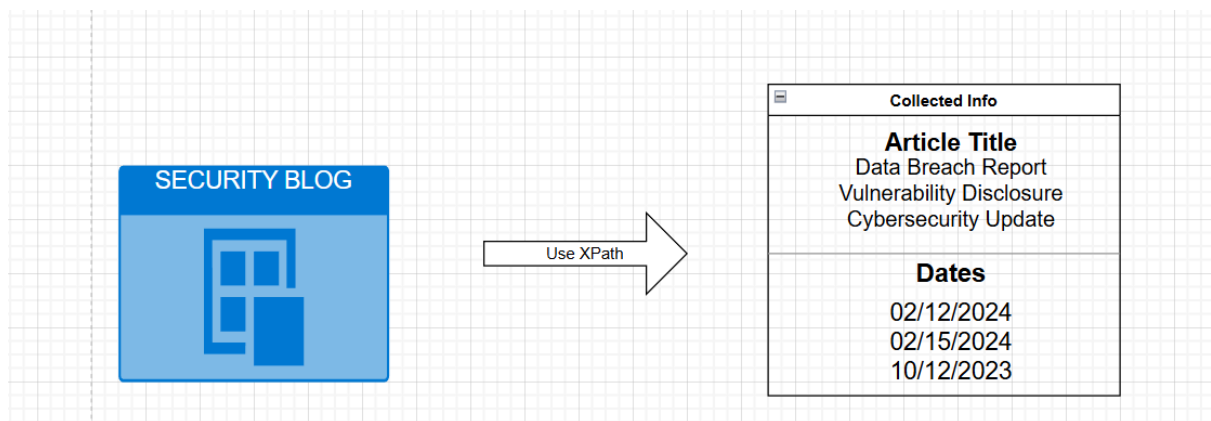


The New York Times' "Snow Fall" article is a great example of scrollytelling because it's like a movie you read. As you scroll down the page, videos, animations, and photos pop up right when you need them, pulling you into the story and making you feel like you're right there.

XPath

XPath is like a set of instructions you give a computer to find a document or webpage. You can tell it exactly where to look, saving you the trouble of searching through everything yourself. It might be used, for instance, to extract only the text within a single heading or all of the links on a page. It's similar to telling someone, "Go to this place and pick this thing." Compared to traditional searching, this makes it much faster and more precise. It is frequently used to assess web pages or extract data from websites. In essence, it's an effective shortcut for locating the exact bit of information you're looking for.

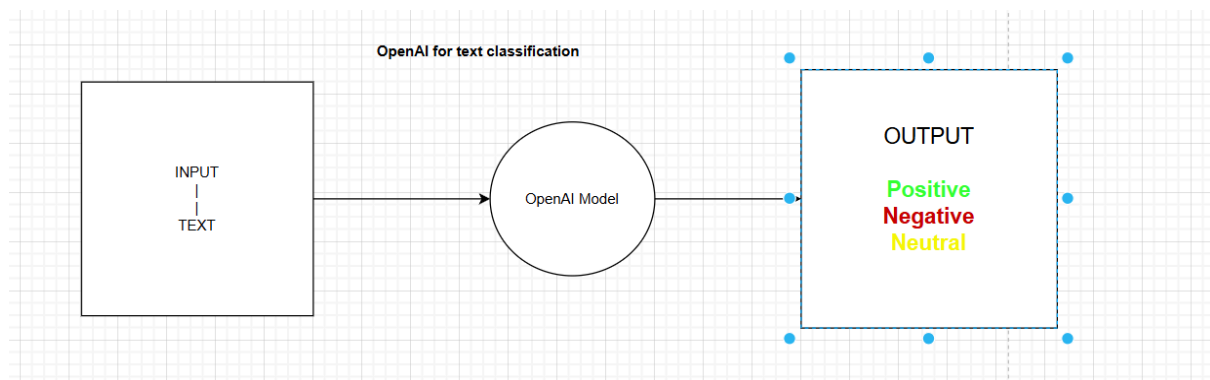
Let's say I have to collect information about recent data breaches from a security blog for a class project. The website is full of pictures, promotions, and other unnecessary information. I could use XPath instead of manually copying and pasting everything. "Get all the article titles and dates from this section of the page," is what I would simply tell it to do. I would have a clear list of just the information I need, without any unnecessary details, in a matter of seconds. I would think of it as giving the computer instructions, such as "go here and grab this," which would make my assignment much quicker and less stressful as a result.



OpenAI for text classification

OpenAI for text classification is basically a tool that can read text and figure out what category it belongs to. For example, it can tell if a review is positive or negative, or if an email is spam or not. You don't have to give it complicated rules because it learns from examples you give it. It works on all kinds of text, from text messages to long books articles. It's super useful for organizing lots of text very quickly. Basically, it's like having an assistant that can see, help, label and organize all your information.

As a cybersecurity student, I could use OpenAI for text classification to help spot dangerous messages. For example, instead of reading through every email or chat ourselves, the AI could look at them and sort them out. If it sees something like "Your bank account is locked, click here," it could flag that as a phishing attempt and normal stuff, like a classmate asking to study together, just gets marked as safe. That way, we don't waste time on spam or scams and can focus on what's important. It's like having a filter that helps us catch threats faster while we're still learning the ropes.



Datawrapper

Datawrapper is an online program that assists you in converting data or figures into tables, maps, or charts. It's designed to be very user-friendly, so you don't need to know how to code or have any advanced design abilities. All you have to do is upload your data, select a chart style, and adjust its appearance. It works well for creating images for reports, school projects, and all you can imagine. You can consider it a simple method of quickly making your data appear more professional and clear.

If I wanted to gather information about previous cyberattacks for a class project, I could use Datawrapper to help everything look more organized. Imagine I have a list of attacks, together with the dates they occurred and the number of victims. I could put the data into Datawrapper and create a timeline or bar chart instead of only showing a list of numbers. In this way, it will be much easier for my teacher and classmates to see the pattern, such as the year with the highest number of attacks. Even though it didn't take me long to get it done, it also gives the end result a much more clean look.

