Instructions for how to view the wikimap

The purpose of this document is to describe the features that are already embedded into the wikimap and to give a hint of what the wikimap would look like in its final form. Please keep in mind that the current version of the wikimap is a prototype and is merely meant to be proof of concept. (The prototype was built with the help of two computer science majors at Holy Cross.)

Given that, let's begin:

1. To start, let me highlight the objects you can see upon opening the wikimap. The map identifies different countries by color. You can zoom in on any location by scrolling. There's also a time feature in the upper left hand of the map. Finally, there are clickable layer buttons on the right. My long-term goal is to have the layers be nested buttons, where the first set of buttons would be major categories (like 'economics', 'health', 'culture', 'government', etc.). Then, after clicking on one of those buttons, more buttons would appear. This next set of buttons would contain more refined headings.

2. To see how the time feature would work, click on the "US states" button. This choice highlights the state borders. Now, move the time cursor back as far as it goes (1775) and zoom in so that the United States fills the screen. Press play and watch as the states officially join the United States. After you're done watching this, I'm sure you noticed that there is some historical inaccuracy associated with when certain states joined the United States. Maine and West Virginia are two examples of the inaccuracies. This doesn't represent a fundamental problem with the map. Instead, we're relying on the fact that this map merely represents a 'proof of concept' and demonstrates that the wikimap *can show* how political borders change over time. (Imagine seeing how the Roman empire or the Mongol empire rose and fell over time. Further, imagine seeing not just one or two empires rising or falling over time, but the entire world's borders changing over time. Borders would appear constantly in flux. At certain times there is an explosion of new countries, while at others it appears like the countries are coalescing.) Now, click off the US states button and zoom out. (You might have to occasionally hit refresh as the prototype sometimes freezes. These are all things that can be improved with the help of professional, experienced computer scientists.)

3. While the time increment in my wikimap is currently set at 1 year, I hope to give the user the ability to manipulate the increment because some data is best seen at longer or shorter time horizons. For example, imagine you want to see climate change over time and have a layer for global temperatures. When watching this layer evolve over time, the right time increment might be on the order of ten thousand years. But, if you wanted to see the impact of a fast-moving disease like the coronavirus, this might be better viewed using a time increment of a day or so.

4. To see what I'm imagining with the layers of data, click on infant mortality. This layer shows the rate of infant mortality per 1000 births by country. The darker the color, the lower the rate of infant mortality; the lighter the color, the greater. Also, if you hover over a country and look to the white box on the left, the wikimap tells you the specific level of infant mortality per 1000 births and the source of the data. Here, I'm imagining a 'more info' button, which when clicked, will show users where the data came from, relevant books on the topic, etc. Click off the infant mortality button. The literacy button largely shows the same features as the infant mortality button, so I'll ignore that.

5. Click on the US population button. Notice that this shows the population of the US states at a certain point in time. (Ideally, this would be connected to the time feature and so show how the populations of the states change over time.) The reason I wanted you to see this is that not all data should be shown at the country-level or state-level. So, if you zoom in on the US states, you'll see that the layer automatically updates to show the population data of the US counties. This demonstrates that the wikimap can show data at granular levels. Unclick the US population button.

6. Click on the UN Member states button and scroll the time cursor back to 1940 or so. By pressing play, you'll see when each country joins the United Nations. You can do the same for the European Union member states. But, what I wanted to show you here is that if you click on both the UN Member states button and the EU member states button at the same time, there are actually subtle differences in color depending on whether a country is a member of one organization, both, or neither. While the color changes are too subtle on the prototype, the idea here is that the wikimap can show how different layers of data interact. Unclick those buttons.

7. Finally, click on US Gini coefficient. If you scroll back to 1977 and press play, you can watch as income inequality gets more severe over time. (Darker means a more unequal income distribution within that state.)

As I mentioned above, this prototype is a proof of concept and is meant to give us an idea about what the wikimap would look like (and what features would be embedded) in its final form. The wikimap would start as a blank shell that would embed the following features:

- Time slider
- Zoom
- Easy way to upload data onto the wikimap

Once this blank shell is complete, we will launch the wikimap online. Over time, trusted users (academics and think tanks to start with) will populate the wikimap with more and more data, converting the blank shell into a sort of 'visual Wikipedia'. This digital map would then allow

users to visualize how data moves over time and varies across region. It would also give users the ability to see correlations across different types of data by super-imposing multiple layers on top of the map at once.