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CS416 Narrative Visualization Project
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Drill Down Narrative - Top 10 countries with largest percent increase in GDP per Capita

1. Messaging. What is the message you are trying to communicate with the narrative visualization?
The goal of this visualization is to provide insights on health, education, and employment with respect to countries which have the highest percent increase of GDP per capita from 2000 to 2019. GDP per capita is an important metric but cannot summarize the well being of a country alone. This visualization shows some expected and unexpected trends relative to countries with high percentage increase in GDP per capita.

2. Narrative Structure. Which structure was your narrative visualization designed to follow (martini glass, interactive slide show or drop-down story)? How does your narrative visualization follow that structure? (All of these structures can include the opportunity to "drill-down" and explore. The difference is where that opportunity happens in the structure.)
The choice of narrative structure is drill-down. The user is presented with one main scene where they can choose between health, education and employment. It is not required that the reader look at all three, but rather only the ones they are interested in. This type of layout gives the reader more control of what content they want to view.

3. Visual Structure. What visual structure is used for each scene? How does it ensure the viewer can understand the data and navigate the scene? How does it highlight to urge the viewer to focus on the important parts of the data in each scene? How does it help the viewer transition to other scenes, to understand how the data connects to the data in other scenes?
Each scene is structured to contain one chart. The main page chart is a bar chart while each of the three drill down scenes contains a line chart. The main page's purpose is to display the top ten countries with largest increase in GDP per capita. A world map is also displayed to indicate the country's location in response to a mouseover to the bar of the respective country. The main page also provides buttons to each of the three drill down scenes. The drill down scenes are children of the main scene and thus can only be accessed through the main page. The reason for this structure is that each drill down scene relates to the main page and not to each other. The contents of each drill down scene contains a line chart to display the trend from 2000 to 2019. The line chart uses annotations and summary text to communicate the results of the data. A tool tip is also provided to allow the user to seek out other trends in the data. Consistent color coordination representing each country was also used to visually orient the reader to the data from scene to scene.

4. Scenes. What are the scenes of your narrative visualization? How are the scenes ordered, and why

There is one main scene and three drill down scenes which can be viewed in any order. There is no sequential importance whether to view employment, health, or education data first even though this is how the buttons where laid out.

5. Annotations. What template was followed for the annotations, and why that template? How are the annotations used to support the messaging? Do the annotations change within a single scene, and if so, how and why
The annotation template was constant throughout the viz. It consisted of a leader line with arrow pointing to the data point of significance. A short text was attached to each leader line. This provided simple and effective communication of unusual data patterns, i.e., sudden spikes. The annotations were individual to a single scene only and not carried out to other scenes. Besides annotations embedded in the line chart, a summary statement of the plot was given below the chart.

6. Parameters. What are the parameters of the narrative visualization? What are the states of the narrative visualization? How are the parameters used to define the state and each scene?
The parameters are factors of GDP we want to track, namely employment, health, and education. Each parameter defines the scene and the chart it contains. For example, these parameters relate continuous data to continuous data (year) and is best presented as a line chart compared to the main scene which relates nominal to continuous data, where a bar chart is better suited.

7. Triggers. What are the triggers that connect user actions to changes of state in the narrative visualization? What affordances are provided to the user to communicate to them what options are available to them in the narrative visualization?
The triggers are employment, health, education, and home. They cause one scene to change to another through common html buttons. A corresponding change in state will occur with updated contents associated with that state by pressing these buttons. The affordance in this case was the commonly recognized html buttons. These buttons are widely used and are almost certainly recognized that they can be activated by mouse click.