**Design Document for Global Economics Webpage by Rory Horkan**

**Introduction:**

In this document I’ll be discussing:

* The reason I went with global economics.
* The purpose of the website.
* The source of the data.
* The design processes
* Would I change anything in the result?

**Origins of the website:**

The objective of this assignment was to create a website that embeds dashboards from Tableau, a chart making software that allows you to convert excel sheets to interactive graphs s that have the globe, bar charts or pie charts. Other applications were on the table as well such as google sheets and adobe illustrator/photoshop. Much like the last assignment this required that a story or purpose is present in the webpage. I chose the topic of global economics since It would allow for the beforementioned charts to be incorporated into the webpage along with the fact that global economics covers a variety of subjects from unemployment rates, GDP, inflation rates as well as which countries have the best/worst economy’s. This all culminates in the big question; “What causes economies to fail?”

**Research:**

Now that I knew what I was doing, it was time to do some research. My first instinct was to go to google and search for “global economics”. What came up were handy statistics from the IMF [[1]](http://www.imf.org/external/pubs/ft/weo/2017/01/weodata/weorept.aspx?pr.x=48&pr.y=14&sy=2012&ey=2020&scsm=1&sort=country&ds=.&br=1&c=512%2C668%2C914%2C672%2C612%2C946%2C614%2C137%2C311%2C962%2C213%2C674%2C911%2C676%2C193%2C548%2C122%2C556%2C912%2C678%2C313%2C181%2C419%2C867%2C513%2C682%2C316%2C684%2C913%2C273%2C124%2C868%2C339%2C921%2C638%2C948%2C514%2C943%2C218%2C686%2C963%2C688%2C616%2C518%2C223%2C728%2C516%2C558%2C918%2C138%2C748%2C196%2C618%2C278%2C624%2C692%2C522%2C694%2C622%2C142%2C156%2C449%2C626%2C564%2C628%2C565%2C228%2C283%2C924%2C853%2C233%2C288%2C632%2C293%2C636%2C566%2C634%2C964%2C238%2C182%2C662%2C453%2C960%2C968%2C423%2C922%2C935%2C714%2C128%2C862%2C611%2C135%2C321%2C716%2C243%2C456%2C248%2C722%2C469%2C942%2C253%2C718%2C642%2C724%2C643%2C576%2C939%2C936%2C644%2C961%2C819%2C813%2C172%2C199%2C132%2C733%2C646%2C184%2C648%2C524%2C915%2C361%2C134%2C362%2C652%2C364%2C174%2C732%2C328%2C366%2C258%2C734%2C656%2C144%2C654%2C146%2C336%2C463%2C263%2C528%2C268%2C923%2C532%2C738%2C944%2C578%2C176%2C537%2C534%2C742%2C536%2C866%2C429%2C369%2C433%2C744%2C178%2C186%2C436%2C925%2C136%2C869%2C343%2C746%2C158%2C926%2C439%2C466%2C916%2C112%2C664%2C111%2C826%2C298%2C542%2C927%2C967%2C846%2C443%2C299%2C917%2C582%2C544%2C474%2C941%2C754%2C446%2C698%2C666&s=NGDPD&grp=0&a=) and The World Bank [[2]](https://data.worldbank.org/). They had vast amounts of data on the global scale of unemployment, inflation and GDP. The next course of action was to find the highest employment rates, worst economies and what the top 10 economies will be in 2020. These were on OECD.stat [[3]](http://stats.oecd.org/Index.aspx?DatasetCode=LFS_SEXAGE_I_R), Office for National Statistics [[4]](https://www.ons.gov.uk/employmentandlabourmarket/peoplenotinwork/unemployment) and Global Finance [[5]](https://www.gfmag.com/global-data/economic-data/the-poorest-countries-in-the-world?page=12).

Now that I had my data, it was now time to pick out a bootstrap template. Bootstrap was handy since it sped up the web development process a lot quicker singe the CSS was already typed out with single page templates to help reducing the amount of HTML pages to one as opposed to say seven pages if it was done without Bootstrap. When viewing templates at startbootstrap.com, I decided to go with the template “Portfolio” [[6]](https://startbootstrap.com/template-overviews/creative/) since not only was it a single page template, it also had a good colour scheme to it.

**Designing the website:**

***Importing the data to tableau:***

Now that the template was downloaded the next move was to import the data into tableau. For the GDP and Unemployment dashboards it was decided that I go with world view dashboards since it shows the data in a colour heat format with the darker the colour indicating a higher GDP and vice versa for the unemployment dashboard. Also, I added percentages on the countries in case someone is looking for the precise percentage of the data. For inflation rate I went with a bar chart since it shows the data in an ordered fashion with the user’s attention being directed towards the top of the chart showing the higher the bar the higher the inflation rate is. Finally, debt was going to be presented as a treemap with green tiny squares representing low debt while bigger squares with red represent higher debt. Now that all the dashboards were saved and the data implemented now it was on to uploading them to tableau public. This was done so that it’s accessible on the cloud which allowed for the dashboards to be embedded onto the website and could be accessed on any machine.

***Creating the top 10 2020 economies chart:***

Considering the brief allowed for a range of applications to use I went with creating a poster in Adobe Illustrator. But first things first, I had to develop a good layout for the poster. I went with a striped look with dark and light greens serving as the colour scheme. After that I implemented the typography into the poster. The text itself was made in photoshop by typing in the text, creating a layer for clipping and adding in the country flag making sure it perfectly fits into the text. Once all the texts were rendered out I then imported them into Illustrator and scaled them down to fit their respective rows and the numbers on the left-hand corner. I saved the file as an SVG and embedded it into the source code.

***Adding in the google sheets:***

For the final section I made two bar charts on google sheets one for poorest economies and the other for employment rates. The brief required that all charts are interactive (having a hover and select feature), lucky for me google sheets allowed for not only charts to be embedded but they could also be interactive.

***Layout of the Webpage:***

Considering the template is a single page format it will rely on link in the nav bar to scour through the site for content. For example, say if I click unemployment in the nav bar then the site will scroll down to the unemployment section. The site is laid out like this; the four tableau sheets are at the top while the chart is the second last section with the google sheets being the last section. The sources for the data is listed on the lower left-hand corner of the site with the user able to click on the links to go to their respective sites. For the image bar itself, I used a royalty free image of stock markets to convey the feeling of economics [[7]](https://media.licdn.com/media/gcrc/dms/image/C5612AQHW-d0qFuHY8w/article-cover_image-shrink_600_2000/0?e=2123863200&v=beta&t=oUBLvzy0ep9Uno-MV3aeh94ErRb98OtlhkyNRCE97oI).

**My Hypothesis:**

My theory is this; country in the west seem to have the best economy’s. While countries in Africa or the East (except for china) have poor economy’s. The data suggests that country’s that experience heavy populations and war seem to suffer the most. Venezuela is one situation where a country is prosperous one second since it follows a capitalism model but suddenly has a high inflation rate due to the correlation that it suddenly became a socialist country over the past 3 years and as such has lack of resources for its citizens.

**How would I redesign the webpage?**

* Try to make the tableau sheets more centred since they do come off as a bit skewed since I was using the centre tag in HTML.
* Tableau requires that you sign in to see the charts on the web page. If there was a way to disable this it would be great.

**References:**

[1] [IMF.org](http://www.imf.org/external/pubs/ft/weo/2017/01/weodata/weorept.aspx?pr.x=48&pr.y=14&sy=2012&ey=2020&scsm=1&sort=country&ds=.&br=1&c=512%2C668%2C914%2C672%2C612%2C946%2C614%2C137%2C311%2C962%2C213%2C674%2C911%2C676%2C193%2C548%2C122%2C556%2C912%2C678%2C313%2C181%2C419%2C867%2C513%2C682%2C316%2C684%2C913%2C273%2C124%2C868%2C339%2C921%2C638%2C948%2C514%2C943%2C218%2C686%2C963%2C688%2C616%2C518%2C223%2C728%2C516%2C558%2C918%2C138%2C748%2C196%2C618%2C278%2C624%2C692%2C522%2C694%2C622%2C142%2C156%2C449%2C626%2C564%2C628%2C565%2C228%2C283%2C924%2C853%2C233%2C288%2C632%2C293%2C636%2C566%2C634%2C964%2C238%2C182%2C662%2C453%2C960%2C968%2C423%2C922%2C935%2C714%2C128%2C862%2C611%2C135%2C321%2C716%2C243%2C456%2C248%2C722%2C469%2C942%2C253%2C718%2C642%2C724%2C643%2C576%2C939%2C936%2C644%2C961%2C819%2C813%2C172%2C199%2C132%2C733%2C646%2C184%2C648%2C524%2C915%2C361%2C134%2C362%2C652%2C364%2C174%2C732%2C328%2C366%2C258%2C734%2C656%2C144%2C654%2C146%2C336%2C463%2C263%2C528%2C268%2C923%2C532%2C738%2C944%2C578%2C176%2C537%2C534%2C742%2C536%2C866%2C429%2C369%2C433%2C744%2C178%2C186%2C436%2C925%2C136%2C869%2C343%2C746%2C158%2C926%2C439%2C466%2C916%2C112%2C664%2C111%2C826%2C298%2C542%2C927%2C967%2C846%2C443%2C299%2C917%2C582%2C544%2C474%2C941%2C754%2C446%2C698%2C666&s=NGDPD&grp=0&a=)

[2] [The World Bank](https://data.worldbank.org/)

[3] [OCED.stat](http://stats.oecd.org/Index.aspx?DatasetCode=LFS_SEXAGE_I_R)

[4] [Office for National Statistics](https://www.ons.gov.uk/employmentandlabourmarket/peoplenotinwork/unemployment)

[5] [Global Finance](https://www.gfmag.com/global-data/economic-data/the-poorest-countries-in-the-world?page=12)

[6] [Bootstrap Template](https://startbootstrap.com/template-overviews/creative/)

[7] [Royalty Free Image for Header](https://media.licdn.com/media/gcrc/dms/image/C5612AQHW-d0qFuHY8w/article-cover_image-shrink_600_2000/0?e=2123863200&v=beta&t=oUBLvzy0ep9Uno-MV3aeh94ErRb98OtlhkyNRCE97oI)