

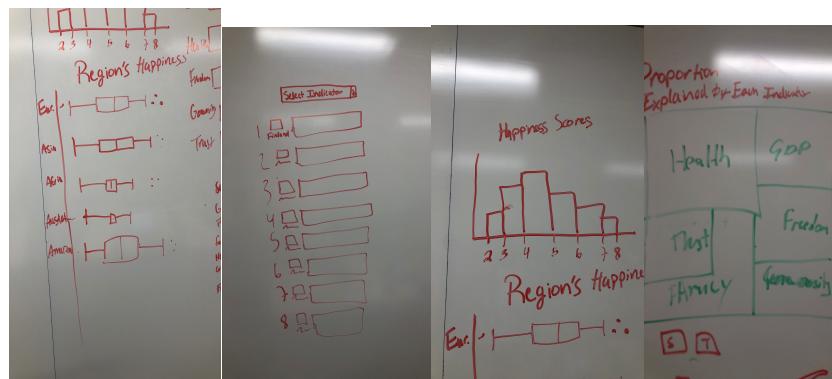
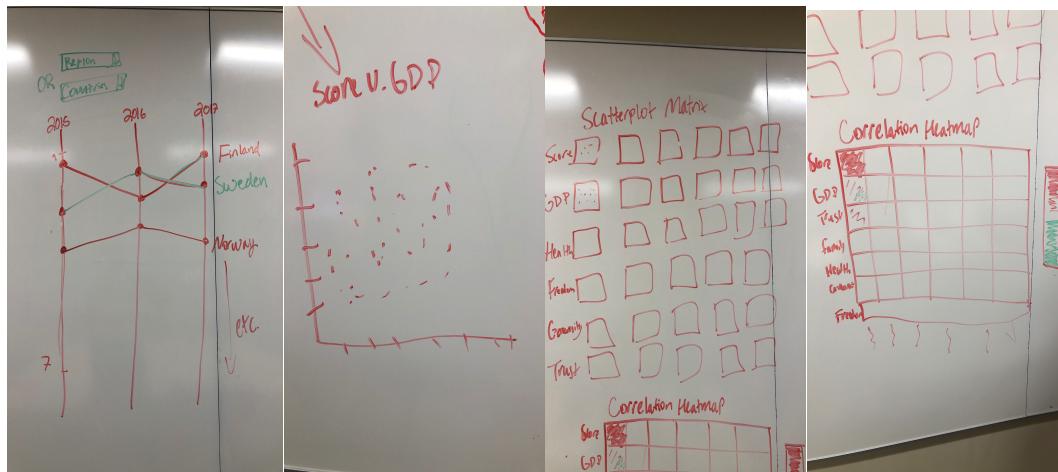
Gross Domestic Happiness:

On The Economics of the Smile & Global Happiness

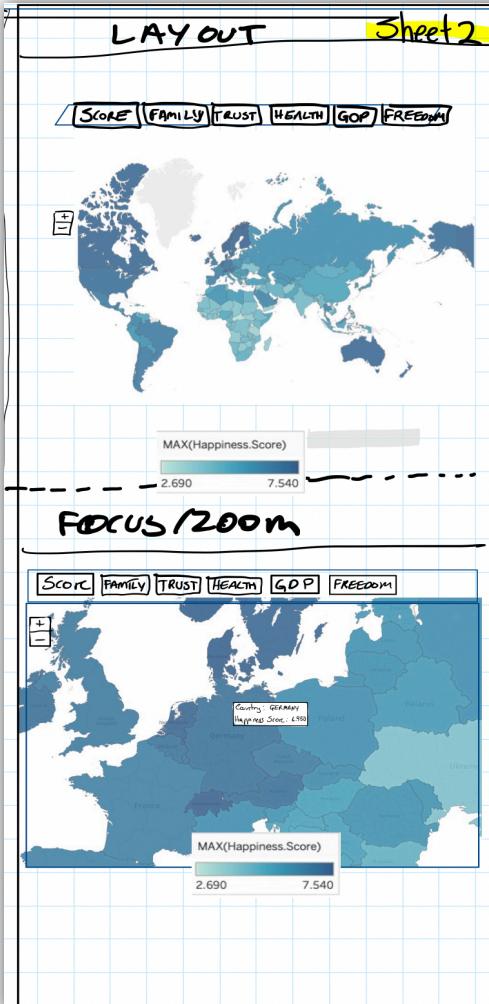
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Sheet 2



TITLE - World Happiness

AUTHORS: Steve Rodriguez

DATE: 3/3/1

OPERATIONS

- Panning / Zoom
- Variable Selection - Selecting one of the variables filters countries with highest chosen variable.
- Scrolling - through map to view desired regions.
- Hovering - Hovering over each country enables a pop up with country name and Happiness score.

DISCUSSION

Advantages -
- Focused interest (Analyze & Search)
- Explicit Targets
- High level views
- Easy to identify objects

Disadvantages -
- static data
- Interaction Required
- field study might be required to validate effective encoding

Sheet 3

LAYOUT

Happiness Scores

Histogram

Author: Jeffrey Chase
Date: 03/03/19 Sheet: 3
Title: Overview page of Gross Domestic Happiness

Operations

- Click on a bar in the histogram to show a list of the values
- Scroll through the different Countries in the list
- Click on group to expand list and see + compare countries in that list
- Click again to minimize that list of countries

Click Show All to show current rankings

Discussion

Pros

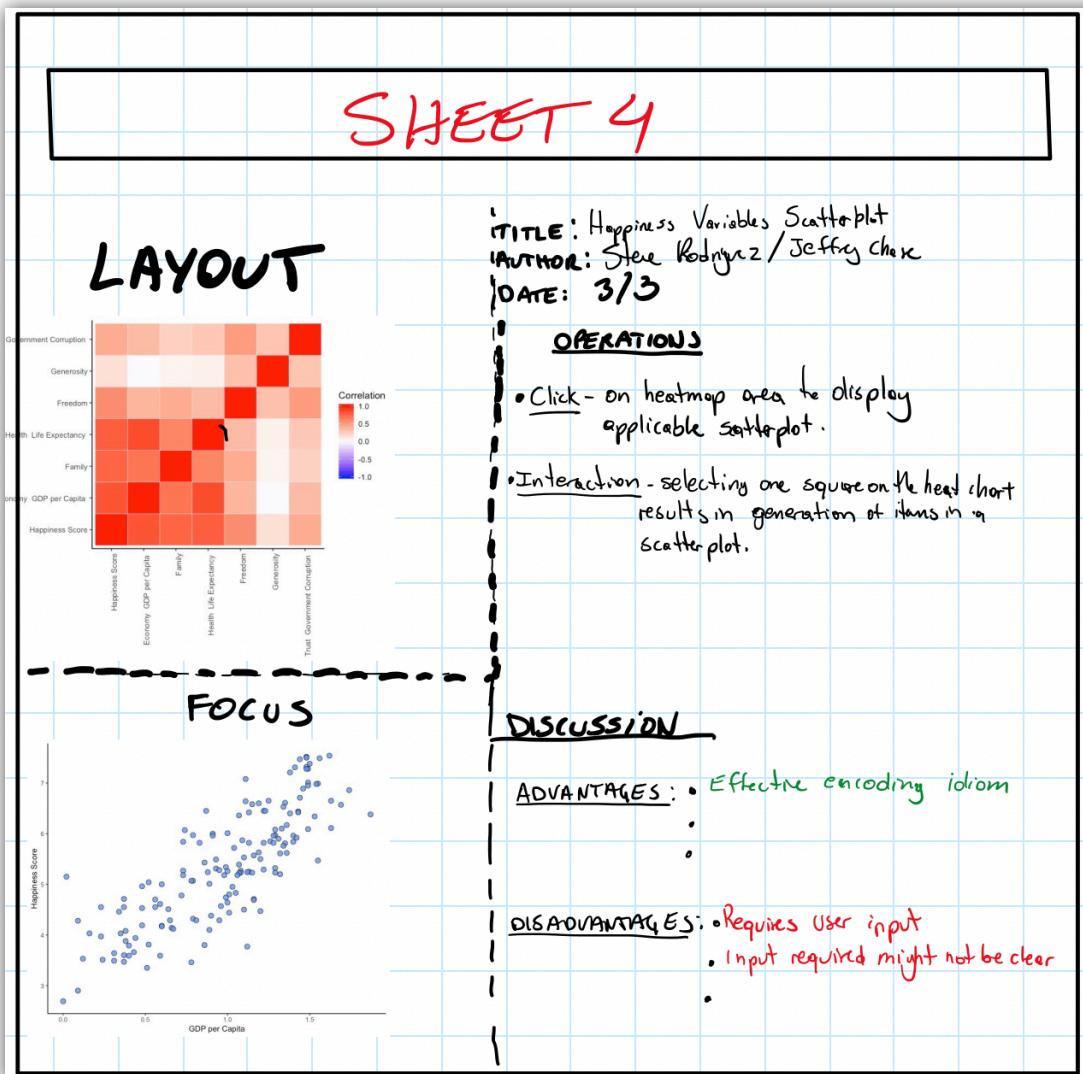
- Provides overview with ability to see detail
- Bars in order of rank + values compatible with country + bar position

Cons

- Requires user to perform action to see data
- 'Clicking' on histogram is unusual, may need written guidance on how to use it.

Score Range	Count
Scores 7-8	4
Scores 6-7	+
Scores 5-6	+
Scores 4-5	+
Scores 3-4	+
Scores 2-3	+

Sheet 4



Sheet 5

Jeffrey Chase
Steve Rodriguez

Gross Domestic Happiness

CSC 496-002

Project Timeline

- Poster Design Ideas/Strategy Mar 19
- Foundations Build website, group data Mar 29
- First Elements Primary visualizations Apr 5
- Status Update Complete prototype Apr 19
- Refined Version Fix bugs/Edit style
- FINAL PROJECT DUE April 23rd**

Explore Relationships

Correlation Heatmap

Hover
Hover over a cell to display the Pearson's correlation coefficient for the relationship

Click
Click on a cell in the heatmap to populate the scatterplot with a plot of the relationship between those two variables

Scatterplot

Hover
Hover over a point to display a tooltip with the corresponding country name and its values

Explore Trends

Hover
Hover over a point to display a tooltip with the corresponding country name and its value/rank

Data Overview

Click
Click on a bar in the histogram to have the window scroll down to that part of the list

Double Click
Double click on a country in the list to go to its country profile that contains more information on its measures

Mapping Happiness

Buttons
Click a button to change what attribute is visualized on the map

Hover
Hover over a country to show a popup with that country's score for that indicator and its rank relative to other countries

Click
Click on a country to pull up its "Country Profile" that has data for all of its values and compares it to the total distribution

Pin & Zoom
User can pan and zoom to focus on specific countries or regions

Regional Overview

Buttons
Click a button to change what attribute is visualized on the map

Hover
Hover over outliers to show a tooltip with the country's name, rank, and score

Click
Click on a country to pull up its "Country Profile" that has data for all of its values and compares it to the total distribution

Pin & Zoom
User can pan and zoom to focus on specific countries or regions

Implementation Details

- Packages**
 - [d3.js](#) JavaScript data visualization toolkit
 - [Leaflet](#) open-source JavaScript library for making interactive maps
 - [Font Awesome](#) free-to-use CSS library to add special icons for making web-based UIs
- Note:** depicted charts were made with R's `ggplot2` library and the map was made in Tableau for the purposes of this poster. These tools will not be utilized in the actual website
- Data Management**
The data will be loaded in the browser as it is a relatively small dataset (about 40kb for all three years of data)
- Other Details**
Flags are linked to countries by their filenames

Sources

Krennla, David. *Flags of the Countries in the World*, 2008.
<http://flagpedia.net/download>.