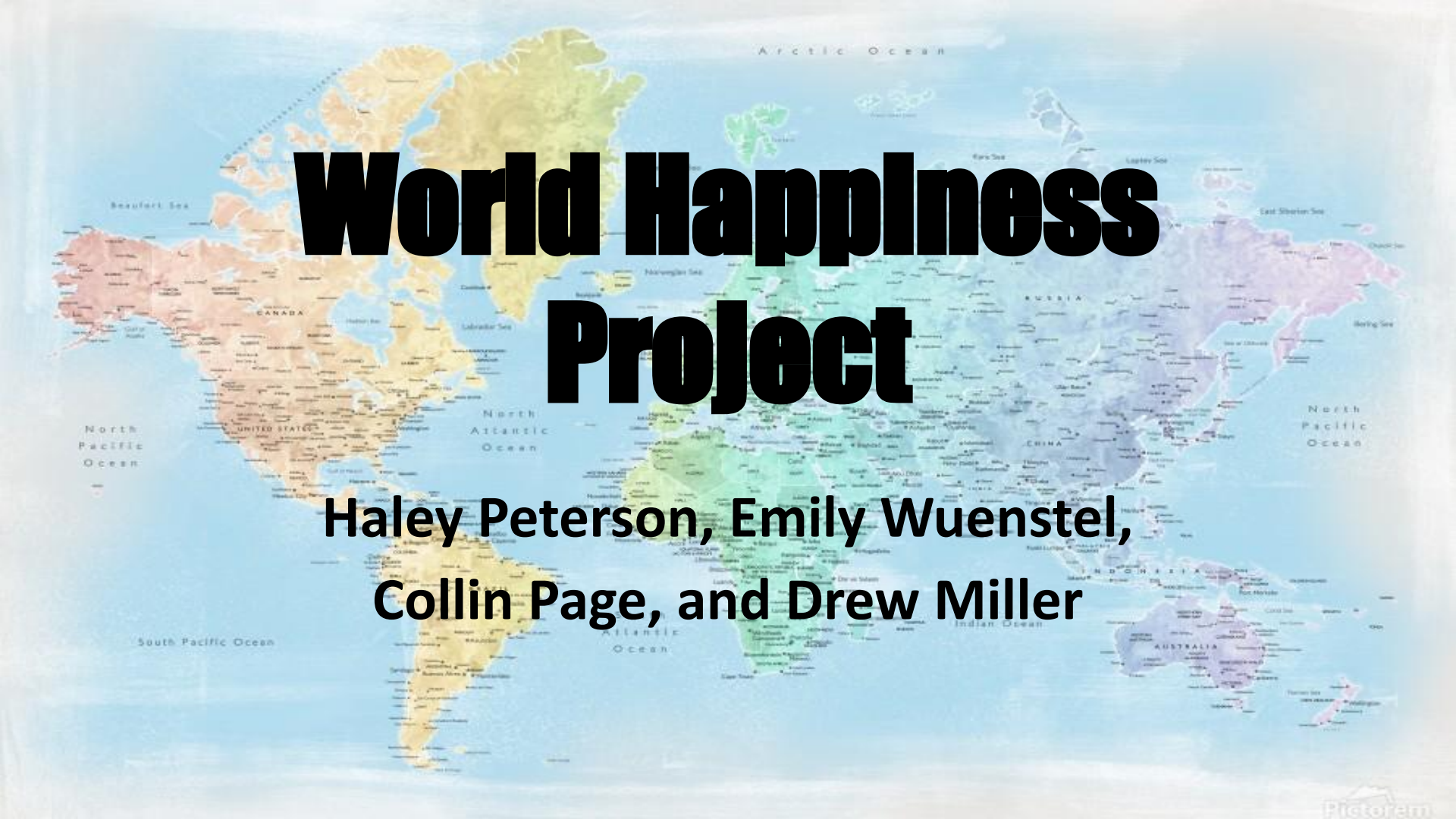


World Happiness Project

Haley Peterson, Emily Wuenstel,
Collin Page, and Drew Miller

9.7% of youth in the U.S. have severe major depression, compared to 9.2% in last year's dataset.

https://www.mhanational.org/issues/state-mental-health-america

Motivations

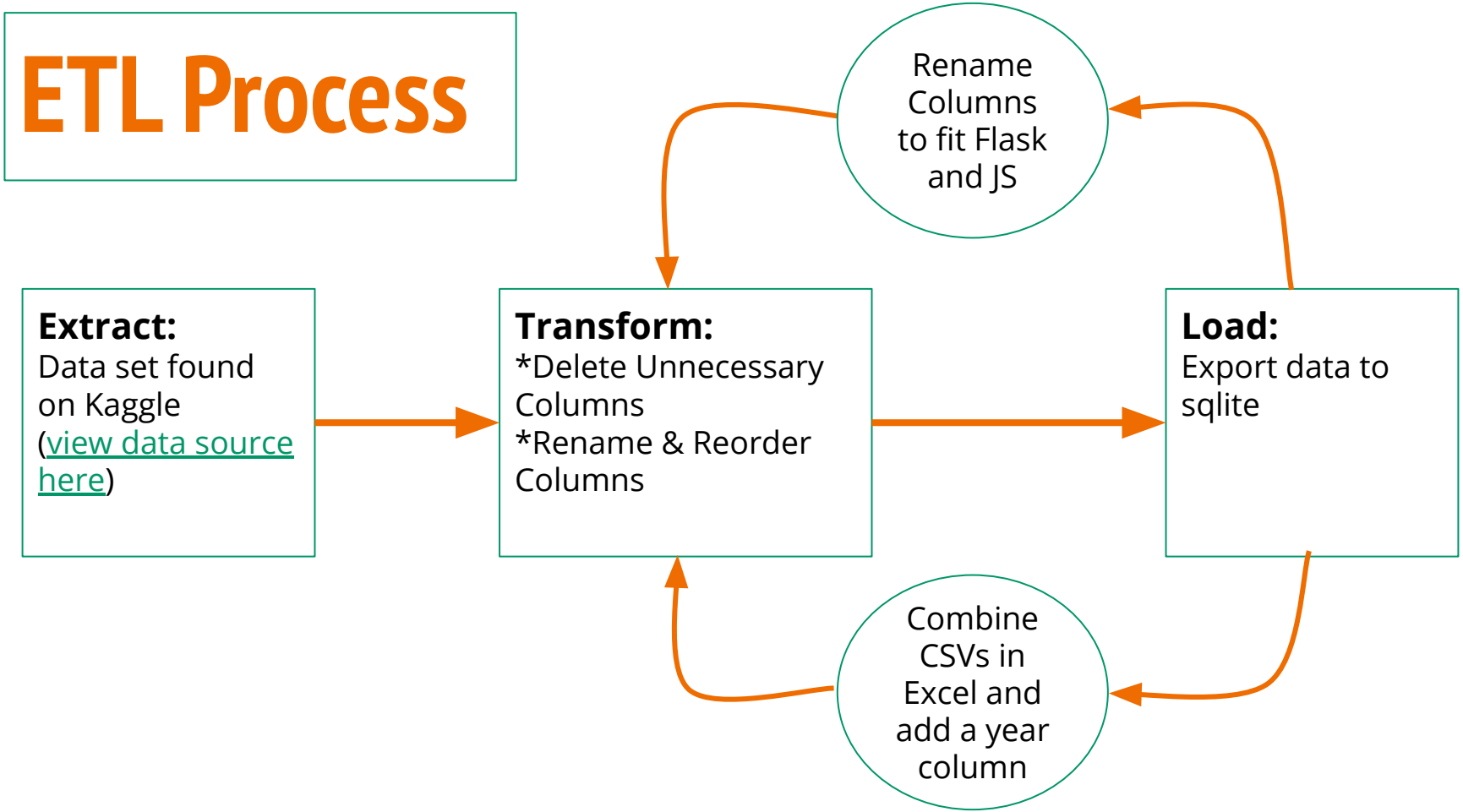
Where is the happiest place on Earth?

What country is the most consistently Happy?

Overview:

1. ETL Process
2. Flask App
3. HTML & CSS
4. Visualizations and App Pages
5. Questions/Comments

ETL Process


Rename Columns to fit Flask and JS
Extract:
Data set found on Kaggle (view data source here)
Transform:
*Delete Unnecessary Columns
*Rename & Reorder Columns
Load:
Export data to sqlite
Combine CSVs in Excel and add a year column

ETL - GeoJSON

Extract:
Import JSON and CSV data

Transform:
Used nested for loops to create a list of lists to incorporate the CSV into the GeoJSON file

Load:
Export a final GeoJSON file

Flask App

- Setup Flask and sqlite database
- Created a Data page with a connection to the sqlite database
- Created routes for the homepage and visualizations

HTML & CSS

New Javascript Library: Anime.js

- Used to create the animations that you see on the homepage

Utilized bootstrap functionalities to create the navbar, and dropdown menu on the Happiness by Country page

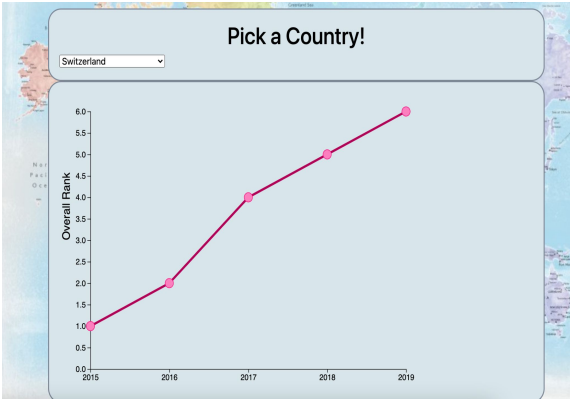
Our web page consists of a homepage and four additional pages:

1. **Happiness by Country** - An interactive map
2. **Happiness: The Last 5 Years** - An interactive line chart with a drop down menu to choose a country
    a. Within this page, there are 4 additional dropdown items that link to the four additional year data charts
3. **Full Data** - A searchable table that displays all of our cleaned data
4. **ArcGIS Example** - Shows how created examples are interactive within ArcGIS

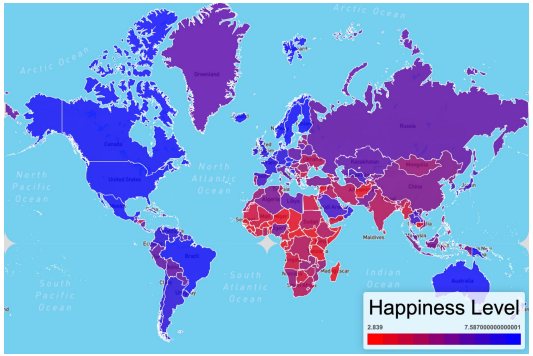
Let's take a look at our App!

Homepage

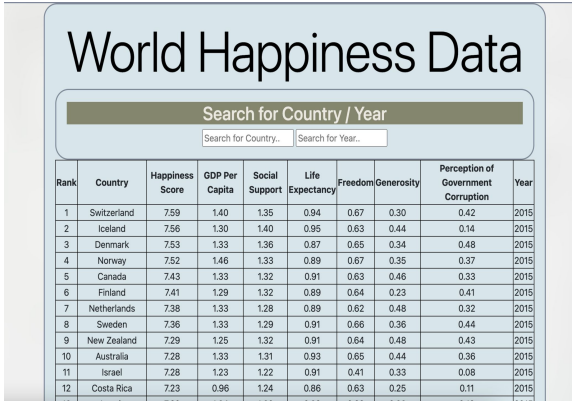
Happiness: The Last 5 Years



Happiness by Country

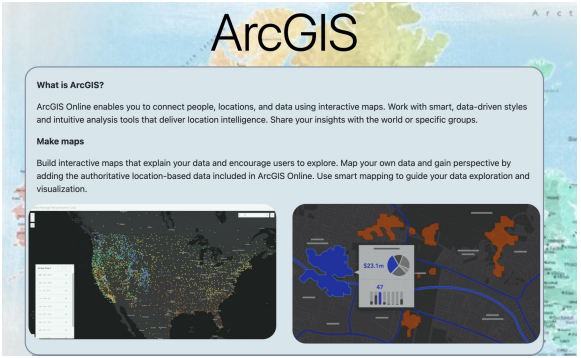


Raw Data



Rank	Country	Happiness Score	GDP Per Capita	Social Support	Life Expectancy	Freedom	Generosity	Perception of Government Corruption	Year
1	Switzerland	7.59	1.40	1.35	0.94	0.67	0.30	0.42	2015
2	Iceland	7.56	1.30	1.40	0.95	0.63	0.44	0.14	2015
3	Denmark	7.53	1.33	1.36	0.87	0.65	0.34	0.48	2015
4	Norway	7.52	1.46	1.33	0.89	0.67	0.35	0.37	2015
5	Canada	7.43	1.33	1.32	0.91	0.63	0.46	0.33	2015
6	Finland	7.41	1.29	1.32	0.89	0.64	0.23	0.41	2015
7	Netherlands	7.38	1.33	1.28	0.89	0.62	0.48	0.32	2015
8	Sweden	7.36	1.33	1.29	0.91	0.66	0.36	0.44	2015
9	New Zealand	7.29	1.25	1.32	0.91	0.64	0.48	0.43	2015
10	Australia	7.28	1.33	1.31	0.93	0.65	0.44	0.36	2015
11	Israel	7.28	1.23	1.22	0.91	0.41	0.33	0.08	2015
12	Costa Rica	7.23	0.96	1.24	0.86	0.63	0.25	0.11	2015

ArcGIS



Questions/Comments?