

A world map with a light blue background and various landmasses in different colors (yellow, green, orange, purple). The map is centered on the Atlantic Ocean. The title "World Happiness Project" is overlaid in large, bold, black letters.

World Happiness Project

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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>

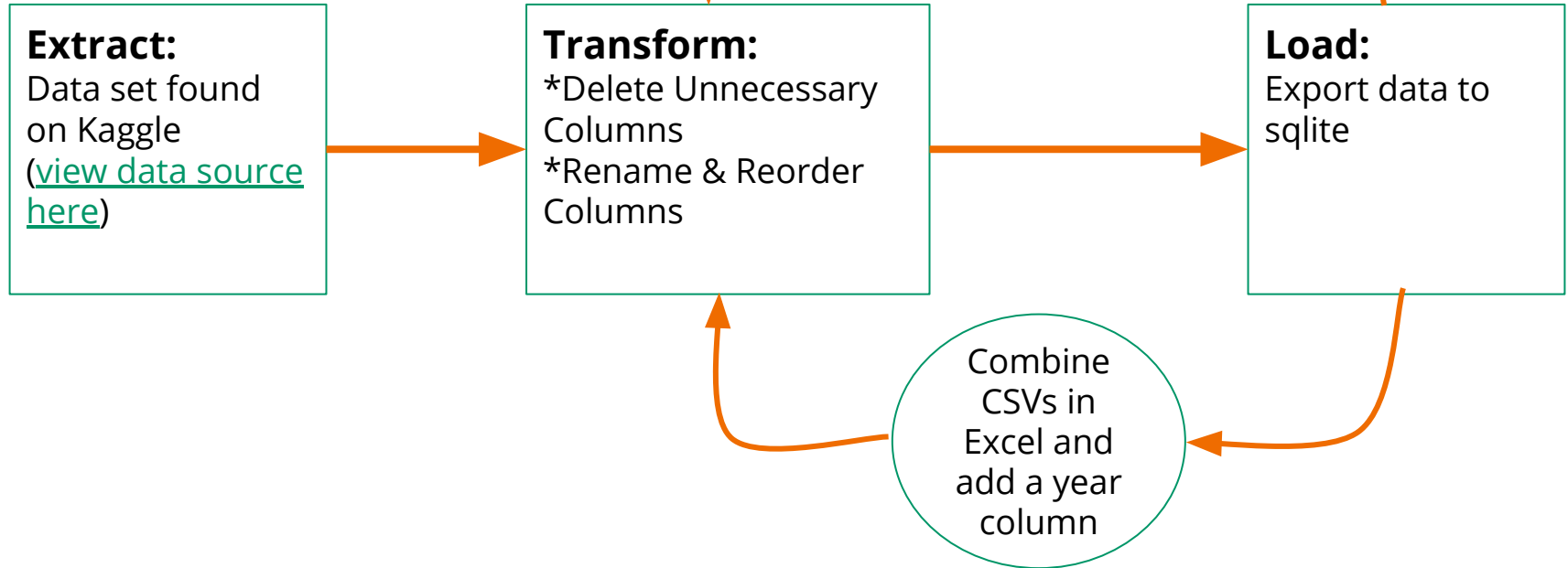
Motivations

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



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

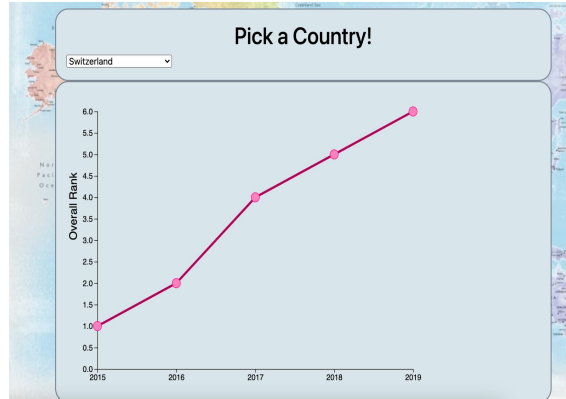
Utilized bootstrap functionalities to create the navbar, and dropdown menu on the Happiness by Country page

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!

Happiness: The Last 5 Years



Raw Data

World Happiness Data

Search for Country / Year

Search for Country... Search for Year...

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

Homepage

Homepage Views

World Happiness Project

Context

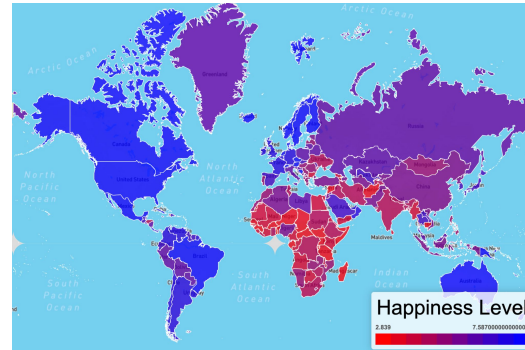
The **World Happiness Report** is a landmark survey of the state of global happiness. The first report was published in 2012, the second in 2013, the third in 2015, and the fourth in the 2016 Update. The World Happiness 2017, which ranks 155 countries by their happiness levels, was released at the United Nations at an event celebrating **International Day of Happiness** on March 20th.

The report continues to gain global recognition as governments, organizations and civil society increasingly use happiness indicators to inform their policy-making decisions. Leading experts across fields – economics, psychology, survey analysis, national statistics, health, public policy and more – describe how measurements of well-being can be used effectively to assess the progress of nations. The reports review the state of happiness in the world today and show how the new science of happiness explains personal and national variations in happiness.

Content

The homepage knows and captures user data from the **Global World Bank**. The

Happiness by Country



ArcGIS

ArcGIS

What is ArcGIS?

ArcGIS Online enables you to connect people, locations, and data using interactive maps. Work with smart, data-driven styles and intuitive analysis tools that deliver location intelligence. Share your insights with the world or specific groups.

Make maps

Build interactive maps that explain your data and encourage users to explore. Map your own data and gain perspective by adding the authoritative location-based data included in ArcGIS Online. Use smart mapping to guide your data exploration and visualization.

Questions/Comments?

