209 Final Project Proposal: World Happiness Report Data Paul Choi, Xinyi Zhu, Shehbaz Virk, Scott Thompson

Project Concept

We will give users easy access to information on global happiness through an interactive, web-hosted visualization tool that utilizes data from the <u>World Happiness Report</u> (WHR, see"Data Source" below). Our project will create a dashboard that enables users to freely toggle between and compare various happiness metrics in any way they see fit, whether that be looking at a specific contributor to happiness across the world or a time series analysis of the rate of change in a country's happiness score over time.

Target Audience

Our target users include a combination of individuals, government agencies, non-profit organizations, and general business decision-makers. The information presented in our dashboard will be relevant for a diverse audience given the insights can be applied across many use cases. For example, it may help non-profit organizations target funding to areas with a high potential impact on a nation's happiness, or individuals evaluate an offer from their employer to relocate to another country.

Tasks Using the Visualization

The primary task for our visualization tool is to answer key questions on happiness based on a range of topics and compare these rankings relative to countries. Another task is to learn about these trends over time and enable the user to leave our tool with conclusions or with more follow-up questions for the user to return to the site in search of more answers. Ultimately, our end goal is to be a trusted analytical tool for all users when thinking about global and national happiness.

Insights

The insights generated from our visualization tool are relative rankings and trends over time in the WHR data (including overall happiness scores, GDP per capita, social support, healthy life expectancy, freedom, generosity, perceptions of corruption, and mental health).

Some example insights include:

- 1. How do happiness scores compare between Finland, the USA, and Vietnam?
- 2. What 5 countries have seen their mental health scores decline the most in the last 5 years?
- 3. What are the top 10 countries that have the highest score in average life expectancy?
- 4. What is the freedom score today in China and how has that changed in the past 10 years?
- 5. How do major events, such as COVID-19, shape happiness scores across the globe?

Data Source

We will source our data directly from the <u>World Happiness Report</u> website. This website provides downloadable data on the happiness measures and variables utilized in their annual reports. It also includes a dashboard we will improve comprehensively.

For background, the WHR was developed to bring "more attention to happiness and well-being as criteria for government policy". The organization assesses the happiness of 130 countries and "shows how the science of happiness explains personal and national variations in happiness".

The happiness scores for each country are based on surveys with sample sizes of around a thousand respondents per country, per year. The report also includes data on "GDP per capita, social support, healthy life expectancy, freedom, generosity, and corruption" and estimates how these six variables "explain the variation across countries" in happiness.

References

Our proposal above (including the insights and example insights, data source description, tasks, project concept, etc.) sources from the World Happiness Report website and content.

Team Charter / Contract¹

- Time management
 - Punctuality Team meetings start at the time on the calendar invite
 - Attendance By default, we attend all meetings together unless otherwise discussed
 - Completion We stay in the meeting until the end of the scheduled time, or we agree to adjourn
- Procedures
 - We come to meetings prepared having completed agreed tasks, and with ideas
 - We will communicate and seek each other's help if we're going to miss a task deadline we have agreed upon as a team
- Behavior
 - We will operate on consensus
 - Active listening is prioritized
- Balancing workload
 - We will seek to balance the workload across the team so no team member feels undervalued, or unfairly overloaded
 - We will discuss who takes on different project tasks/responsibilities as a group as they arise
 - Team members can meet outside the broader group to collaborate on tasks they have jointly taken on
- Cadence of team meetings and location
 - Team meetings will happen over Zoom, and the organizer will send out Google Calendar invites with the Zoom link
- Roles
 - Below roles are our assigned roles. Nevertheless, we encourage each other to speak up regardless of the assigned role. Our team hopes to share our responsibilities and keep the discussion fun at all times.
 - <u>Scott:</u> At the beginning of a meeting, the leader sets subgoals. These sub-goals are then presented to the group for approval. The leader is also responsible for presenting the group material to the rest of the class.
 - <u>Xinyi:</u> The secretary is responsible for taking in-session notes and preparing presentation materials from these notes.
 - <u>Shehbaz</u>: The timekeeper is responsible for keeping track of the time allotted to each discussion and keeping the group aware of the remaining time. The leader is responsible for deciding what to do when time is running out during a discussion.
 - Paul: The devil's advocate will keep his/her mind open to problems, possibilities, and divergent or opposing ideas.
- Resolving disagreements
 - The group specifies problems or areas of concern and then forms consensus on resolution. If necessary, we will put any issue to a vote.

¹ From UWaterloo example provided, with our adjustments and adaptations