Does Money Buy Happiness?

An Interactive Web Experience

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1 Overview

This website invites users to explore whether wealth correlates with well-being. Through interactive visualizations and storytelling, visitors will:

- Examine a world map colored by GDP per capita.
- Take a quiz contrasting two countries' well-being statistics.
- Meet five personas representing different wealth-happiness profiles and decide for themselves if money buys happiness.

2 Data & Interactivity

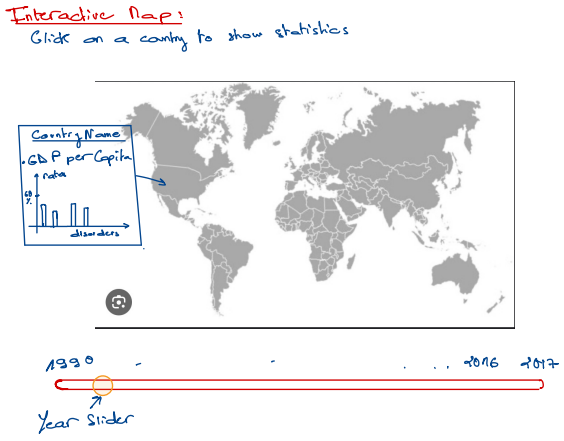
- **Year Slider:** Filters all views to the selected year (1990–2017) and dynamically recolors the map's choropleth based on GDP per capita for that year.
- **Linked Views:** Hovering or clicking in one section updates related charts and narratives in others.

3 Section 1: Interactive Map & Country Stats

World Map: A choropleth of countries colored exclusively by GDP per capita. A legend (échelle) at the bottom indicates the color scale. As users adjust the year slider, the map recolors to reflect GDP per capita changes over time. The map is implemented using D3.js and embedded in a React component.

Country Pop-up: On click, a chart appears showing:

- Name of the selected country
- Its GDP per capita
- A graph plotting anxiety and depression rates over time



4 Section 2: Quiz: "Which Country Is Happier?"

1. Present two randomly chosen countries (with flags).
2. Ask *"Which is happier?"* based on Happiness Index.
3. Upon selection, show side-by-side stats:

- Depression and anxiety disorders rate
- GDP per capita and median income

4. Provide a brief explanation of the correct answer.

5 Section 3: Character Stories & Reflection

Personas: Five profiles drawn from country data:

- Wealthy & Happy
- Wealthy & High Depression and Anxiety Disorders
- Poor & Happy
- Poor & High Depression and Anxiety Disorders
- Middle Income & Moderate Happiness

Narratives: Short stories weaving real statistics into each character's background.

Reflection Prompt: Visitors choose *Yes* or *No* to "Does money buy happiness?" and view aggregated responses.

6 Tools & Lectures

- **D3.js and Maps:**
  - Based on Lectures 8.1 and 8.2, we used choropleth maps to represent GDP per capita spatially. We selected appropriate map projections (e.g., Mercator or Winkel Tripel) considering distortion impacts.
  - We worked with GeoJSON and TopoJSON data as introduced in the lectures, and integrated map layers through D3's `geoPath` and projection tools.
  - Concepts like tile-based rendering and vector tile formats influenced how we structured our map components for responsiveness and performance.
- **Interactivity:**
  - Lecture 5.1 guided us in building linked views: clicking on countries updates stats and graphs across the page.
  - We incorporated interactive elements such as the year slider and hover-based tooltips using best practices discussed.
- **More Interactive D3 (Lecture 5.2):**
  - This lecture helped us build responsive scales, dynamic transitions (e.g., for slider animation), and customize interactions.
  - It also guided our use of D3 transitions and UI state handling for quiz interactions.
- **Time-Series Visualization:**
  - From the D3.js Time Series Exercise, we learned to bind data over time and represent trends interactively with brushing and zooming tools.
- **Color / Choropleths:**
  - Lecture 8.1 introduced choropleth best practices. We normalized values appropriately and designed the map with perceptually accurate coloring schemes.