Narrative Visualization: A Journey Through the Golden Era of Gaming

Messaging:

This visualization shows that the late 2000s were the golden age of video games. During this time, game sales hit their highest point, and many of the most popular and memorable games were released. Consoles like the Wii, Xbox 360, and PlayStation 3 were at the center of this success.

The goal is to help people see why this time was so important for gaming. By looking at sales trends, popular games, and top platforms, the visualization tells the story of why the late 2000s stand out in video game history.

Narrative Structure:

This narrative visualization uses an interactive slideshow structure. It guides users through a series of scenes in a set order, with buttons to move forward and backward. Each scene builds on the previous one to tell the story of how the late 2000s became the golden age of gaming. Within each scene, the user can drill down and explore in a variety of ways to follow the interactive slideshow structure. In scene 1, the user can hover their mouse over different parts of the line chart to see sales data in each region for a particular year. In scene 2, the user can hover their mouse over different bars of the segmented bar charts to see sales data for a particular console in a particular year. In scene 3, the user can select a year and a genre from the 2 dropdowns to filter the data.

Visual Structure:

Each scene in the visualization is designed to make it easier to understand and explore the data. The first scene uses a multi-line chart to show how video game sales changed over time in different regions. Each line is color-coded by region, and a vertical line with a shared tooltip appears when the user hovers, making it easy to compare sales across regions in any given year. Axis titles and a short description above the chart help users interpret the data and understand why sales peaked around 2008 and an annotation highlights the peak years of sales. The second scene uses a stacked bar chart to show how different gaming platforms contributed to total game sales each year. Each platform is represented by a different color in the stacked bars. A tooltip appears when hovering over a bar segment, displaying the year, platform, and sales amount. A legend on the left helps the user identify each platform, and an annotation highlights the peak years and dominant consoles of the late 2000s. In the third scene, a bar chart shows the top-selling video games filtered by year and genre. The dropdown menus allow users to interactively explore different combinations, and the chart updates in real time. The chart uses a horizontal layout to give more room for long game titles on the y-axis. This encourages users to explore trends in top games before, during, and beyond the late 2000s. Each scene uses consistent styling and labeling, and the "Next" and "Back" buttons make it easy to move through the story while maintaining a clear connection between scenes.

Scenes:

The scenes progress from general to more specific while building on each other. Starting with general sales by region, then sales per console, then sales per title. Each scene highlights why the late 2000s was the golden era of gaming.

- **Scene 1: Global Sales Over Time By Region (Line Chart)**
  Shows a line chart of yearly global video game sales. This helps users see the sharp rise in sales leading up to a peak around 2008. It sets up the key moment the rest of the story focuses on.

- **Scene 2: Sales by Platform (Stacked Bar Chart)**
  Breaks down yearly sales by gaming platform. This shows how multiple consoles (like the Wii, Xbox 360, and PS3) contributed to the late-2000s boom. It highlights platform diversity during the peak years.

- **Scene 3: Top-Selling Games by Year (Vertical Bar Chart)**
  Lets users explore iconic game titles using dropdown menus for year and genre. This reinforces the message by showing that many of the most beloved and best-selling games came out during the late 2000s era.

Annotations:

Annotations follow a static template. Each annotation is pre written per scene and provides the look of a newspaper article to support the narrative structure. In Scene 1, annotations mark peak sales across all regions in 2008. In Scene 2, an annotation marks the iconic console's peak in 2008, emphasizing its dominance visually and contextually. The static template keeps annotations readable and instantly meaningful, supporting the intended messaging without cluttering the visuals.

Parameters:

The main parameter of the narrative visualization is the scene number. This parameter determines which scene the user is currently in. There are three scenes in total, each representing a different part of the story. Each scene is a different state of the visualization. When the scene number changes, the visualization updates to show a different chart, annotation, and sometimes different user interface elements. Another parameter used in scene 3 is the user's dropdown selection, which includes selected year and selected genre. When the data is filtered with the dropdowns, it creates additional states of the visualization. These parameters define how data is displayed and allow users to explore in more detail.

Triggers:

The main triggers for changing scenes are the "Next" and "Back" buttons.

- When a user clicks "Next," the scene number increases by 1.
- When they click "Back," the scene number decreases by 1.
- These button clicks are event triggers that control which scene is displayed.

Each scene also has interactive elements that act as triggers:

- In Scene 1, users can hover over a line segment in the line chart. This triggers a tooltip that appears near the cursor and displays:
  - The year
  - The sales in each region
- In Scene 2, users can hover over a bar segment in the stacked bar chart. This triggers a tooltip that appears near the cursor and displays
  - The platform name
  - The year
  - The amount of sales

- In Scene 3, users can interact with dropdown menus to choose a year and genre, which triggers the chart to update and show game rankings by sales.

Affordances:

To help users understand what they can do:

- The "Next" and "Back" buttons are clearly labeled and easy to find.
- The dropdown menus use standard UI elements that users recognize.
- Tooltips appear automatically on hover, which invites exploration without requiring clicks or extra effort.
- The paragraph at the top of each scene tell the user exactly how to dive deeper into the data

These affordances make the visualization feel smooth and intuitive to navigate, encouraging users to explore the data while following the story.