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SoftDev
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Target Ship Date: 2023-05-22

1. **Program Components**
   i) Main Page
   - Will contain an interactable world map where the user can select one of three regions (North America, Europe, Japan) to link to a page dedicated to that region
   - Users can select a genre (ie: sports), a platform (ie: Xbox 360), or a publisher (ie: Electronic Arts) and see global trends, namely how specific genres and platforms have performed over time
   ii) North America Page
   - A bar graph with a slider for the length of the time period and a genre selector to see game sale statistics for that genre
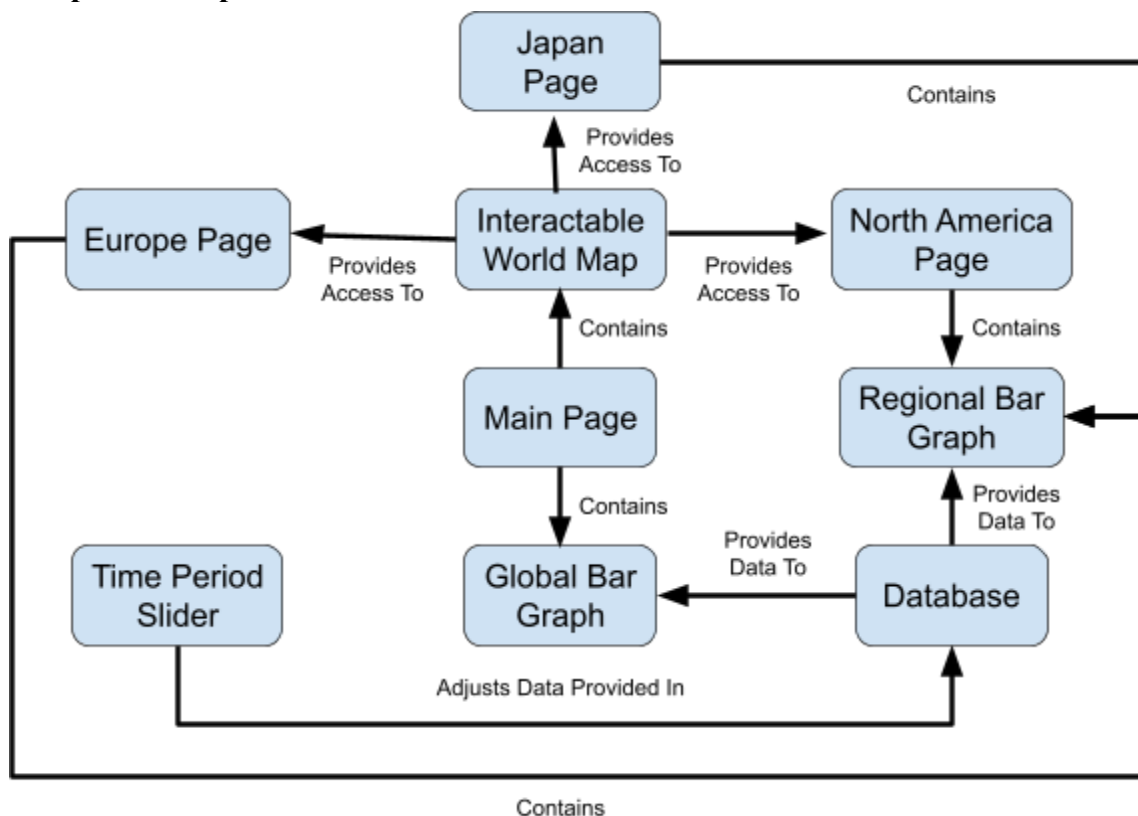   iii) Europe Page
   - Same as North America Page w/ Europe data
   iv) Japan Page
   - Same as North America Page w/ Japan data

2. **Component Map**

3. Database Organization

ID	Name	Platform	Year	Genre	Publisher	NA_Sales	EU_Sales	JP_Sales	Other_Sales
Explanations	Name of the game	Which platform it was released on (eg: Xbox 360)	Year of release	Genre of the game (eg: sports)	Publisher of the game	# of sales in North America	# of sales in Europe	# of sales in Japan	# of sales everywhere else
2	Wii Sports	Wii	2006	Sports	Nintendo	41.49	29.02	3.77	8.46

All sales are measured in millions of copies sold.

Link(s) to dataset(s) used:
https://www.kaggle.com/datasets/gregorut/videogamesales

4. Site Map
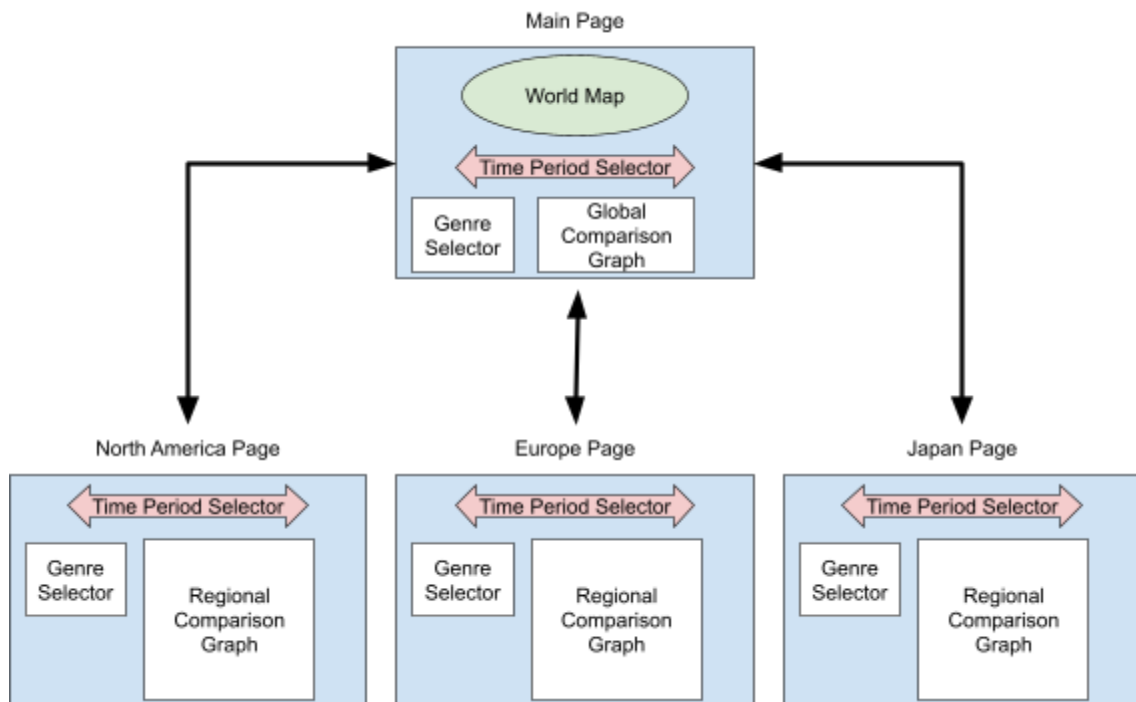
Slider for bar graph to adjust width (time interval of 1-5 years)

index.html:
- Landing page where the user will be able to interact with a map and click on the different regions to go to those pages
- There will also be graphs that relate to all 3 regions on this page
- Adjustable scatterplot to gauge correlations / trends between sales in different regions (e.g. if a game sells 4 million copies in North America, how many sales is it expected to make in Europe / Japan / rest of the world and how likely)
  - User can choose the axes to compare against

northAmerica.html
- Will contain graphs that relate to the region of North America specifically
- Bar graphs to show game sales for a specific genre in the Americas

europe.html
- Same as northAmerica.html but for Europe

japan.html
- Same as northAmerica.html but for Japan

style.css
- Will contain all of the styling for our landing page

northAmerica.css
- Will contain all of the styling for our North America page

europe.css
- Will contain all of the styling for our Europe page

japan.css
- Will contain all of the styling for our Japan page

script.js
- Interactive map and graphs will be coded here

northAmerica.js
- Graphs and sliders will be coded here

europe.js
- Graphs and sliders will be coded here

japan.js
- Graphs and sliders will be coded here

5. **Front-End Framework**

We will use Bootstrap because our group has more experience with it, we think it looks prettier than Foundation, and the documentation is clear.

6. **Task Breakdown**

   Matthew Yee - Interactive Map, Global Graphs
   Vivian Graeber - Flask, Serving droplet
   Samantha Hua - SQL, html, css
   Vansh Saboo - Graph design, data formatting

   - ☐ Determine the graphs that we want to make (All)
     - ☐ Bar graphs
     - ☐ Scatterplots
     - ☐ [Parallel Set](#)
     - ☐ More?
   - ☐ Format the data so that it will graph nicely (Samantha)
     - ☐ CSV files to sqlite files
   - ☐ Basic html to get the project rolling (Samantha)
   - ☐ Create SQL queries that the graphs need (Samantha)
   - ☐ Make the graphs one by one (Matthew and Vansh)
     - ☐ Interactive map
     - ☐ Will update doc here later with specific graphs
   - ☐ Touch up HTML if needed (Samantha)
   - ☐ Type up the CSS using Bootstrap (Samantha)
   - ☐ Figure out how to host website (Vivian)
     - ☐ Create droplet
     - ☐ Get new domain from Willy V
     - ☐ Serve droplet