Matthew Yee, Vivian Graeber, Samantha Hua, Vansh Saboo (Team Gamin Goombas)
SoftDev
2023-05-01
Target Ship Date: 2023-05-22
Final Delivery Date: 2023-05-24

1. **Program Components**
   i) Main Page
   - Will contain icons of the each of the three regions in which the data is available, (North America, Europe, Japan) which serve as links to a pages dedicated to those regions
   - Users can select multiple genres (ie: sports), or a platform (ie: Xbox 360), 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
   - Also contains a line graph that shows the performance of all genres of games from 1980-2015 in a single graph
   iii) Europe Page
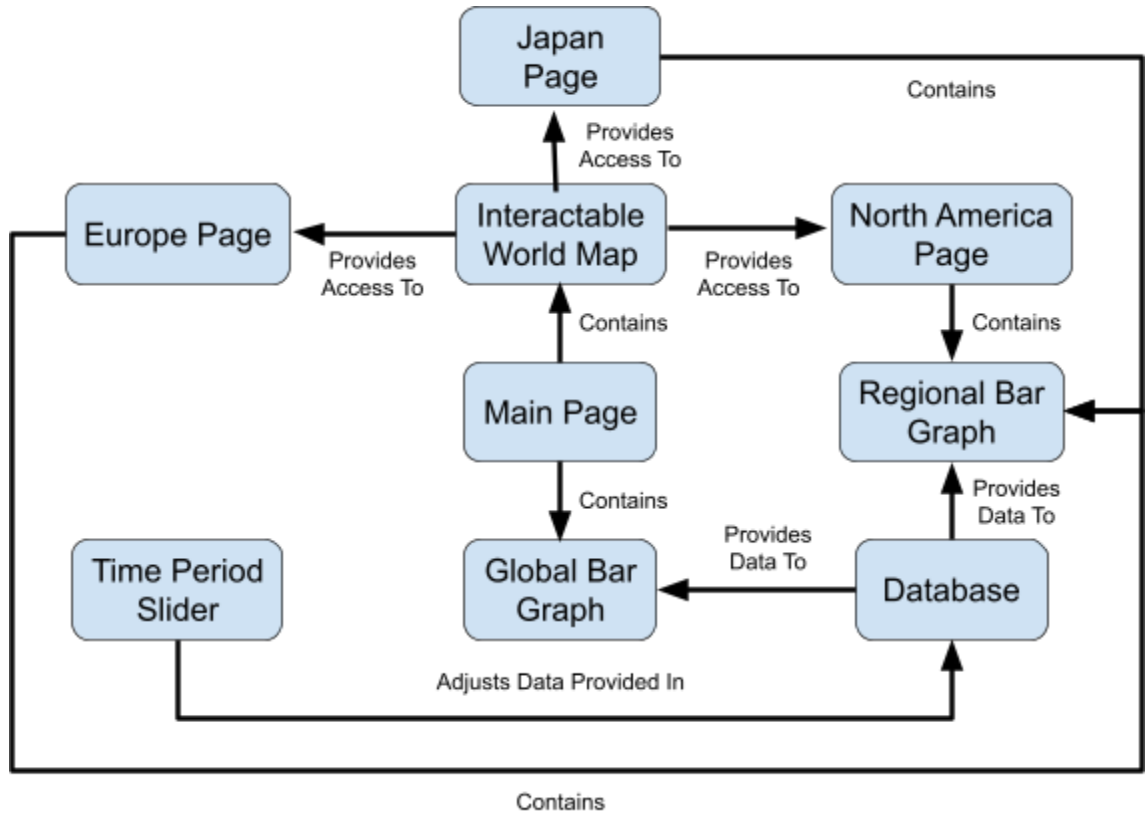   - Same as North America Page w/ Europe data
   iv) Japan Page
   - Same as North America Page w/ Japan data
   v) Flask API
   - We will make Python functions to return the data from the db housed in SQLite3
   - It will convert the query results to python dictionaries, which are then sent to the frontend via render_template
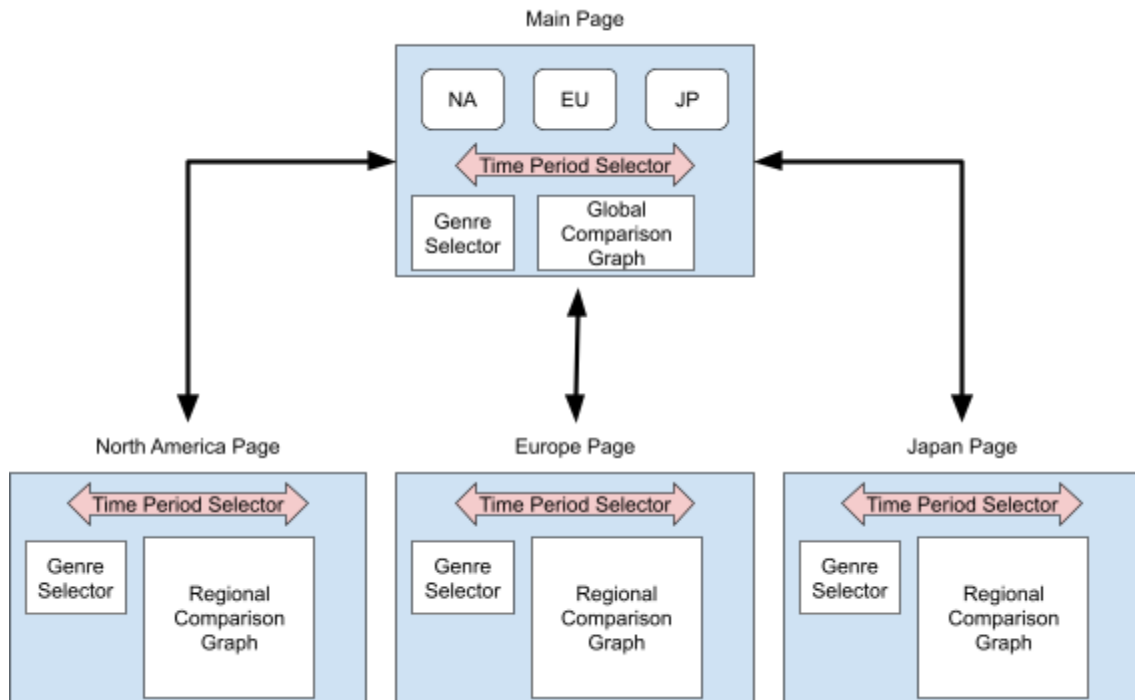
2. **Component Map**

3. Database Organization

ID	Name	Platform	Year	Genre	Publisher	NA_Sales	EU_Sales	JP_Sales	Other_Sales	Global_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	# of sales globally
2	Wii Sports	Wii	2006	Sports	Nintendo	41.49	29.02	3.77	8.46	82.74

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 regional icons 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

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
- Line graphs show game sales for all genres throughout time 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

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~~
  - ☑ ~~Bar graphs~~
  - ☐ Scatterplots (scrapped)
  - ☑ ~~Line graphs~~
- ☑ ~~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 (scrapped)
  - ☑ ~~Line graphs~~
  - ☑ ~~Bar 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~~