

Final Project

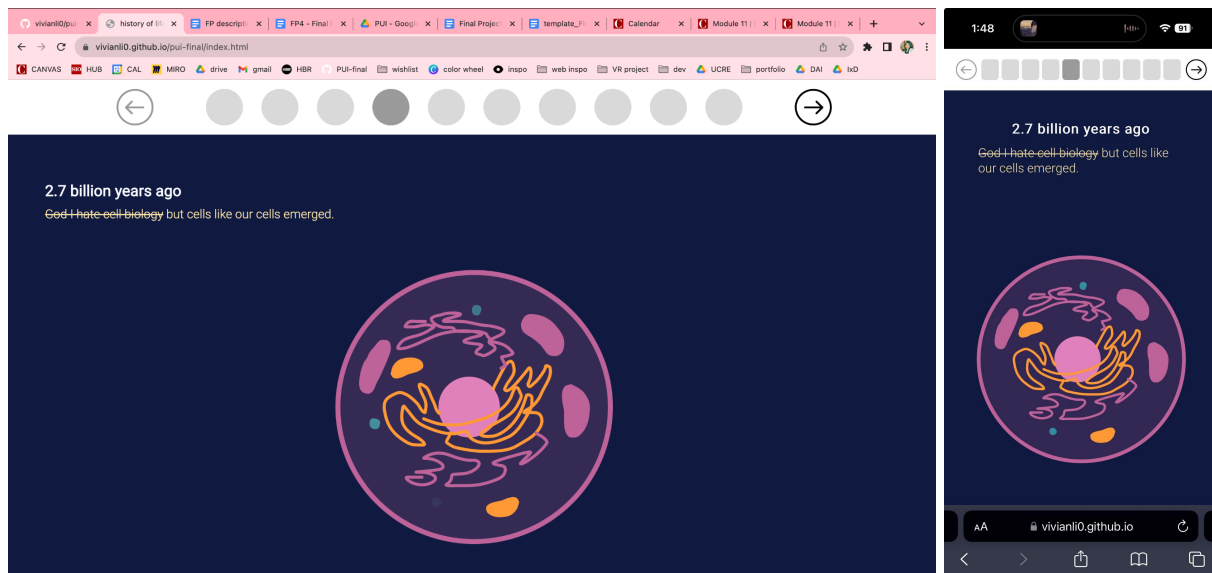
Informational Tool: An Interactive, Animated Timeline

Part 1

Website Description

My website is an interactive, animated timeline about the history of life on Earth. Due to the large quantity of content covered, my FP is the first installment of this timeline and covers ten distinct periods, from the birth of Earth as a planet to the first mass extinction around 440 million years ago. The purpose of this website is to educate the user with very few words, fun graphics, and interactions. I purposefully employ infinite scrolling to signify the passing of time, and the user can interact with the information by clicking on the next slide or flip cards to check the answer to a question. The illustrations are SVG files I created on Figma to ensure minimal loading time and seamless animation. My ideal audience would be young adults and adults.

Responsive screen sizes: 1440px (laptop), 390px (mobile)



Part 2

List of Interactions

1. Scroll down to see the nav indicator (grey circle) light up
2. Click on the nav indicator to jump to specific sections

3. In sections that have a box with image and text, click on left or right arrows to change content like a slideshow
4. In the section with three cards, click on them to reveal the answer

Part 3

External Tools

Libraries: **Anime.js**, ScrollReveal.js, SweetAlert2

I chose Anime.js to implement SVG animation, ScrollReveal.js to enhance the overall experience of scrolling down the page, and SweetAlert2 to enhance the look of the pop-up alert, which is for the three cards that the user can interact with.

I used Anime.js to animate individual components of a composite SVG file so that some shapes move while others do not.

Dynamic animation enhances my website experience by adding visual interest and attracting more attention to my illustrations.

Part 4

While the overall layout for my website did not change, I iterated upon the design for each section and improved the illustrations over time. There wasn't much interactivity in my original design, only animation and scrolling, so I added the clickable components. I was a lot more ambitious with the amount of illustrations, which I also had to tone down and adjust my design accordingly. I also made minor adjustments based on what I could implement in the code.

Part 5

One of the challenges I encountered was the sizing for mobile, and I wanted to do mobile because it would be the most different. Originally, I exported my SVGs without grouping individual components together, and I had to re-align them one by one, which obviously would be messed up on mobile, so I had to redo the whole thing to make sure each SVG is under one `<svg>` tag, then contained in a `<div>` for best organization. At this point, I also had to mock up a mobile design in Figma and re-wrote all the CSS to minimize redundancy.

Appendix

The WAVE accessibility report shows no error.

The image displays three screenshots of the WAVE (Web Accessibility Evaluation Tool) interface, powered by WebAIM. All three screenshots show a successful accessibility report for the URL `https://viviani0.github.io/pui-final/#`.

Summary Screenshot (Left): The 'Summary' tab is active. It shows a clean report with the following counts:

- Errors: 0
- Contrast Errors: 0
- Alerts: 0
- Features: 36
- Structural Elements: 21
- ARIA: 12

A message at the bottom states: "Congratulations! No errors were detected! Manual testing is still necessary to ensure compliance and optimal accessibility." A 'View details' button is visible.

Details Screenshot (Middle): The 'Details' tab is active. It provides a breakdown of the findings:

- 36 Features:** Includes 35 X Alternative text and 1 X Language.
- 21 Structural Elements:** Includes 1 X Heading level 1, 8 X Heading level 2, and 10 X Heading level 3.

Details Screenshot (Right): The 'Details' tab is active, showing further breakdowns:

- 1 X Heading level 1**
- 8 X Heading level 2**
- 10 X Heading level 3**
- 1 X Header**
- 1 X Navigation**
- 12 ARIA:** Includes 12 X ARIA label.

A note at the bottom of the rightmost screenshot reads: "If an icon does not appear within the page, turn off Styles above to view it."