

# COVID, Code, and Competition!

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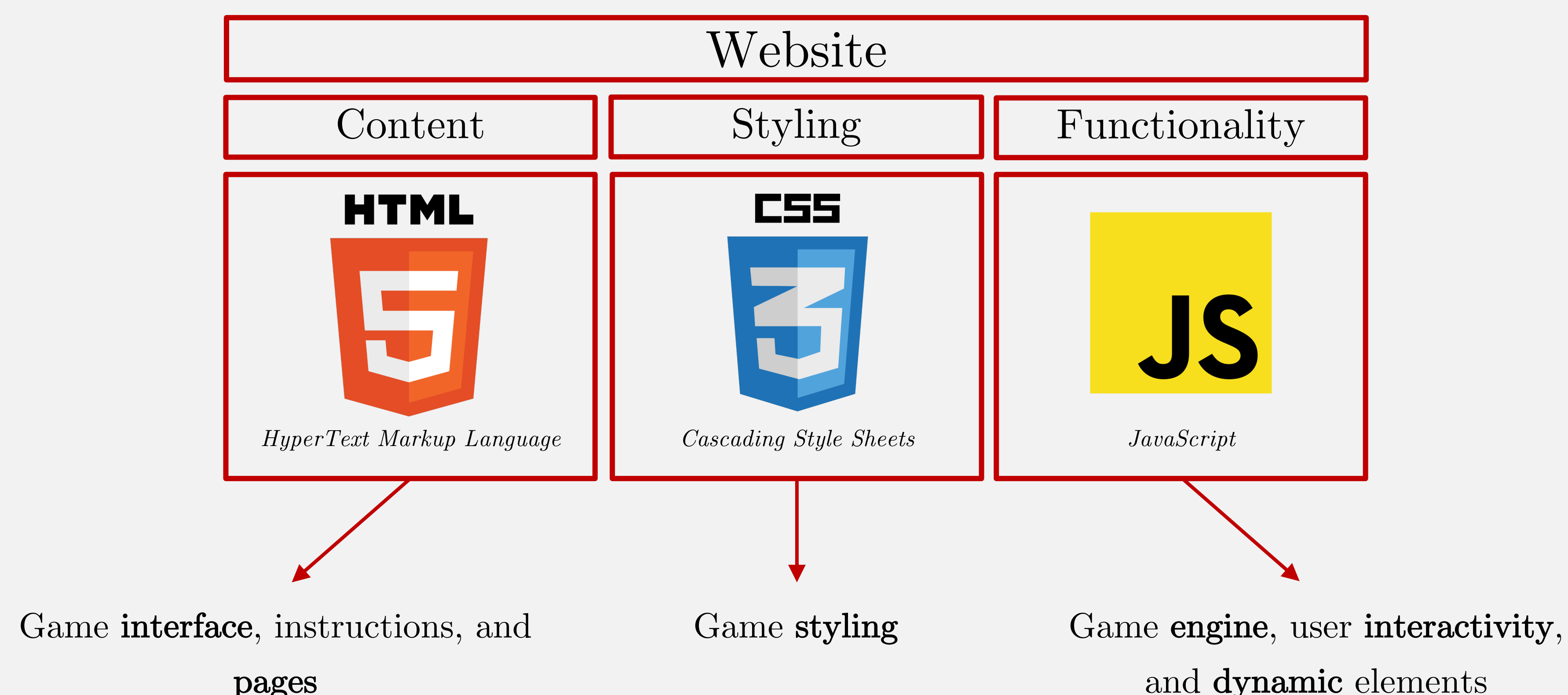
## Problem and Objectives

- During the creation of this project, the **COVID-19 pandemic** was (and still is) a deadly scourge.
- **Misinformation and lack of information** continue to contribute to the pandemic's tenacity. We sought to bring understanding to prevention policies such as masking, distancing, shutdowns, and vaccines.
- We wanted to create something that would be *accessible* (i.e., cross-platform) and with which people would *enjoy engaging*.
- We designed a **retro-aesthetic game** titled "Mask-It or Casket!" (See image below.)



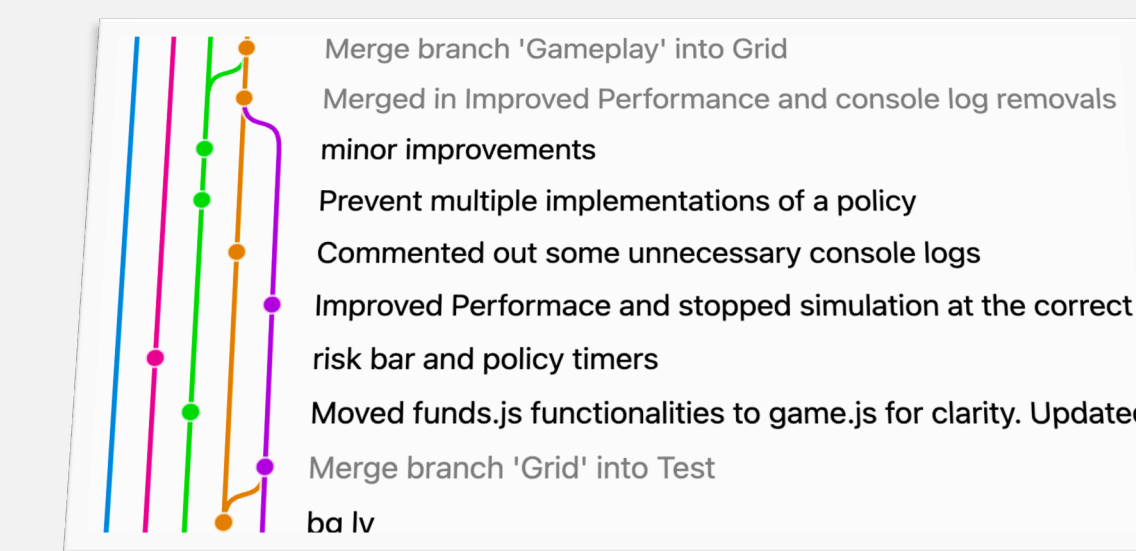
## Technology Background

- We decided to design a **web-based video game** so our creation would promote engagement on a variety of devices.
- We employed the following **standard languages** for different components of the website:

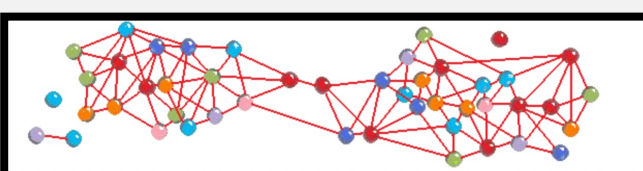



## Implementation

- The entire (front-end) of the web-game is hosted by **GitHub sites**.
- **Git** and **VScode** were crucial in coordinating contributions.



Screenshot of Git Graph display

- Mask-It or Casket can be separated into the following **major components**:
  - Instructions pages
  - Main game interface
  - Game engine (using graph data structures) 
  - Leaderboard (using SQL database on Swarthmore CS machine) 

## Gameplay

- Players have two minutes to keep disease spread and deaths as low as possible.
- Players are given money to implement various policies to achieve this goal



## Conclusions

- Although each of my group members and I had modest experience with web development, we found plentiful support online and through our instructor. Our backgrounds with data structures and algorithms also helped.
- Additionally, we found each web development language to be relatively modern, simple, and familiar in syntax, further contributing to our success in this project.



For more information, contact me at [bdrucke1@swarthmore.edu](mailto:bdrucke1@swarthmore.edu). You can also scan the QR code to download this poster, go to the Mask-It or Casket website, and see our source code.



This project was completed as part of CPSC 071, *Software Engineering*, during the Spring 2021 semester. Other students who worked on and contributed to this project include *Hyeyun Chae '21*, *Christian Galo '22*, and *Maria Quiroz '23*. This project was advised by Professor *Michael Wehar*.