RETRO REWIND

GAMING WEBSITE PROJECT

ABOUT THE WEBSITE

Retro rewind is an arcade inspired website where you can play retro style games straight from your browser. The website is neon themed to bring the arcade vibe straight to the screen. Six types webpages have been implemented: Home, Games Menu, Genre Page, Game page, Credits and an About page. Webpages always have a navigation bar for easy access and a logo for website branding. The website is also designed for simplicity, where every webpage can be redirected to within 2 clicks.

The site is fully responsive and designed for a smooth performance no matter what device you're on. Though some games are best experienced on a larger screen.

TARGET AUDIENCE

Retro rewind is designed for anyone who enjoys the charm of simple, retro styled games – whether you're an old school gamer or a casual gamer. Because the games are played directly from the site it's perfect for people looking for quick and easy gameplay. As well as retro gamers who appreciate pixel graphics and classic gameplay mechanics. With a wide selection of genres such as classic, action, adventure and strategy, there's something for everyone to enjoy.

CODE BREAKDOWN

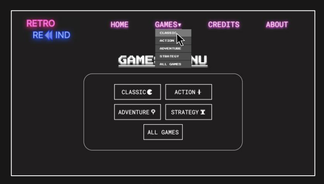
The website was built using HTML5 for structure, CSS for styling, JavaScript for functionality and GitHub Pages for hosting the games. All games are open sourced and credited in the credits section. They are a mix of JavaScript and Godot Engine games.

CSS was used for the following functionality:

- Navigation bar dropdown, animation and hover styling **(1)**
- Navigation bar hover underline **(2)**
- Button hover styling **(3)**
- Game photo hovering glow **(4)**

JavaScript was used for the following functionality:

- Loading the navigation bar onto every page
- Loading every game box on the genre page
- Hover effects to show info overlay on a game box **(4)**
- Button click navigation handling
- Loading the game into the game screen
- Loading credits



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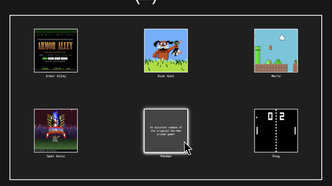

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PROCESS OF CREATING THE WEBSITE

Before the final version of the website was created, it went through several design stages. This included a low-fidelity prototype to plan basic structure and layout, followed by a high-fidelity prototype that incorporated visual styling and interactivity. Below, the progression from early drafting to the final website is shown. For the final website most changes were visual refinements. This included the game screen, credits page, buttons and logo border. The most significant change was reducing the number of planned genres from six to four. This allowed more focused and complete pages.

CHALLENGES

Many challenges were faced while creating the website, especially initially when I was still new to HTML, CSS and JavaScript.

Challenge 1: Being able to work effectively within time limit
As I wasn't familiar with the coding languages it made it difficult to determine how much time I would need to work on each task

Challenge 2: How to actually make games playable
Since playing games in your browser was the main concept, it was initially challenging to figure out how to implement this.

Challenge 3: The scarcity of open-sourced retro games
This was the main challenge. As the website focused on retro games while respecting copyright, this made the number of games available very limited and time consuming to find.

REFLECTION

The aim of this project was to create a visually appealing website without sacrificing the functionality. I believe my website accomplished this. Nearing the end of this course, I feel a lot more confident in my web development skill than when I started. Although this assessment was time consuming, it was rewarding as seeing your site come together was worth it. Having to personally build the website has developed my skills and I now feel confident in building basic websites. In addition to this I've also learnt valuable lessons such as:

- The importance of research and planning before implementation
- Understanding what code does rather than copy and pasting, so it's easier to apply and debug
- Asking for help instead of spending hours stuck on one issue
- Prioritising functionality over appearance
- Getting help online; I don't need to invent anything new

As mentioned above there definitely were challenges, but I worked through them. To address time pressure, I started design and implementation phases as early as I could. And for the second challenge, I adapted solutions from lectures/tutorials and decided to use an iframe. For the biggest challenge, I reduced the number of genres from six to four to ensure complete webpages.

FUTURE WORK

There is plenty of room for development. If I had more time, I would expand the site to add more features to enhance usability. For example, more games and genres can be added to appeal to a wider audience. And with this increase in games, a search bar feature can be added to quickly find games. Another feature I would implement is user profiles, allowing users to log in, save their progress or favourite games. Alongside this, a rating system could let users leave feedback and recommend games to others. Something I would change about the website is for it to cater more to mobile users, ensuring all games are playable for both mobile and desktop users. I would also focus on trying to make my code as clean and reusable as possible. But most importantly, if I had more time, I would do real world testing to gather feedback from actual user experience.

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