RetroArcade

Team 24 members:

[Faisal alassaf]   [Abdullah jan]   [Yazeed aldaraan]
[Mohammed alshehry]   [Naif abdulaziz]

SWE363 Intructor:

Dr. Omar Hammad

Description:

- Step back in time with our Classics, a nostalgic online arcade featuring timeless games like Wordle, Snake, Tic Tac Toe, Coin collector, Sudoku, and Tetris, all presented in a vintage gaming experience.

Overview:

- RetroArcade games is a homage to the golden era of gaming, combining the simplicity and charm of classic games with the convenience of an online platform. Our website invites users to relive the joy of playing iconic games from the past, fostering a sense of nostalgia and community. The user-friendly interface, retro graphics, and seamless gameplay make it a perfect destination for both seasoned gamers and those new to the world of classic arcade entertainment.

Target Audience:

- Gaming enthusiasts, nostalgia seekers, and anyone looking for a fun and accessible online gaming destination, teenagers and kids ranging from 4 and above.
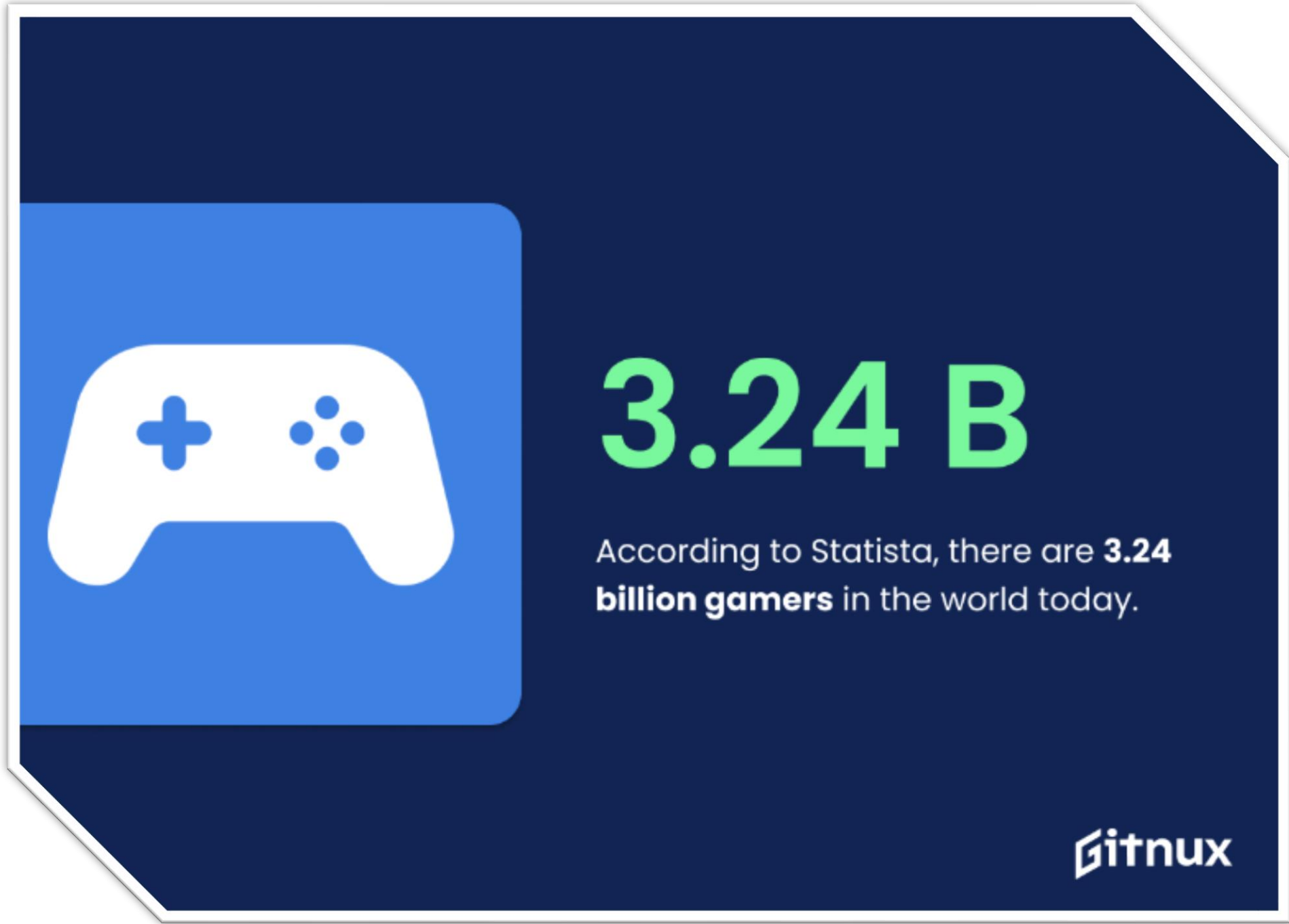
Problem:

- Traditional classic games are scattered across different platforms, making it challenging for users to access and enjoy them in one cohesive experience.

Solution:

- RetroArcade consolidates beloved classic games in a single platform, offering a unified and immersive retro arcade experience for users of all ages.

Main Features:

- Diverse Game Collection: Wordle, Snake, Ping Pong, Coin collector, Tetris, Pacman, and Sudoku.
- Retro Arcade Aesthetics: Vintage graphics and sound effects for an authentic experience.
- Multiplayer Online Chat: Connect and hangout with fellow players in real-time.
- Responsive Design: Enjoy the arcade on various devices seamlessly.

Clement, J. (2023, August 31). *Video gaming worldwide.* Statista. https://www.statista.com/topics/1680/gaming/#topicOverview

Opensource code and References:

- Conley, D. (2022, March 2). *Build a Multiplayer Game with JavaScript & Firebase* [Video]. YouTube. https://www.youtube.com/watch?v=xhURh2RDzzg
- Paiola, C. (2023). *Snake game.* codepen.io. https://codepen.io/CaioPaiola/pen/nojJmQ
- https://www.canva.com was used to design our logo.

Technology Stack:

- **Front-end**: HTML5, CSS3, JavaScript.
- **Back-end**: Firebase, node.js, JavaScript, xampp.
- **Database**: phpMyAdmin.
- **Real-time Communication**: Implemented in Coin collector using firebase
- **Hosting**: xampp through local host, firebase for Pizza Store game across all networks.

Conclusion:

- Our journey crafting the Retro Arcade website with HTML5, CSS, JavaScript, Node.js, Firebase, and XAMPP was an invaluable learning experience. We used our skills that we learned from our course such as frontend design, backend operations, and database management, though time constraints limited the depth of our implementation. Despite achieving a visually engaging platform, optimizing website / games functionality and performance remains a challenge. Given more time, we'd prioritize refining user experience, scalability (hosting our website), and backend security, envisioning a more expansive site with personalized user accounts, increased game variety, and enhanced community features. Our work showcases progress but underscores the continuous evolution and potential for further refinements in web development.