PROJECT TITLE: GHOST IN A MACHINE: A HALLOWEEN HANGMAN FOR DEVS

The development of the Halloween Hangman game was an engaging and informative experience for our team. We have encountered few challenges and discovered new and have learnt many valuable information during the course of the project.

CHALLENGES FACED:

a.) ***Game Mechanics***: Implementing the game's logic was a significant challenge. We needed to handle word selection, tracking correct and incorrect guesses, displaying the hangman figure for the incorrect guesses accumulated and determining game outcomes. This process required careful planning and rigorous testing to ensure that the game is operated as expected.

b.) ***Design and Styling***: Designing and styling was one of the challenges we faced while developing the game. Our team had to brainstorm ideas for design and style to match with the theme Halloween. We have experimented many styles and designs to check which suits the theme so that users can get an enjoyable gaming experience.

WHAT WORKED:

a.) ***Interactive Features***: The game's interactive handling made excellent use of JavaScript. It made it possible for us to incorporate fluid user interface elements, such showing the hangman figure in response to a string of false guesses and revealing the word's correct letters. This has given the game a crucial new component. Additionally, the game's outline has been supplied via the usage of HTML, which serves as its structural backbone.

Additionally, CSS adds a layer of aesthetic appeal to the website by incorporating eye-catching colors, backgrounds, and animations.

b.) ***Entertaining Gameplay***: The goal and regulations of the game made for a fun and captivating gameplay experience. The objective of the game, for the players, was to predict the word before making six incorrect guesses. The straightforward yet challenging concept provided motivation for the users to continue playing and improving their word guessing skills.

c.) ***Collaboration with GitHub***: Since we split up the work, GitHub has made it possible for us to work on several project components at the same time and quickly combine our contributions. Code review and integration have been made simpler by GitHub's branching and pull request features.

WHAT DIDN'T WORK:

a.) ***Lack of Analytics***: The game didn't include analytics or metrics to track user behaviour and game performance. These data-driven insights could have guided future improvements and user experience enhancements.

b.) ***Monetization Strategies***: Developing effective monetization strategies, such as in-app purchases or ads, while maintain a positive user experience is a challenge.

c.) ***AI for difficulty adjustment***: Incorporating AI for dynamic difficulty adjustment can be complex. The game would need to adapt to individual player skill levels, will make it challenging to develop an AI that provides a fair but challenging experience.

LESSONS LEARNED:

a.) ***Testing and Debugging are crucial***: In the project, we have learned the importance of testing and debugging. Even a small problem can affect the user experience. To create a clean and enjoyable game, we must thoroughly check and test all the functionalities and rectify them correctly.

b.) ***User Interface (UI) and User Experience (UX) Design***: We as a team have learnt a lot about the impact of UI and UX design on the player's experience. Clear instructions, attractive visual interface is very essential for player retention and satisfaction.

c.) ***Project Management and Agile Methodology***: As a team, we recognized how crucial it was to specify the goals, milestones, and scope of the project. Having a clear plan allowed us to stay on course and in line with our objectives for the project. We used an Agile methodology approach, which gave us the flexibility and responsiveness to adjust to evolving needs and player input. We were able to make constant improvements throughout the development cycle because of the incremental and iterative nature of agile.

d.) ***Problem-Solving Ability***: We honed this ability as difficulties emerged throughout the development process. We learned how to approach issues properly by determining the underlying cause of the problem and coming up with creative solutions, whether it was a coding bug, a design flaw, or a player experience issue.

e.) ***Collaboration tools enhance productivity***: Making use of collaboration tools like GitHub makes code management easier for teams and boosts output considerably. Smoother and more efficient collaboration results from effective version control and the capacity to work concurrently on various project aspects.

In summary, the design and development of the Halloween Hangman Game has provided us with a wealth of information, from technical part of the web development to design considerations and effective project management. These lessons will surely play a large part to our growth as developers and ability to create more engaging and accessible games in future.