CLOUDFLARE WORKERS FOR GAMING

Introduction:

Cloudflare Workers for gaming aims to maintain data security, system reliability and provide a streamlined interface for both players and developers. But in addition to the industry's steady and amazing development, it is important to notice the problems faced while designing and deploying these games into the market. Several companies face the market effect of high latency and downtime which results in an escalated loss of millions of dollars.

Thesis:

The video game industry in the past grew exponentially and was believed to reach over $300 billion in the next 5 years but got hit by the global pandemic of COVID 19. At this point, the issues of the gaming industry seemed trivial, relative to the millions who have been affected, and the possible threat to millions more globally. But this appears to be a perfect opportunity to launch a game in the market. Hence, to contribute to the industry in the period of quarantine, CloudFlare has decided to design a game that will focus on keeping the gamers at home. Apart from engaging the traditional players the project also aims to attract the non-gamers by introducing them to the new web contests that they could play while sitting at home. The game has a simple idea of engaging the users by giving them daily tasks. These tasks include all the daily chores one did before the quarantine. Completing each task upgrades the game level and gives quarantine currency to the players which they can use once they cross a certain level in the game. Integrating the concept of virtual reality, the players in these difficult times are provided a virtual experience of being outside their home. They can, therefore, meet their friends virtually, form teams as per their liking and complete the further levels.

Game working:

The game will be made available online, using the Argo Smart Routing to detect real-time congestion and route web traffic across the fastest and most reliable network paths. Hence, providing faster load time, increased reliability, it will block web traffic from bad sources, eventually providing the users enhanced gaming experience. The game would be heavily dependent on virtual reality, using content-rich technologies consisting of more comprehensive codes that would even utilize video and photos large in bandwidth. Hence, deploying the traffic using load balancers would deal with the latency and downtime for the product.

Improving the product quality:

Before the release of the game, the game needs to be tested for global load balancing, events such as traffic spikes, distributed denial of service attacks which could cause latency and unavailability, hampering the system. As the game will involve real-time tasks combined with heavy virtual reality technologies, having misconfigured servers can cause long application response delays and application outages. Moreover, the players must be constantly connected to the servers to map their progress, therefore, working of the cloud during the failover should be checked regularly to avoid the shift of traffic to unhealthy servers. In all, every parameter must be checked repeatedly to provide a smooth user experience.

Goals to measure the success:

The user experience will be dependent on the smooth functioning of the game. The user reviews for our game will be dependent on the parameters such as the gameplay and the story play. Hence, providing them access to the game with reduced latency would increase the positive review in the market. At the same time, If the players are motivated to stay at home for a longer duration, that would mark the actual success of the product, as they will enjoy the game and be safe at the same time.

Risks involved:

The video game development business has a reputation for being unpredictable, it involves disruptive ventures with little empirical research in such projects. Adopting a customer base focus to gain benefits from the current circumstances might not be as relevant in the future. Also, our game focuses on engaging the occasional and non-gamers, but if this chunk does not accept our product, we might suffer a major blow, as we will be investing out significant time and finance in evaluating the liking of such users. Moreover, there is always a risk of data security associated with these projects. As our game focuses on engaging players in quarantine, it gives daily tasks to the users. We will gain access to the players' surroundings, accessing private images, videos of the house and other confidential data of the player. If the game is prone to any of these risks and the user data gets mishandled, it could hamper the company's reputation and act as a major setback for the future ventures.