

Abstract:

Airport COO Game (ACG) is an immersive and interactive educational tool designed to replicate the complexities of airport operations, with a particular emphasis on studying the queuing and processes of each node within the system. Developed for industry designers, this game provides a realistic environment where players can explore and understand the intricacies of airport systems architecture. By simulating various scenarios and challenges, ACG offers valuable insights into optimizing airport flow and improving overall system efficiency. With its intuitive interface and comprehensive simulation capabilities, ACG serves as a practical training platform for professionals seeking to design and implement effective airport infrastructures.

Motivation:

Think about the last time you travelled by air. Remember the long queues at the check-in counters, the security checkpoints, and the boarding gates? These experiences, while common, are the result of intricate systems working together. Every delay, bottleneck, or inefficiency impacts not just individual travelers but the entire airport's operations.

Inspired by games like "Airport CEO," which brought attention to the complexities of airport management, the Airport COO Game (ACG) takes the concept further by focusing on the nuanced aspects of queuing and security checkpoints. While "Airport CEO" provided a comprehensive overview of airport operations, ACG distinguishes itself by homing in on the specific challenges of queue structure and real-world simulations, such as system breakdowns.

ACG offers a unique opportunity for industry designers to step into the shoes of airport planners and managers. By engaging in hands-on simulations, designers can experience firsthand the challenges faced in managing airport queues and security checks.

But why a game? Because learning through experience is often the most effective way to grasp complex concepts. ACG provides a safe, virtual environment where designers can experiment with different strategies, identify potential issues, and find innovative solutions. It's not just about optimizing systems; it's about enhancing the overall passenger experience.

Moreover, as the world of aviation continues to grow and evolve, there's a pressing need for talented individuals who can design smarter, more efficient airport infrastructures. ACG aims to nurture these skills by offering a blend of education and entertainment, turning learning into a rewarding and engaging experience. So, whether you're a seasoned airport professional or a curious enthusiast, ACG invites you to embark on a journey to reimagine and reshape the future of airport systems architecture.