Game Day Experience

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Project Description:
Experiencing the thrill of a last second victory or the sting of defeat is a part of the game day experience for college football. All the elements of a stadium and the crowd combine to create a one-of-a-kind atmosphere. While the game day experience is great, for sports like football it only happens a handful of times a year. This creates a challenge for colleges who want to show a recruit, donor, or fan how it feels to "be there." Virtual reality (VR) tools like the Oculus Rift and the C6 at Iowa State can create highly realistic virtual environments. These tools have the potential to provide the game day experience year round. But what features of the simulation are critical for making it feel real? Features may range from technological (game engine visuals, physics) to behavioral (interaction design) to psychological (storytelling, personalization). Building a game day experience and investigating which components influence user immersion will provide valuable information on what elements aid in creating realistic environments. Interns will research the necessary components to creating this game day experience. Specific elements will be implemented in Unity 3D and then run on multiple computing platforms including the C6, the world's highest resolution immersive VR system. Interns will also perform a formal user study to gauge the developed simulation's realism and level of user engagement.