

Virtual Reality: Creating a New Game Inspired by Successful Previous Games

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Introduction

Virtual Reality (VR) is a relatively new technology but it has quickly gained popularity and is inherently prone to innovation by its newness, particularly in the realm of video games. This project focuses on a number of games that have been commercially successful in order to determine and understand what factors helped create that success. These factors are then applied to the creation of an entirely new VR game, taking into account influences in game mechanics and visual elements, such as a game's art style, and general genre of gameplay.

Influence of Existing Games

Throughout this project, there were over a dozen games that were analyzed to determine successful aspects of different VR games. These aspects fall mainly into two categories: game mechanics and visual elements.

Within game mechanics, there is both style of play and teleportation, which every VR game has to deal with in some way, even if it means not using it entirely. Largely influential in game mechanics was the very popular game *Beat Saber*, a rhythm game that, at its core, challenges players to hit blocks to the beat of a song. Utilizing no real button pressing during gameplay and relying solely on the movement of the controllers was deemed to be helpful to an immersive experience. This style of play was decided early on.

The visual influence of games like *Job Simulator* led to the deliberately stylized look of the end result game, including elements that often used a low polygon art style.

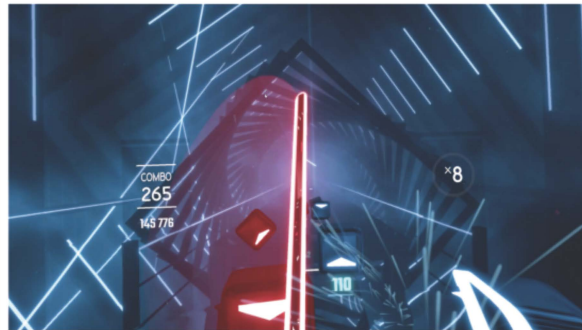
An influence on game genre also came from *The Unspoken*, a game about learning magic and fighting off evil with it in the game's campaign.

References

Beat Saber. HTC Vive version, Beat Games, 2018.

Job Simulator. HTC Vive version, Owlchemy Labs, 2016.

The Unspoken. Oculus Rift version, Insomniac Games, 2016.



An in-game screenshot from *Beat Saber*



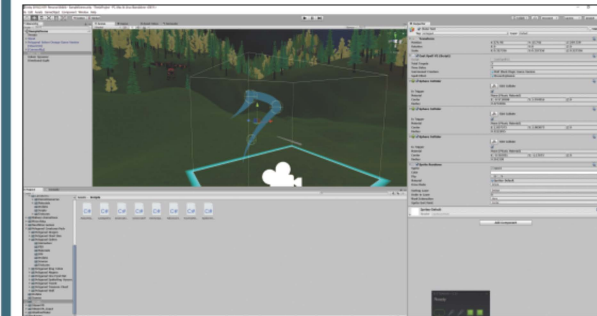
An in-game screenshot from *Job Simulator*



An in-game screenshot from *The Unspoken*

Game Development

The final game was developed using the free Unity game development engine. The initial influence of the reviewed games was significant, as was exploring available assets for purchase through the Unity Asset Store. A number of the game's assets came from that asset store, as well as some original creations. A substantial amount of the game's development naturally came from programming in order to create the desired effect. In this case, that meant following a rune's path with a controller would cast a spell, summoning a magical animal to defeat the evil creatures advancing on the player, surviving as long as possible.



A screenshot of the Unity workspace midway through the game's development



An early in-game screenshot from the final game

Acknowledgements

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Scan QR code to the right to access a website with information about the end result game, including footage captured in-game.

