組別 Team ID: 202425

專題屬性 Catlegory:多媒體應用 (Multimedia Applications)

專題名稱 Project: 瓦萊斯 (WARACE)

一、指導老師 Advistor: 吳信成老師 (Prof. Hsin-Cheng, Wu)

二、組員 Team members: 周子皓 (11014143)、劉俊彬 (11014014)、董柏均 (11014085)、徐彬詠 (11014082)、黄沐卿(11014097)

三、系統環境 System environment:

(一) 軟體 Software:

作業系統 Operating System:Windows 語言 Programing language:C++ 開發工具 Toolkits:Unreal Engine 5

(二) 硬體 Hardware:

處理器:Intel(R) Core(TM)i5-12400F CPU @ 1.6GHz 或更高規格;硬碟:512G;顯示卡:RTX3050以上;頭盔設備:Oculus Quest 2;記憶體:16G RAM;顯示器:15以上。

四、 簡介:

(一) 系統簡述(系統的主要功能)

玩家可透過 VR 設備進入遊戲世界,體驗多人卡牌對戰遊戲的樂趣。系統支持玩家在虛擬環境中與其他玩家進行即時對戰,並根據遊戲策略和對手的出牌做出即時反應。遊戲結果會在虛擬空間中呈現,讓玩家享受沉浸式的遊戲體驗。

(二) 特色 (系統的亮點)

- 直觀的操作介面:系統設計以玩家的角度為出發點,提供直觀的卡牌選擇和出 牌動作,並搭配搖桿的操作,讓玩家輕鬆遊玩遊戲。
- 沉浸式對戰:結合虛擬實境技術,讓玩家身臨其境地進行卡牌對戰,體驗身邊的場景變化、特效展示以及聲音環繞的環境,增強對戰的真實感。
- 多人互動性:支持即時匹配對戰模式或 IP 連線,讓玩家能與其他玩家互動,增 強遊戲的社交功能。
- 可擴充性:系統支援後續擴充新的角色和新的效果卡,未能可加入更多種族和 玩法,保持遊戲的新鮮感。
- 視覺特效與音效:每次使用卡牌都伴隨不同的視覺特效與音效,增強遊戲的娛樂性。

五、Introduction:

Introduction

Players can enter the game world through VR equipment to experience the excitement of multiplayer card battles. The system supports real-time matches with

other players in a virtual environment, where players can respond instantly based on game strategies and the opponent's moves. Game results are displayed in the virtual space, providing an immersive gaming experience.

Features

- Intuitive Interface: Designed from the player's perspective, the system provides intuitive card selection and play actions, complemented by joystick controls, making the game easy to play.
- Immersive Battles: Utilizing virtual reality technology, players can engage in card battles as if they were physically present, experiencing changes in the surrounding scene, special effects, and an immersive sound environment that enhances the realism of the battles.
- Multiplayer Interaction: Supports real-time matchmaking and IP-based connections, enabling interaction with other players and enhancing the social aspect of the game.
- Expandability: The system supports future expansions with new characters and effect cards, allowing for the addition of more races and gameplay options to keep the game fresh.
- Visual and Audio Effects: Every card play is accompanied by unique visual and audio effects, enhancing the entertainment value of the game.