

## **Project Charter - Group 8**

### **VirtuCards**

#### **Team Members:**

June Seo, Ryan Hawks, Aryan Wadhvani, Kade Boltjes, Shayne Marques, Umang Sharma

#### **Project Title:** VirtuCards

#### **Problem Statement:**

In response to the COVID-19 pandemic, social distancing policies were implemented in public areas, which limited physical interaction and some social activities. One of these activities is playing card games with friends. In real-world situations, the card deck and other surfaces become points of contact between players. While there exists competition to our product such as [playingcards.io](https://playingcards.io) and [UNO! for Mobile](https://www.unity.com/games/uno-for-mobile), VirtuCards is the only mobile game with a common external screen that allows for in-person contactless play with a similar experience as before the pandemic.

#### **Project Objectives:**

- Create a server that acts as a card table where others can join using their mobile devices.
- Build a system that enables players to see and interact with their hand of cards, on mobile devices.
- Connect the clients on the mobile app to the game host with a join code, allowing the player to draw cards from the shared table, as well as play cards to the shared table.
- Implement a 52 card deck mode and various other card games in the system.

#### **Stakeholders:**

- **Users:** People who want to play card games with relatives, friends, coworkers, etc.
- **Developers:** June Seo, Ryan Hawks, Aryan Wadhvani, Kade Boltjes, Shayne Marques, Umang Sharma
- **Project Coordinator:** Yu Shi
- **Project Owners:** June Seo, Ryan Hawks, Aryan Wadhvani, Kade Boltjes, Shayne Marques, Umang Sharma

#### **Project Deliverables:**

- A C# desktop game built with Unity acting as the server for players to join, as well as displaying the “table” for the game along with current scores.
- A mobile game also built with Unity on the client-side to allow interaction with the server-side Unity game, such as by playing cards from the user’s hand and drawing from the deck.
- Ability to create and maintain user accounts to track statistics like win rate in a SQL database.

- Leaderboard functionality present inside the Unity game comparing wins and losses against other players.
- Messaging system that allows client-side users to send messages to the participants in the lobby.