# Game Design Document for *Cardgame*

## Overview

*Cardgame* is a 1 on 1 card game set during a war between neighbouring kingdoms. There is an emphasis on the financial management aspect of war. Players take decks of their own making head-to-head against each other, made up of 3 types of card: Units, Utilities and a single General per deck. Units are creatures that stay on the battlefield and can enter combat with the opponent’s units, or raid the opponent’s gold supply should their battlefield be empty. Utilities are one time abilities with powerful effects, ranging from drawing extra cards, to gaining gold, to killing an opponent's unit. Each player also plays as a General, which is a powerful card with a unique ability that supports different strategies, however the General cannot attack units. The Generals’ abilities will help you win the game through amassing gold, maintaining/gaining card advantage, etc. Building your deck to synergize with your General's ability is a key aspect to winning the game.

The card game is a fast paced one, closer to *Yu-Gi-Oh!* than *Hearthstone* or *Magic: The Gathering*, to reflect the hectic nature of war. Players use Gold to do everything, including hiring units, using utilities, using unit abilities, and paying their unit’s wages. If a player runs out of gold they go bankrupt. They are unable to pay their units wages and as a result they begin to revolt and that player will lose the war should they not recover. As a result, gold management is a key feature of the game.

## Players

*Cardgame* is a game for two players who go head-to-head with decks that they’ve created. Each card in the deck represents either a unit in their army (for example, a plague doctor) or a utility that they can use to get ahead (for example, a bank withdrawal). The exception to this is the General.

Each player can select one of a number of General’s, which acts as not only their character with a unique ability, but also as their avatar. This would be similar to the class a player selects in *Hearthstone*, or their Commander in the Commander format of *Magic: The Gathering* (however without the limitation to deck-building present in both of these cases).

Players play together over a network on two separate machines, however the game is designed in such a way that it would be easily replicable in real life with physical cards. To specify, in-game the player can only do with the cards what they are able to do with a card in real life, for example, change its orientation, flip it over, or put counters on it.

Players also control Units. A unit that is hired by the player can be ordered to attack other units, the opponent’s general, and also use its own ability (should it have one). Within the context of the game this is the player (The General) giving orders, as opposed to playing as the Unit itself.

## Story

*Cardgame* does not have an in-depth story – the primary focus is on gameplay and having a too in-depth lore can, in my opinion, limit card design. However, as a general story, the Players play as Generals, who are the leaders of various neighbouring kingdoms and clans fighting over a barren land they all wish to claim to expand their own territory. Each general commands an army consisting of hired units, and making use of hired services known as utilities. The victor of a match would be the ruler who claims this barren land.

## Look & Feel

During battle, the player’s perspective in *Cardgame* is a fixed-perspective, top-down view of an initially empty battlefield, which is populated with cards as the game progresses. Cards and any counters the game needs are represented by 2D sprites. The player’s side of the field is on the bottom half of the field, while the opponent’s field is rotated onto the opposite side. Cards are always displayed upright for each player so they can read any cards in play. Cards in the opponent’s hand cannot be viewed. For more detail on the orientation of the playing field see the Interface section.

The feel is an extension goal – functionality is more important.

The feel is that of a brutal battlefield – cards are destroyed, burnt, etc. Combat is accompanied by the sounds of clashing swords, and dying units will roar in pain, all accompanied by the sound of war drums. Actions should feel impactful, and so will be accompanied with appropriate visual and sound effects. Card artwork should have a consistent medium, but the theme should differ depending on the kind of card it is. For example, some cards may depict creatures such as frogs, yet others may depict rotting zombies. The latter would be a darker themed card, however drawn in a similar style, as opposed to the former which may be a bit more colourful.

## Tokens

The following is a list of tokens in *Cardgame:*

* Cards (see *Cards.xlsx* or *Cards.csv* for specific details on each card) (in game and in deck-builder):
  + Units
  + Utilities
  + Generals
* Gold
* Card Cost
* Card Health
* Card Strength
* Poison Counters
* Decks (in-game and in deck-builder)
* Battlefields
* Hands
* Discard piles
* Players
* Dice
* Card backs (back side of card)
* Debt counters
* Multiplayer score (based on wins and losses)

## Rules

The following are a list of the rules that make up *Cardgame*:

**[R1]** Each player starts the game with 25 gold.

**[R2]** When a player starts their turn with 0 gold, they gain 15 gold and one debt counter.

**[R3]** If a player starts their turn with 0 gold and with a debt counter, they lose the game.

**[R4]** Each player’s deck must be exactly 25 cards, PLUS one General

**[R5]** Each player starts the game with their General outside of the deck, to the left of their hand/field.

**[R6]** Every card has a cost in gold to put it into play. Units also have health and strength.

**[R7]** When played, Units will stay on the field however Utilities will go to the Discard pile once their effect has been resolved.

**[R8]** Units are killed either when their health reaches 0 or when killed by card effect. Killed cards go to the Discard pile unless specified otherwise.

**[R9]** Card effects overrule game rules

**[R10]** The turn player can enter combat with each of their Units once per turn

**[R11]** When entering combat, the attacking player selects an opponent’s unit as a target. Both units then lose health equal to the other’s strength.

**[R12]** If the opponent has no units on the field the turn player can “raid” the opponent’s supplies instead. If they do, the opponent loses gold equal to half the strength of the attacking unit.

**[R13]** A unit with a poison counter loses 1 health at the end of each turn per counter.

**[R14]** Each player gains 5 gold at the beginning of their turn (after checking whether they need a debt counter).

**[R15]** Each player draws a card at the beginning of their turn.

**[R16]** The player who goes first cannot attack during their first turn.

**[R17]** Units can be “buried” through the effects of certain cards (including themselves!). Buried cards are be flipped face-down.

**[R18]** Buried cards cannot attack, be attacked or use their effects.

**[R19]** Cards cannot effect buried cards with their effects unless they specify that they effect a buried card(s).

**[R20]** Some cards can “bounce” themselves or other cards using effects. This means to return the card to its owner’s hand.

**[R21]** At the beginning of each player’s turn they must pay their unit’s wages (1 gold per unit).

**[R22]** Anything that occurs at the beginning of a player’s turn (checking for debt counters, effects, etc) happens *before* that player draws.

**[R23]** Any card effects that happen at the end of a player’s turn happens immediately before the start of the next player’s turn. This means the turn player cannot do anything (hire units, use utilities, etc) after these effects go off until the beginning of their turn.

**[R24]** Should multiple effects trigger simultaneously, the turn player gets priority on their effects. They may choose any ONE effect that has triggered, resolve it, then the opponent may choose any other ONE of their effects that has triggered and resolve it. This continues until there are no more effects to resolve.

**[R25]** Lord effects must always resolve immediately when triggered. This means they occur before the priority system detailed in **[R24]**.

**[R26]** The “Beginning” of the turn begins with checking for Debt Counters, THEN effects go off.

**[R27]** Some effects have “triggers”. For example, one card might have its effect trigger when a Unit (possibly itself) is killed.

## Features

**[F1]** Players must weigh the benefits of using all their cards quickly, as overextending and using all their resources may lead them particularly vulnerable, with an empty field, few cards in hand and low gold resources, should all their Unit’s be killed. **[R2], [R3], [R6] & [R12]**.

**[F2]** Players must use their Units efficiently to make sure they’re getting as much value out of them as possible. This means knowing when to use their abilities, what to use those abilities on, which of the opponent’s Units to attack with each Unit, etc. Essentially, getting the most out of their money. **[R1], [R2], [R6] & [R8]**

**[F3]** Some cards have effects that could lead into other effects, creating a combination of cards that would greatly benefit the player who used them (in either gold/card advantage or field presence). When deckbuilding players must try to play cards that could combo off together. **[R4]**

**[F4]** When deckbuilding, players must build their deck so that it has a consistent strategy/win condition that ideally complements their General’s ability. **[R4] & [R5]**

**[F5]** Players can tactically kill their own Unit’s to benefit from their own, or other cards effects **[R27]**

## Gameplay

## Interface

## Objectives