

High-Level Algorithm. Team 2 (Yasmeen, Yvette)

1. Initialization:

- Create decks of 25 cards for both players using a linked list.
- Each player has an initial HP (20).
- Both players draw a starting hand (1 card).

2. Gameplay Loop:

- Until a player's HP reaches 0, repeat the following for each turn:
 1. **Draw Phase:**
 - The current player draws one card from their deck.
 2. **Play Phase:**
 - The player can play a card from their hand (either a unit or spell card).
 - If a **unit card** is played, it is placed on the battlefield. Name of unit card, which is an attack card: *Savage Strike*
 - If a **spell card** is played:
 - **Damage:** Opponent loses 1 HP. Name of Damage card: *Viper's Bite*
 - **Heal:** Player gains 2 HP. Name of Heal card: *Divine Renewal*
 - **Defend:** Player loses 1 HP but can defend against attacks. Name of Defend card: *Ironclad Wall*.
 3. **Attack Phase:**
 - The player can attack with units on the battlefield.
 - The opponent can choose to defend with their own units (defending units cannot attack next turn).
 - Apply unit effects (player attacked loses 2 HP points when Savage Strike is used by their opponent).
 4. **End of Turn:**
 - Switch to the next player.

3. End Condition:

- The game ends when a player's HP reaches 0, and the opponent is declared the winner.

Note: the code will use the concepts of polymorphism and inheritance and will have a GUI interface that might look like: (the white box is where the log will be kept)



Card Game

Welcome to the Card Game!

Draw Card

Play Card

End Turn

Player 1 HP: 20 | Player 2 HP: 20

