# ML for
# Trading Card Games

# Background

- Magic is a card game where each card can change how the game plays out.

- Our Project will focus on the probability of drawing any card from a deck.
- Some Special Card Effects include:
    - "Search your deck (library)"
    - "Scry"
        - View Cards and put them on top/bottom of your deck
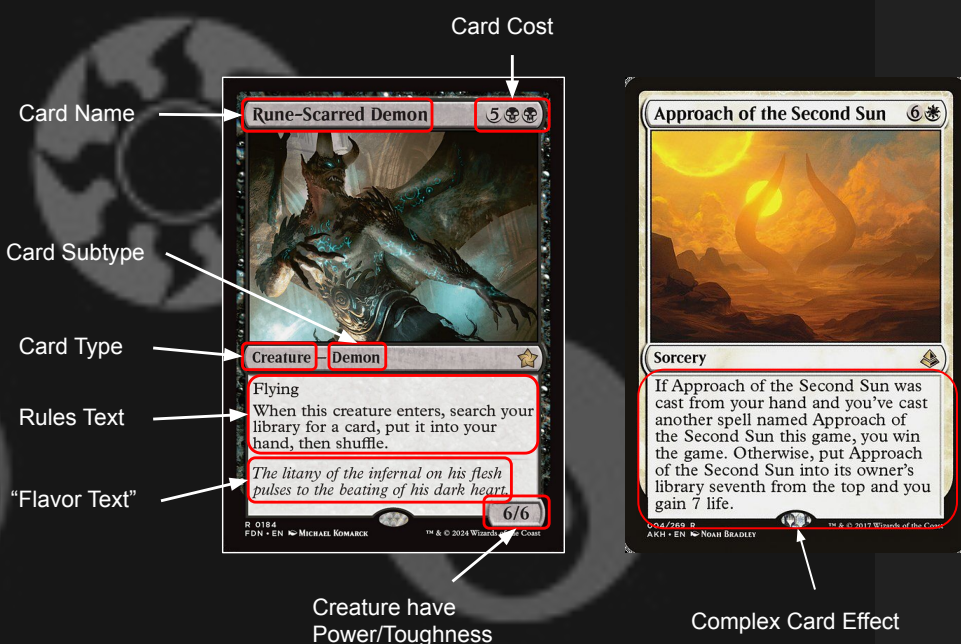    - "Draw a Card"

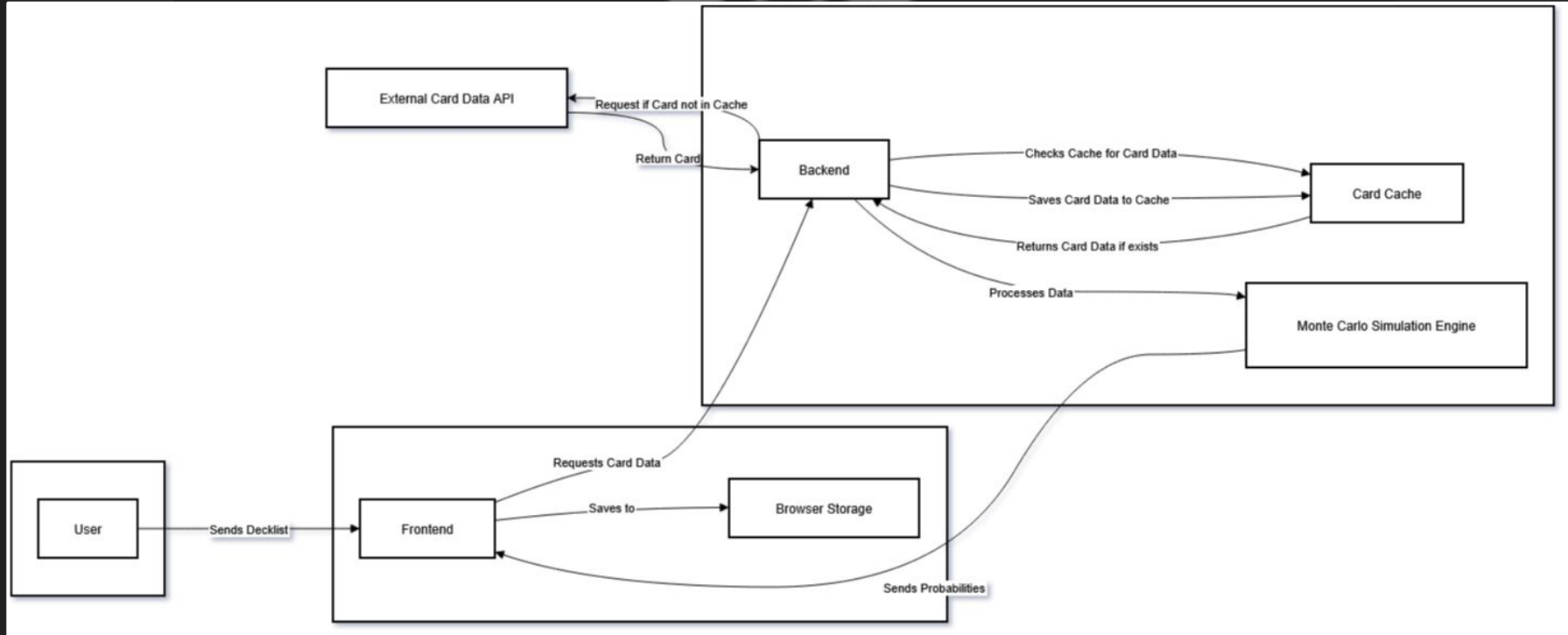This is a Land

This is not Land





Example of a Way to Win the Game

# Problem

- **Current Tools:**
  - Don't Take into account complex card effects.
  - Can only be used for specific online versions of the game.

- **Our Tool:**
  - Can be used regardless of format and how the user is playing.
  - Will take into account the complex actions of cards.

Card Cost

Card Name

Card Subtype

Card Type

Rules Text

"Flavor Text"

**Rune-Scarred Demon** 5 🔵🔵

Creature — Demon

Flying
When this creature enters, search your library for a card, put it into your hand, then shuffle.

*The litany of the infernal on his flesh pulses to the beating of his dark heart.*

6/6

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Creature have Power/Toughness

**Approach of the Second Sun** 6🔵

Sorcery

If Approach of the Second Sun was cast from your hand and you've cast another spell named Approach of the Second Sun this game, you win the game. Otherwise, put Approach of the Second Sun into its owner's library seventh from the top and you gain 7 life.

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Complex Card Effect

# Implementation / Pipeline

# Links/References

These Links can be helpful for either providing more information regarding the game or related works.

[Untapped.GG Companion](#)

[Scryfall Database](#)

[Introduction to Magic Slideshow](#) - Card Anatomy idea used.

[MTG Formats](#)

[Youtube: How to Magic the Gathering](#) - Presented by The Command Zone