**Campus Santa Fe**


**Construcción de software y toma de decisiones (Gpo 501)**


**Ejercicio de Modelación de Base de Datos Pokemon TCG**


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ENTITIES:

**Player**
Player ID (primary key)
First Name
Last Name
Email
Password
Score

**Deck**
Deck ID (primary key)
Deck Name
Number of Cards
Creation Date

**Card**
Card ID (primary key)
Card Name
Card Type (e.g., Pokémon, Energy, Trainer)
Rarity
Card Health
Card Attack

**Collection**
Collection ID (primary key)
Player ID (foreign key)
Card ID (foreign key)
Deck ID (foreign key)

**Game**
Game ID (primary key)
Player ID (foreign key)
Collection ID (foreign key)
Events
Results
Game Date

**Evolutions**
Evolution Card ID (primary key)
Card ID (foreign key)

**Abilities**
Abilities ID (primary key)

Card ID (foreign key)
Ability Description
Ability

RELATIONSHIPS:

Player is **One-to-Many** with Deck (OWNS)
**Constraints:** A player can own many decks, but each deck belongs to only one player.

Player is **One-to-One** with Collection (HAS)
Constraints: Each player has exactly one collection, and each collection belongs to one player.

Player is **One-to-Many** with Game (PARTICIPATES)
Constraints: A player can participate in many games, but each game has only one player.

Deck is **One-to-Many** with Card (CONTAINS)
Constraints: A deck can contain many cards, but each card is contained in one deck.

Card is **Many-to-Many** with Abilities (HAS)
Constraints: A card can have many abilities, and an ability can be associated with many cards.

Card is **One-to-Many** with Evolutions (HAS)
Constraints: A card can have many evolutions, but each evolution belongs to one card.


JUSTIFICATION:

These design decisions were made after careful analysis of the system requirements and the nature of the Pokémon TCG game, with the goal of creating a database model that is efficient, scalable and capable of supporting the functionality required for the game.