**Pokemon TCG Price Mapping Guide**

This guide explains how the flexible price mapping system works and how to extend it for new card variations.

**How It Works**

The system uses a hierarchical approach to determine the correct TCGPlayer price category based on card characteristics:

1. **Special Combinations** - Checked first (e.g., Shadowless + 1st Edition)
2. **Individual Characteristics** - Each characteristic maps to multiple price categories
3. **Set-Specific Rules** - Applied based on the card's set
4. **Exclusion Rules** - Remove inappropriate categories
5. **Default Fallback** - Standard categories as last resort

**Examples**

**Example 1: Regular Unlimited Cubone from Jungle**

* Characteristics: None
* Process:
  1. No special combinations
  2. No individual characteristics
  3. No set-specific rules for Jungle
  4. Exclusion rules remove 1st Edition categories
  5. Uses default categories: ['unlimited', 'unlimitedHolofoil', 'normal', ...]
* **Result**: Selects 'unlimited' price ($0.36)

**Example 2: 1st Edition Shadowless Charizard from Base Set**

* Characteristics: ['1st Edition', 'Shadowless']
* Process:
  1. Special combination found: 'shadowless+1st edition'
  2. Adds: ['shadowless1stEdition', 'shadowlessFirst', '1stEdition']
  3. Individual mappings add more 1st Edition and Shadowless categories
  4. No exclusions (has 1st Edition)
* **Result**: Selects 'shadowless1stEdition' price if available

**Example 3: Staff Stamped Promo Pikachu**

* Characteristics: ['Staff', 'Stamped', 'Promo']
* Process:
  1. Special combination 'staff+promo' adds: ['staffPromo', 'staff', 'promo']
  2. Individual mappings add stamped and promo categories
  3. No set-specific rules
  4. No exclusions (is a promo)
* **Result**: Selects 'staffPromo' or 'staff' price

**Example 4: Japanese Reverse Holo from Modern Set**

* Characteristics: ['Reverse Holo']
* Language: 'Japanese'
* Process:
  1. No special combinations
  2. 'Reverse Holo' adds: ['reverseHolofoil', 'holofoil', 'normal']
  3. Language adds: ['japanese', 'normal']
  4. Categories prioritized: Japanese categories first, then reverse holo
* **Result**: Selects 'japanese' price if available, otherwise 'reverseHolofoil'

**Adding New Mappings**

**1. Add a New Characteristic Mapping**

In price\_mappings.py, add to CHARACTERISTIC\_MAPPINGS:

python

'galaxy foil': ['galaxyFoil', 'holofoil', 'normal'],

'textured': ['textured', 'fullArt', 'holofoil'],

**2. Add a Special Combination**

For cards with multiple special characteristics:

python

COMBINATION\_RULES = {

*# ... existing rules ...*

'textured+full art': {

'categories': ['texturedFullArt', 'textured', 'fullArt'],

'requires': ['textured', 'full art']

},

}

**3. Add Set-Specific Rules**

For sets with special pricing structures:

python

SET\_SPECIFIC\_RULES = {

*# ... existing rules ...*

'crown zenith': {

'additional\_categories': ['crownZenith', 'galarian'],

'exclude\_categories': ['1stEdition'] *# Modern set, no 1st Edition*

},

}

**4. Add Exclusion Rules**

For new category types that should be excluded under certain conditions:

python

EXCLUSION\_RULES = {

*# ... existing rules ...*

'not\_textured': [

'textured', 'texturedFullArt', 'texturedRare'

],

}

**TCGPlayer Price Category Patterns**

Common TCGPlayer price category patterns:

* Base: normal, holofoil, nonHolo
* Edition: 1stEdition, unlimited, shadowless
* Combinations: 1stEditionHolofoil, unlimitedHolofoil
* Special: reverseHolofoil, promo, staff
* Language: japanese, german, french
* Modern: galaxyFoil, textured, goldRare

**Debugging**

The system logs the price selection process:

💳 Available price categories: ['1stEdition', 'unlimited']

🎯 Card characteristics: 1st Edition, Shadowless

🔍 Checking price categories in order: ['shadowless1stEdition', '1stEdition', ...]

💰 Using market price from '1stEdition': $45.00

**Best Practices**

1. **Order Matters**: List categories from most specific to least specific
2. **Always Include Fallbacks**: End with general categories like 'normal'
3. **Test Combinations**: Some characteristics conflict (e.g., Base Set 2 + 1st Edition)
4. **Use Actual TCGPlayer Categories**: Check TCGPlayer API responses for real category names
5. **Document Special Cases**: Add comments for unusual mappings

**Common Issues and Solutions**

**Issue: Wrong Edition Price**

* **Cause**: Card identified as regular but priced as 1st Edition
* **Solution**: Check unique\_characteristics detection in Ximilar

**Issue: Missing Price Category**

* **Cause**: TCGPlayer uses different category name than expected
* **Solution**: Log available categories and update mappings

**Issue: Language Variants**

* **Cause**: Non-English cards using English prices
* **Solution**: Ensure language is passed correctly from identification