# **@** Problem Solving: Complete Menu Categories

#### **Initial Problem**

The original implementation only displayed one menu category instead of all available categories from the API response.

## Original Code (Limited Display)

```
// X Only showed one category const itemCards = resInfo?.cards?.[4]?.groupedCard?.cardGroupMap?.REGULAR?.cards?.[2]?.card?.card?.itemCards || [];
```

#### Solution: Complete Menu Display

To resolve the issue of displaying all menu categories, we need to enhance the code to dynamically fetch and render all available categories from the API response. This involves:

#### 1. API Structure Analysis

```
const fetchMenu = async() => {
    const data = await fetch(RESTAURANT_MENU_API + resId);
    const json = await data.json();

    // Debug logging to understand API structure
    console.log("Full API Response:", json.data);
    console.log("Cards structure:", json.data?.cards?.[4]?.groupedCard?.cardGroupMap?.REGULAR?.cards);
    setResInfo(json.data);
};
```

#### 2. Enhanced Category Filtering

### 3. Dynamic Category Rendering

```
return (
   <div className="menu">
      < h1 > {name} < /h1 >
      <h2>{cuisines.join(", ")}</h2>
      <h3>{costForTwoMessage}</h3>
      {categories.length === 0 ? (
         <h2>No menu items available</h2>
          categories.map((category, index) => {
             const categoryTitle = category.card?.title || `Category ${index + 1}`;
             // Handle both regular and nested categories
             let items = [];
             if (category.card?.card?.itemCards) {
                 // Regular category with direct items
                 items = category.card.card.itemCards;
             } else if (category.card?.card?.categories) {
                // Nested category - flatten all subcategories
                 items = category.card.card.categories.reduce((acc, subCategory) => {
                   return acc.concat(subCategory.itemCards || []);
             return (
                 <div key={index} className="menu-category">
                    <h2>{categoryTitle} ({items.length} items)</h2>
                       \{items.map((item) => (
                           key={item.card.info.id}>
                              (item.card.info.defaultPrice / 100)}
                              {item.card.info.description && (
                                  {item.card.info.description}
                                  )}
                   ))}
        </div>
);
})
      ) }
   </div>
```