The **Market Value Research Tool for Secondhand Women's Fashion** User Guide

See the App: Link

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Outline

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How the Data is Collected and Loaded

This tool gathers active listing data from eBay's Browse API, specifically for women's fashion, accessories, and shoes.

The data includes only "Buy It Now" listings (no auctions) and reflects prices sellers are currently asking.

New data is refreshed daily, ensuring up-to-date insights into the reselling market. Listing data is pulled from eBay's API once a day and is stored locally for the developer.

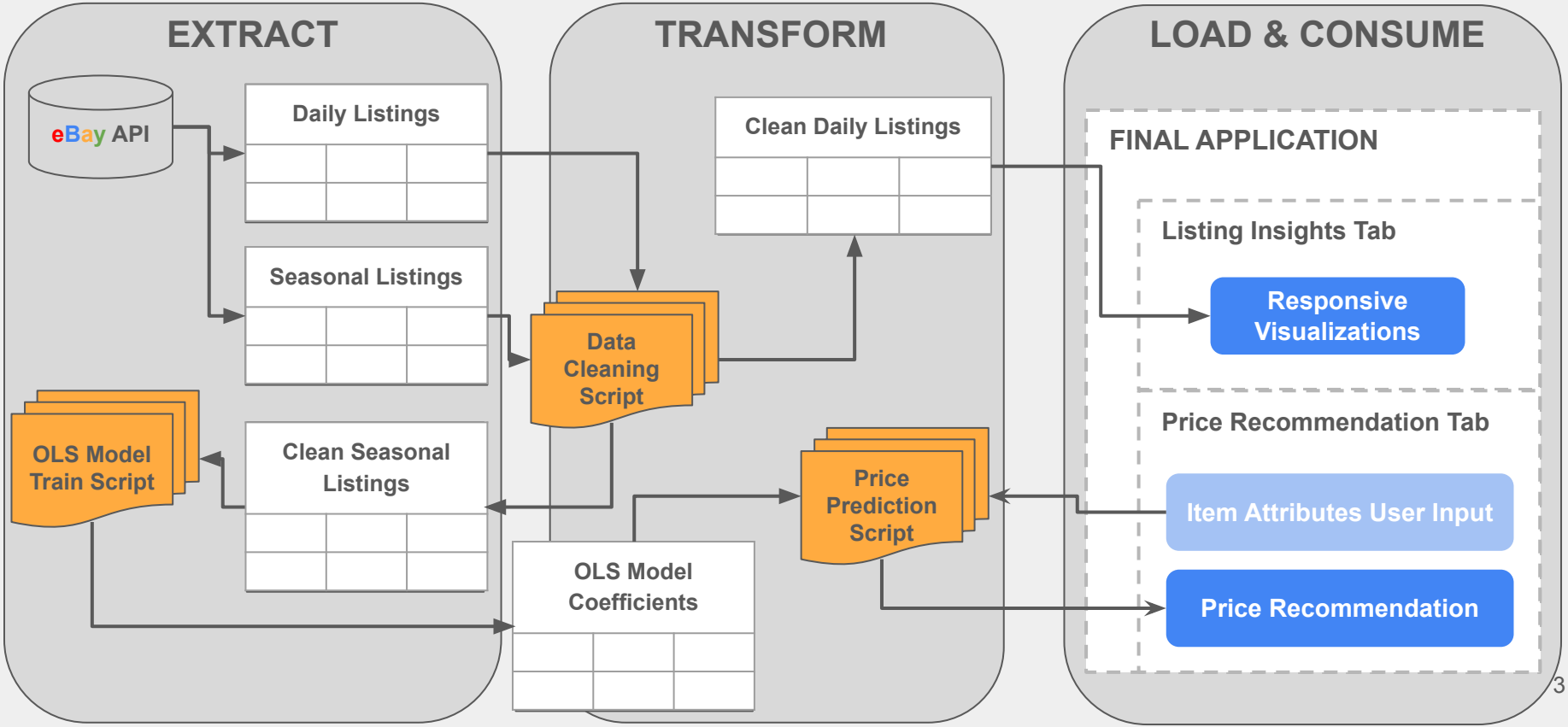
Price Recommendation Model Training:

- The price model is based on an Ordinary Least Squares (OLS) model of aggregate listing data.
- The OLS coefficients are updated on a seasonal basis and the last retrain period dates are displayed on the app.

Listing Insights Data:

- About 4,000+ of the latest listings of a set list of item categories are pulled daily. A back-end script combines and de-duplicates data from the current day and prior four data pulls for consumption in the app.
- Because some listings remain active across multiple days, the daily data pulls often capture duplicate listings from previous days. As a result, the five-day dataset contains fewer than 4,000 × 5 unique listings.

Application System Architecture



Price Recommendation: How much should I ask for my item?

The **Price Recommendation** tab helps resellers price an item competitively. To get a recommendation:

- Fill in the item's characteristics (e.g., brand, material, style, condition) via search or selection.
- Enter your seller statistics (like feedback percentage and score). If you are not a seller on eBay, leave the default values as is.
- The underlying recommendation model will consider the default value that is pre-filled in the model.
- The default values represent the reference levels for each predictor in the Ordinary Least Squares (OLS) model.
- Click "Recommend a Price."

The tool will return: A recommended listing price based on current market trends.

- A 95% confidence interval for expected listing prices. This interval is based on coefficients and standard errors from a pre-trained OLS model.
- Tips on adjusting your pricing based on whether you want to prioritize higher revenue or a faster sale will also appear.
- Click “Clear Prediction” to start over, or select other attributes and click “Recommend a Price” to receive a new prediction.

Listing Insights: What is the reselling market like right now?

The Listing Insights tab provides interactive, up-to-date visualizations of the current reseller landscape. You can:

- Filter listings by category, brand, material, condition, and more.
- View the price distribution across listings (with adjustable price range).
- Explore top-selling brands and listing counts by category using dynamic treemaps and bar charts.
- See basic statistics like the mean, median, and range of listing prices.
- These insights help you understand pricing patterns, popular brands, and trends across the secondhand fashion market.

You have 8 filters on the sidebar that control everything above:

- Item Type
- Style Pattern
- Garment Care
- Brand
- Material
- Size
- Size Type
- Condition

They apply across all four visualizations at the same time, making this a cohesive, interactive market research dashboard.

Listing Insights: Visualization Guide

Price Distribution Histogram

What it shows: A histogram of listing prices (or log prices) based on the current filtered dataset and selected price range.

Interactive features:

- You can toggle between viewing Price or Log Price using the radio buttons.
- You can filter the price range using the range slider below the radio buttons, to zoom into particular price ranges (for example, focus on $50–$150 listings).
- The histogram updates dynamically as you change the filters (e.g., selecting a specific brand, material, or condition).

Use case: Helps users understand the general distribution of current listing prices — are most listings in the $30-$50 range? Are there many high-end outliers?

Price Statistics Table

What it shows: A small, clean table reporting key summary statistics based on the filtered price data:

Interactive features:

- Updates in real-time based on all active filters and the price range selection.

Use case: Gives users a quick "at a glance" summary of price characteristics — not just where most prices cluster, but the full spread.

Listing Insights: Visualization Guide

Treemap: Number of Listings by Category

What it shows: A treemap where each block represents an Item Type (e.g., Dresses, Shoes, Tops).

- Block size = proportional to the number of listings in that category.

Interactive features:

- You can hover over a block to see the exact count.
- It updates dynamically based on the filters you apply (e.g., only show "Shoes" listings from "Nike" filtered above).

Use case: Helps users quickly spot what types of items dominate the resale market at the moment.

Bar Chart: Top 10 Most Popular Brands

What it shows: A bar chart displaying the 10 brands with the most active listings, ranked from highest to lowest.

Interactive features:

- Recalculates based on your current filters.
- Automatically excludes brands labeled as "unknown," "unbranded/other," or "uncommon_brand" to keep the chart focused on recognizable brands.

Use case: Shows users which brands are most heavily represented — for example, is Free People currently the most-listed brand? Or maybe Zara?

Contact

If you have questions or feedback about this tool, please reach out to:

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