



# Zillow Data Scraping Documentation

Maine Pad Finder Project

COS 457 Database Systems

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# 1 Overview

This project is a simple web scraper that collects rental property listings in Maine from Zillow and exports them into a structured CSV file for later analysis and database usage.

The scraper:

- Iterates through Zillow result pages.
- Visits each property page and each unit page for apartment complexes.
- Extracts name, address, rent, bedrooms, bathrooms, apartment number, and square footage.
- Outputs all data to `zillow-properties.csv`.

# 2 Files

`Fosgate_ZillowScraper.py`

Main scraper script:

- Builds Zillow pagination URLs
- Extracts property links
- Detects single properties or apartment complexes
- Extracts unit-level details
- Saves CSV as output

# 3 Requirements:

- Python 3
- `pip install requests`
- Beautiful Soup 4

## 4 How To Run

1. Install dependencies:

```
pip install requests beautifulsoup4
```

2. Run the script:

```
python Fosgate_ZillowScraper.py
```

3. The output `zillow-properties.csv` will appear in the same directory.

## 5 How It Works

### 5.1 Page Loop

The script loops pages until Zillow shows no more results.

### 5.2 Property Detection

Each link is checked:

- If no unit table exists → single property.
- If unit cards exist → apartment complex (unit card view).
- If simple table exists → apartment complex (table view).

### 5.3 Single Properties

Extract:

- Address.
- Rent.
- Beds and baths.
- Square footage.

## 5.4 Apartment Units

For unit cards and tables:

- Copy base building info.
- Extract unit-specific rent, square footage, bed/bath counts, and apartment number.

## 5.5 Final Export

Writes all data as rows into `zillow-properties.csv`.

# 6 Data Format

- **NAME:** Property or unit name.
- **ADDR:** Address stored in a list-like string.
- **RENT\_COST:** Monthly rent.
- **BEDROOMS:** Bedroom count.
- **BATHROOMS:** Bathroom count.
- **APT\_NUM:** Unit number (0 for single properties).
- **SQFT:** Square footage.