



**FRAGRANCE  
FINDER**

# Development Team

Lakelon Bailey - Web Application

Stephen Souther - Website Scraping/Emailing

William Duff - Website Scraping

Kien Nguyen - Website Scraping

Faithful Odoi - Website Scraping

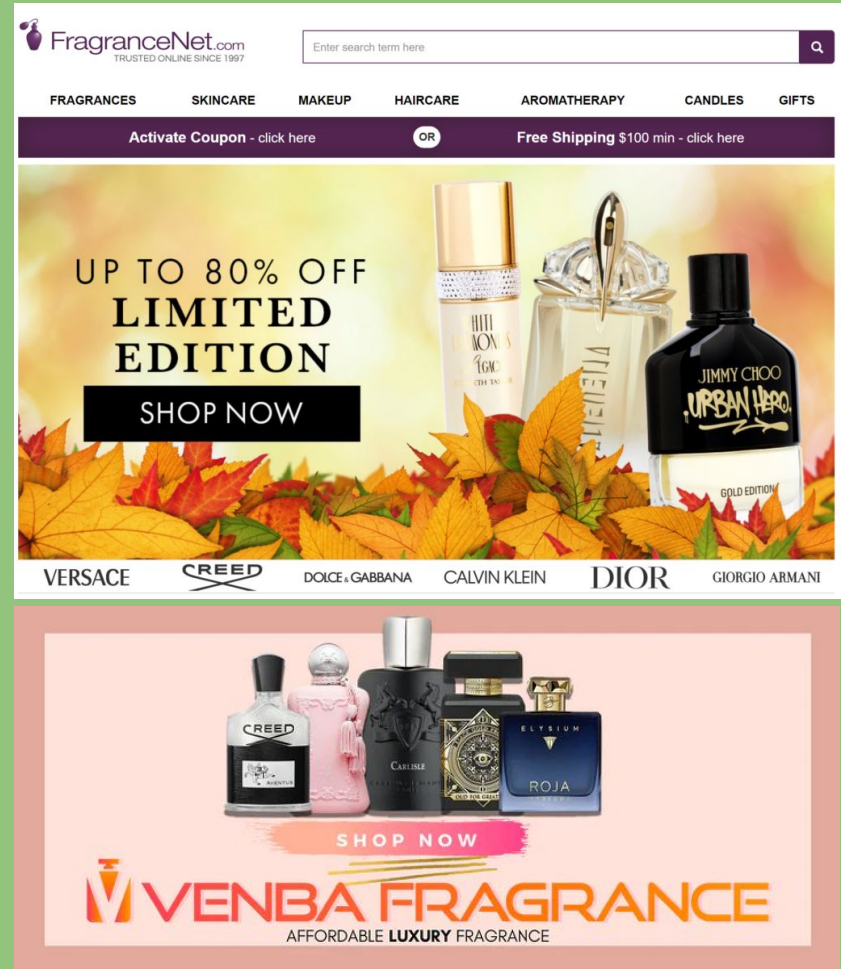
Nolan Coffey - Website Scraping

Jacob Kennedy - Frontend Designer

# What are we making?

Our team recognized an issue with the process of shopping for fragrances from online discounter sites. These sites are spread out over the internet, making it hard to track down the best price. We wanted to fix this by creating an all in one page where all of the stores' data would be stored in one place, and when prices change on a favorite fragrance, an update is emailed as to what the new price is.


Jacob Kennedy



# Web Scraping (Python, BeautifulSoup, Playwright)

- Scraping web pages for important information
  - Playwright used to open and interact with elements on site, BeautifulSoup used for parsing HTML file.
  - Brand, title, concentration, size, price, gender, link to fragrance, and link to image
  - Format/clean the data to make sure it is uniform for all of the scrapers

[Home](#) > [Men's Fragrances](#) > [Cedrat Boise Mancera Unisex EDP](#)



### Cedrat Boise Mancera Unisex EDP

**\$64<sup>98</sup>** SAVE \$95

Why is this such a bargain?

Size

**4.0 OZ**

Select a Type of Box

**Regular Box**

Quantity

- 1 +

```
<div id="shopify-section-product-template" class="shopify-section product-template-section">
  <div id="ProductSection" data-section-id="product-template" data-section-type="product-template" data-zoom-toggle="zoom-in" data-zoom-enabled="true" data-related-enabled="false" data-social-sharing data-show-compare-at-price="false" data-stock="true" data-incoming-transfers="false">
    <nav class="breadcrumb" role="navigation" aria-label="breadcrumbs">
      <div class="grid" itemscope itemtype="http://schema.org/Product">
        <meta itemprop="url" content="https://www.aurafragrance.com/products/cedratboisemanceraforwomenandmenedp">
        <meta itemprop="image" content="//www.aurafragrance.com/cdn/shop/products/a9fed8761f0a7a623c5eba287128e094f1aac8f_grande.jpg?v=1598998108">
        <div class="grid-item large--two-fifths">
          <div class="grid-item large--three-fifths">
            <h1 class="h2" itemprop="name">
              <p style="font-size:125%">Cedrat Boise Mancera Unisex EDP</p>
            </h1>
            <div itemprop="offers" itemscope itemtype="http://schema.org/Offer">
              <div class="product-description rte" itemprop="description">
                <div class="social-sharing is-default" data-permalink="https://www.aurafragrance.com/products/cedratboisemanceraforwomenandmenedp">
            </div>
```

[Home](#) / [Fragrances](#) / [Gianni Versace](#) / [Versace Dylan Blue](#) / [Eau De Toilette](#)

## Versace Dylan Blue

Eau De Toilette Spray 3.3 fl. oz. / 100 ml

by [Gianni Versace](#) [\(view all\)](#)

Select Size

eau de toilette mini 0.17 oz



Happy Perfume by Clinique | [Fragrances](#) X +

← → X [fragrancenet.com/products/clinique/happy-perfume](https://fragrancenet.com/products/clinique/happy-perfume)

FragranceX

Search

[Women's Perfume](#)

[Men's Cologne](#)

[Brands](#)

☐ [Abercrombie And Fitch](#)

☐ [Acca Kappa](#)

## Shop by Category



MEN'S WATCHES



WOMEN'S WATCHES



SUNGLASSES



APPAREL



ACCESSORIES



JEWELRY



Type here to search



39°F



5:38 PM

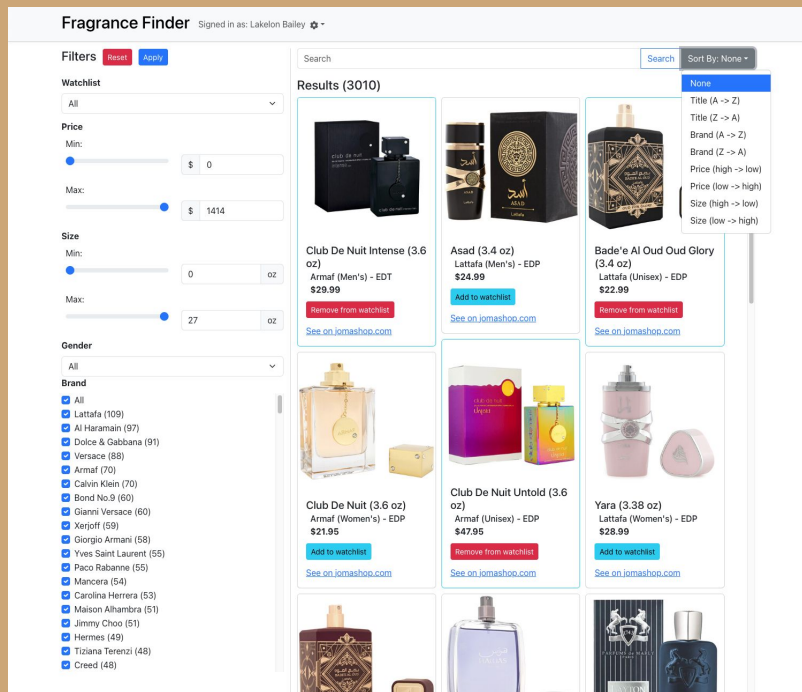
11/28/2023

# Server-side API (JavaScript, Express.js, MySQL, Sequelize)



- Handle API requests from frontend.
- Interact with database
- Create JSON Web Tokens (JWT) using secret key.
- Validate JWT and protect endpoints.

# Client (JavaScript, React, Bootstrap)



- Allow sorting, filtering, and searching of fragrance listings
  - Brand and Title
  - Price
  - Size
- Progressive loading of fragrances
- Mobile friendly

# Authentication with JSON Web Token (JWT)

**Fragrance Finder** Login Signup

**Login**

Email address  
Enter email

Password  
Enter password

Submit

**Fragrance Finder** Login Signup

**Sign Up**

First Name  
Enter first name

Last Name  
Enter last name

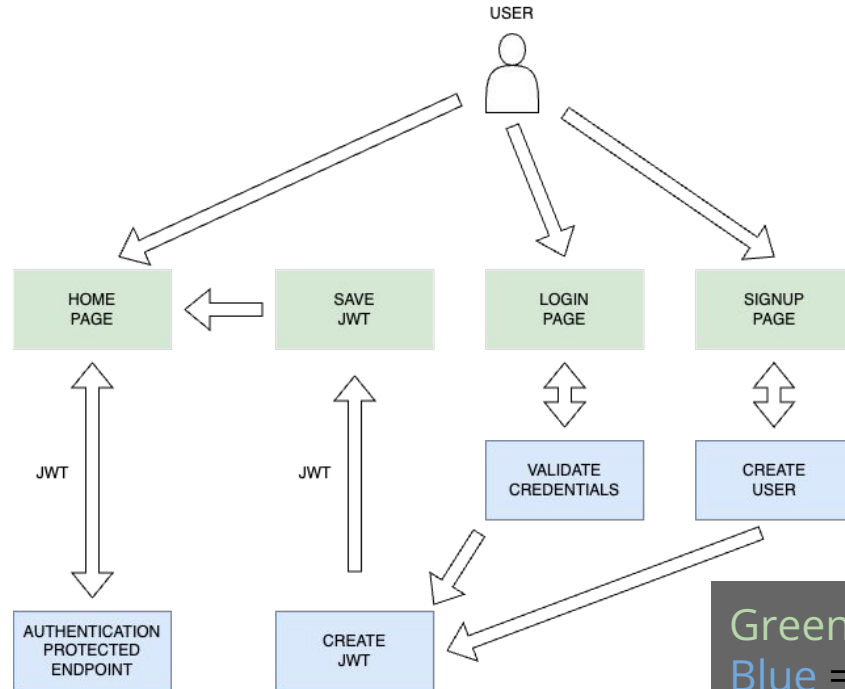
Username  
Enter username

Email address  
Enter email

Password  
Enter password

Submit

## Authentication Flow

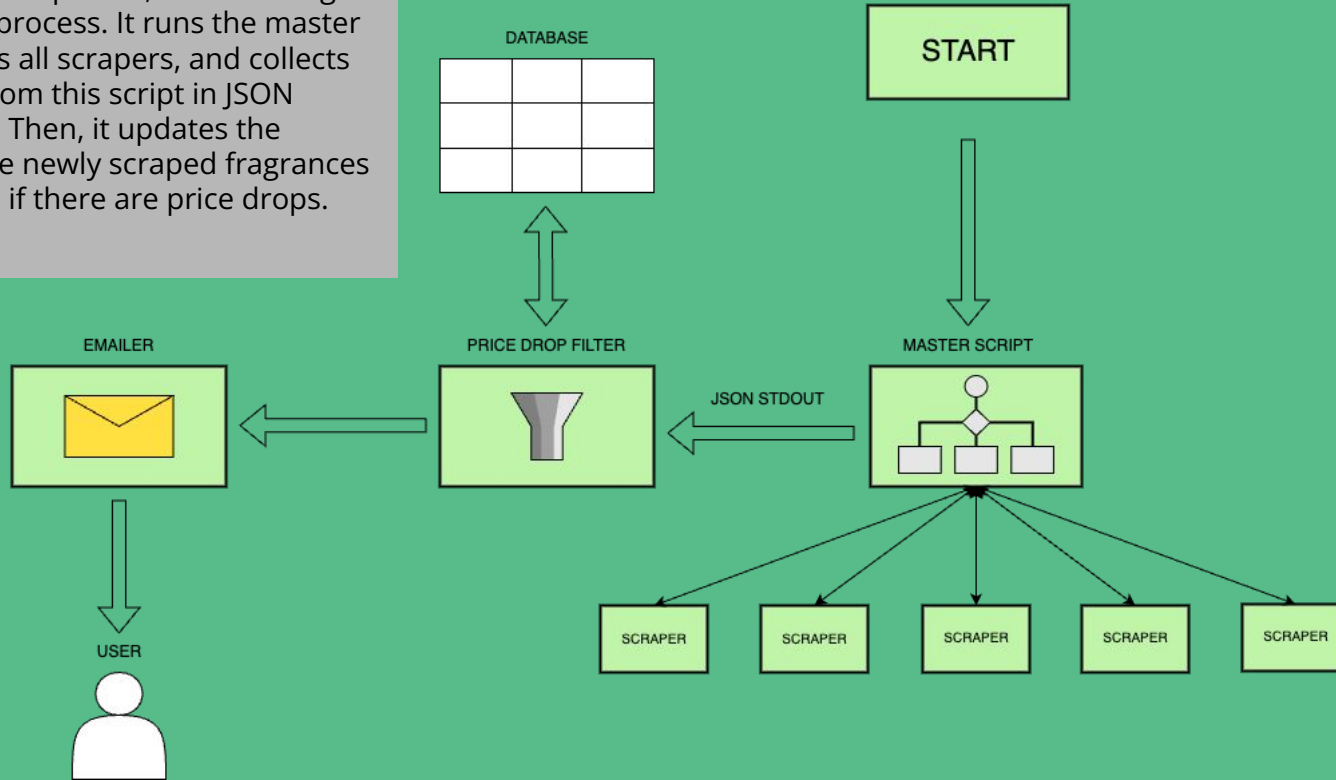


Green = Client  
Blue = Server



## Database Updater Script Flow

Our database updater script packages scraping, database updates, and emailing into one master process. It runs the master script, which runs all scrapers, and collects fragrance data from this script in JSON standard output. Then, it updates the database with the newly scraped fragrances and emails users if there are price drops.



# Email Alerts

Here is an example email that a user would receive. In this case, the user had these two fragrances watchlisted, causing our application to email them with price drop notifications.

## Price alerts for one or more items on your watchlist



stephen@ky4nw.com <stephen@ky4nw.com>

11/26/2023 12:43 PM

To: stephen@ky4nw.com

Hello Stephen,

The price for the following items on your watchlist have dropped:

[Asad EDP by Lattafa](#) is now \$24.99 at [www.jomashop.com](http://www.jomashop.com)

[Club De Nuit Intense EDT by Armaf](#) is now \$29.99 at [www.jomashop.com](http://www.jomashop.com)

Thank you and have a nice day.

# Demo

Questions?