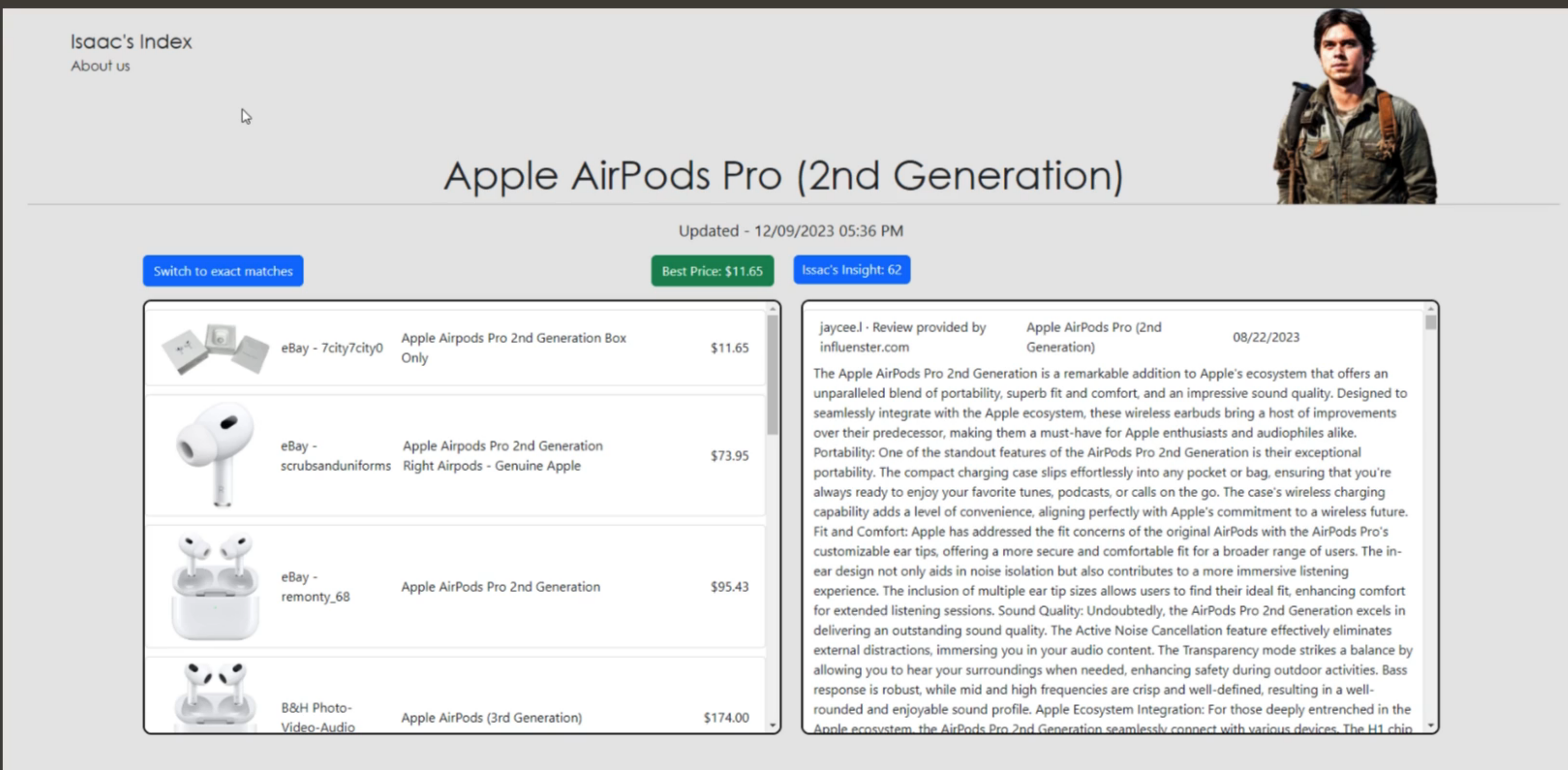


Website



Objective of App

Issac's Index is a price and review aggregator extension. When you're shopping online, the extension performs a parallel search in the background and alerts you of lower prices found at other stores. The goal is to ensure shoppers are always able to buy products at the lowest price point across the web, regardless of which stores' ecosystem they begin their search in. It also compiles reviews for products from multiple websites in one place, giving a more representative sample of consumer sentiment.

Methodology

Technologies Used -

Languages: Python, JavaScript, SQL, HTML, CSS

Website: Flask, SQLAlchemy, Bootstrap

Chrome Extension: Node.js, Playwright, Bootstrap

Backend: PostgreSQL

Testing: Pytest, Jest

Development Methods: Agile methodology

using Scrum framework, version control using GitHub

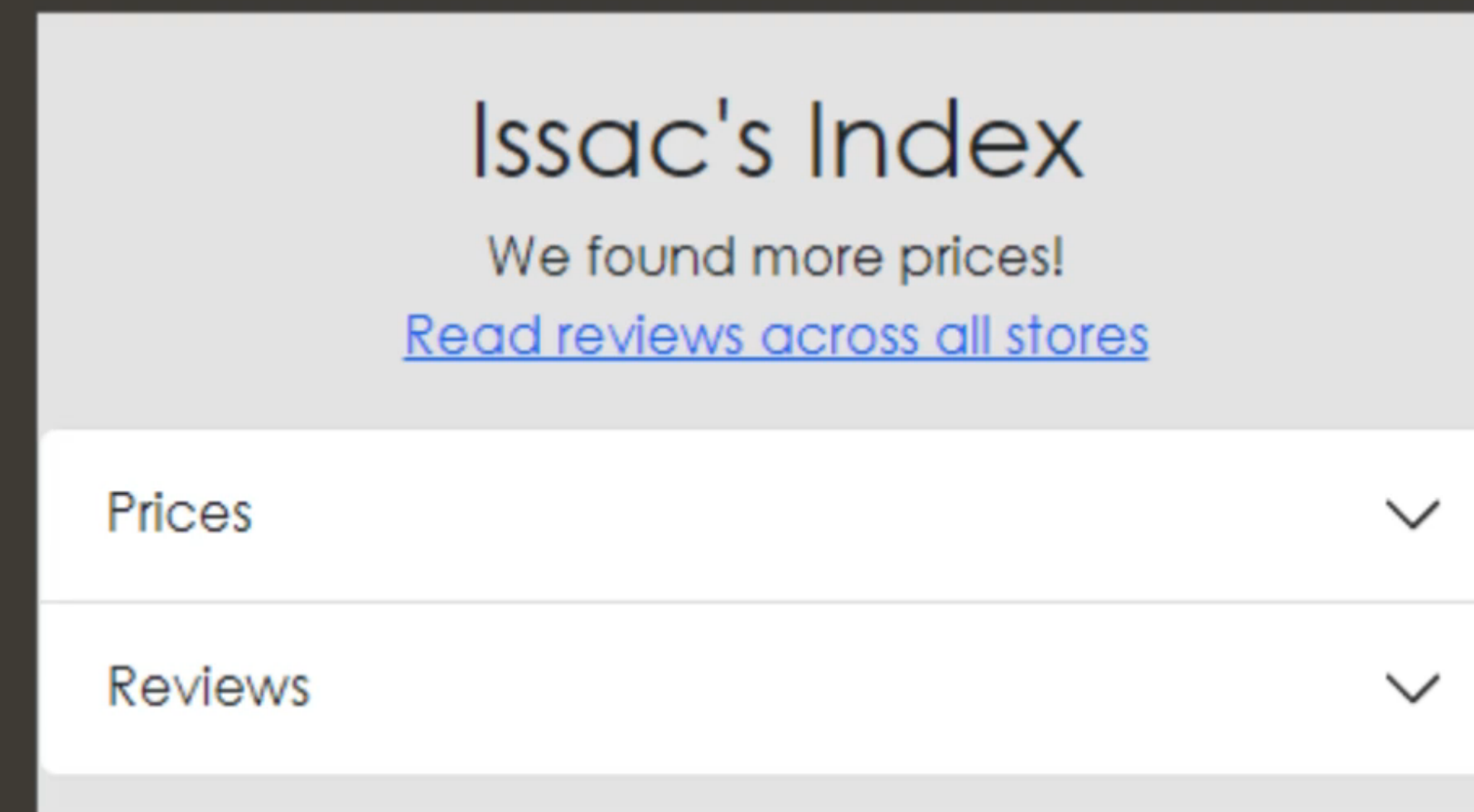
Deployment Methods: Cloud deployed using Heroku

Issac's Index



Ryan Guyton, Jesse Johnson, Nathan Mead, Mitchell Thompson

Chrome Extension



Issac's Insight

Issac's Insight provides invaluable insights to users by searching and extracting key similar and identical product data points from countless online retailers. This aggregated score is dynamically calculated and consistently updated with each request, enhancing users' online shopping experience in this ever-changing online retail landscape.

Future Work

- **Screen fake reviews**
 - Great problem for machine learning, but out of our scope to create
 - Fakespot does exactly this, but has no API for integration
 - Investigate putting ChatGPT to the task
- **Activate on any storefront**
 - Currently only kicks in for Walmart.com. Making extension general purpose requires that we make our webscraper much more robust
- **Price history**
 - Exposes fake discounts
- **Customizable Issac's Insight**
 - Allow users to calibrate score factors to their unique shopping preferences with sliders
 - Will give transparency on how we score products

Lessons Learned

- **Planning is important, but so is failing fast**
 - Original vision relied on sourcing product data from various retailers directly through their APIs. The backend and database were designed around this assumption
 - Research showed that most online shops had free APIs, but we later encountered restrictions
 - If we had tried to secure API keys before making designs, we would have encountered the problem sooner and saved some wasted effort
- **Integration is difficult**
 - Don't leave for last if you can avoid it
- **Factor in learning new tech when planning**
 - Consider only using languages we're already familiar with

