

Affiliate



Sponsor



Problem Statement

Consumers and businesses struggle to analyze product reviews efficiently due to the overwhelming amount of online data. Manual research is time-consuming, and existing tools either lack customization or are expensive. Our project aims to provide an accessible and efficient solution for extracting, analyzing, and visualizing product review data.

Our Solution

A web based scraping tool designed to help users efficiently collect and analyze e-commerce product reviews. The tool extracts relevant data from various e-commerce platforms and organizes it into structured review data, which is stored securely in AWS S3. It also provides valuable analytical insights using AWS QuickSight, enabling users to gain actionable information from the reviews. With its intuitive user interface, the tool allows business users to easily look up and query the collected data for their analysis needs.

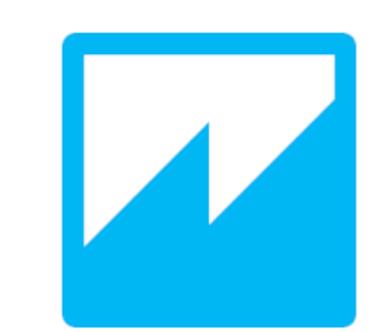
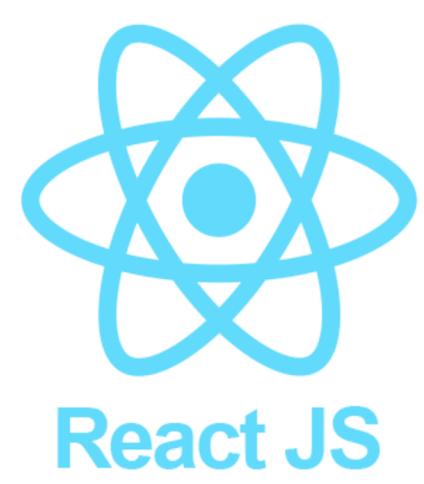
Challenges

- Handling Anti-Scraping Mechanisms
- Optimizing API and Cloud Costs
- Ensuring Ethical & Legal Compliance

App Structure

- User Inputs Target URL or Product
- Scraper Fetches Data
- Data Processing & Storage
- Data Visualization & Insights

Technology Stack



User Interface

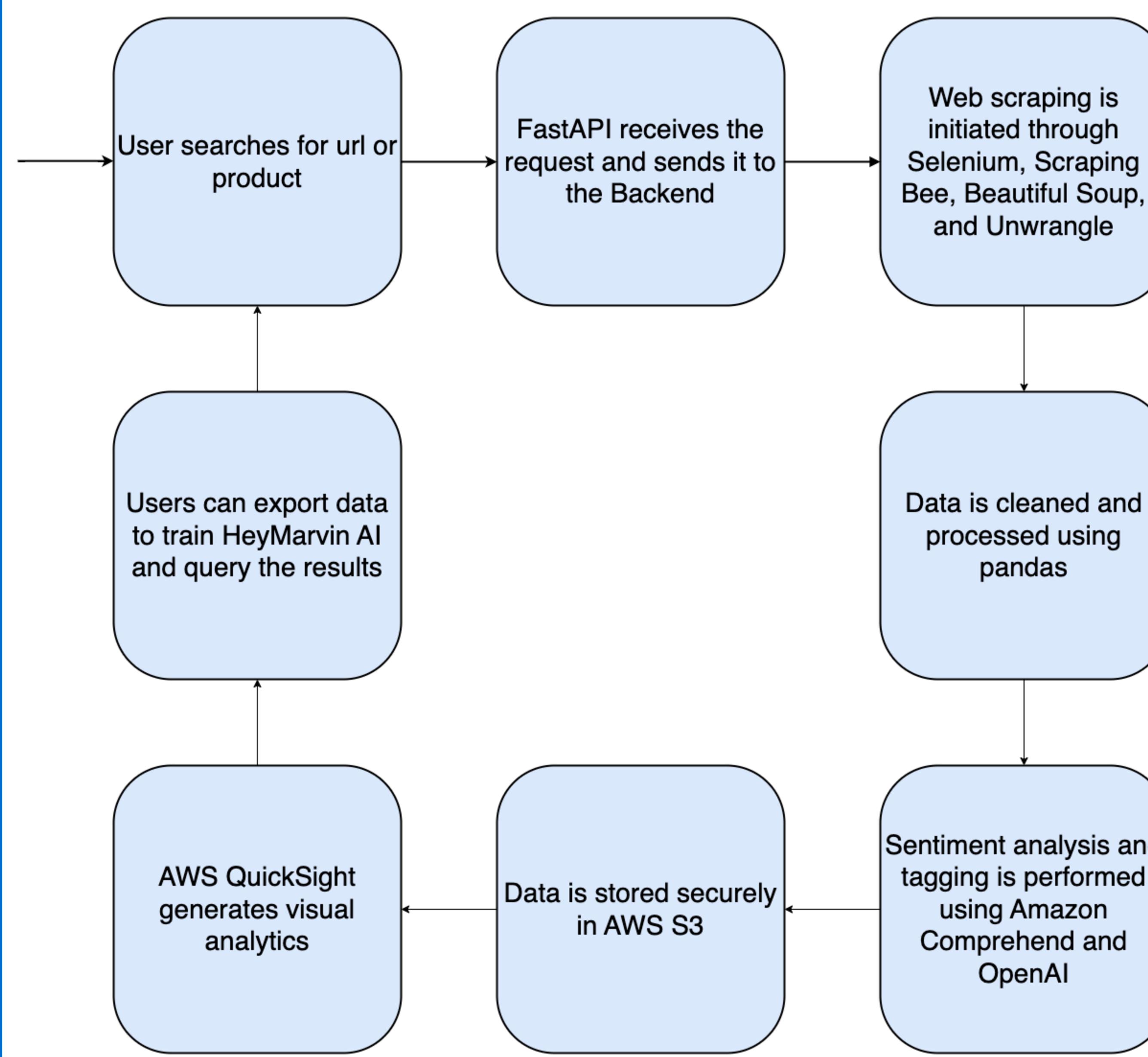
The user interface consists of three main sections:

- Step 1: Enter URLs**: A form to enter product URLs from Amazon, Best Buy, etc., with a "Scrape Product Data" button.
- Step 2: Choose Options**: A form to select the number of pages and other filtering options, with a "Scrape Reviews" button.
- Step 3: Scrape & Analyze**: Displays results in a table format:

Product Name	Category	Price	Availability
Product A	Electronics	\$199.99	In Stock
Product B	Home	\$24.99	Out of Stock
Product C	Clothing	\$49.99	In Stock

Buttons for "Download Results", "Search Products", "Scrape Products", and "Scrape Reviews" are also present.

System Architecture



Team Members



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Advisor