

MICHIGAN STATE
UNIVERSITY

Alpha Presentation

Amazon Smart Shop: Web Extension for
Shopping

The Capstone Experience

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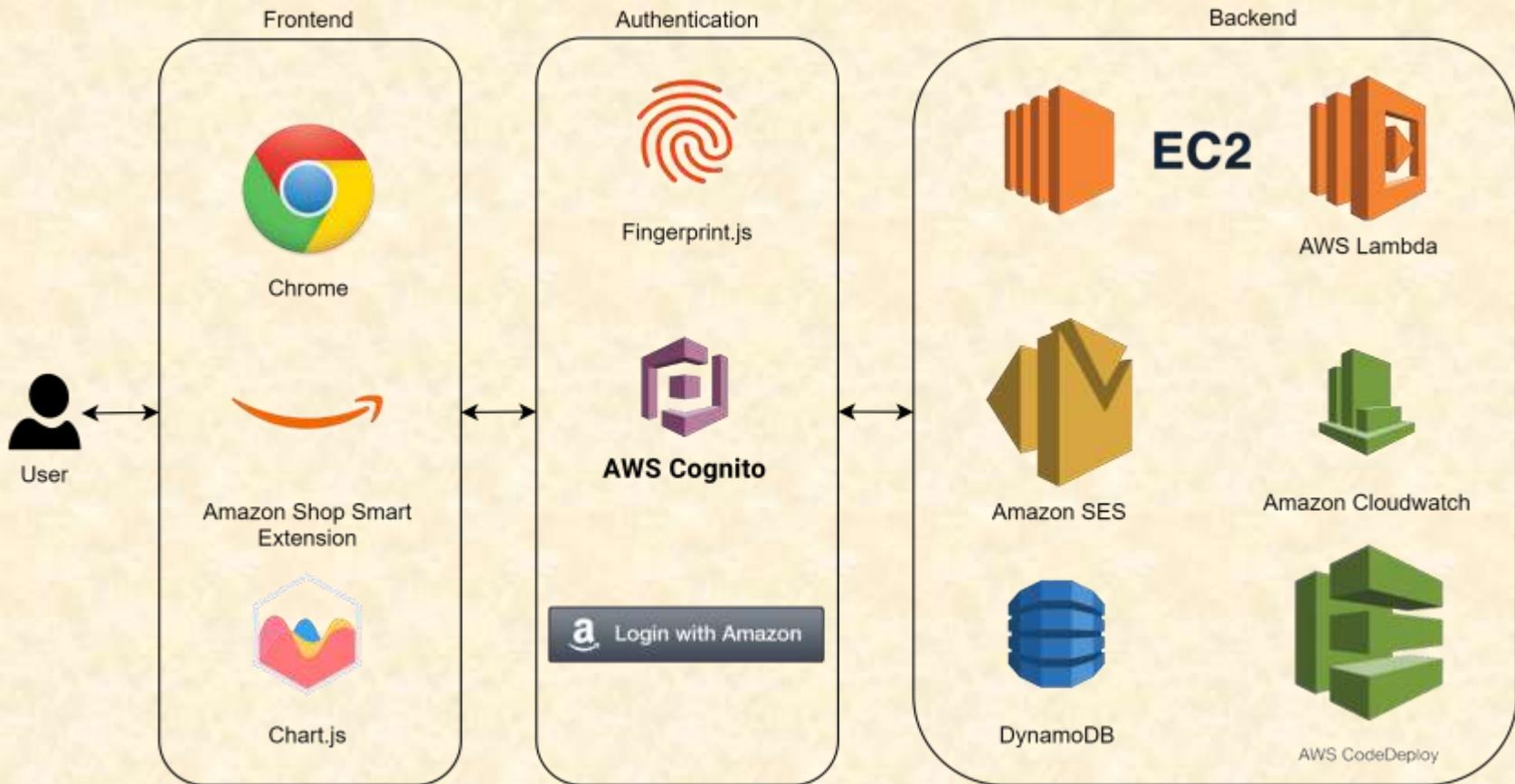
*From Students...
...to Professionals*

Project Overview

- Create a pop-up browser extension to improve the Amazon shopping experience
- Tracks Amazon products
- Used while browsing external retailer's sites
- Sends automated email notifications



System Architecture



Tracked Items

Amazon.com. Spend less. Smile. X +

amazon Hello Select your address All

All Best Sellers Amazon Basics New Releases Customer Service Today's Deals Prime Books Amazon Ho

Amazon Shop Smart

Tracked Items Scanner Settings

Your Tracked Items:
Click on a product to view more information

1. **2021 Apple 12.9-inch iPad Pro (Wi-Fi, 256GB) - Space Gray** [View Price History](#)
2. **Dyson V7 Animal Cordless Stick Vacuum Cleaner, Iron** [View Price History](#)
3. **Sony Noise Cancelling Headphones WHCH710N: Wireless Bluetooth Over the Ear Headset with Mic for Phone-Call, Black** [View Price History](#)

[Add Item](#) [Remove Items](#)

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GREENGLIDER

WILL

Start listening on Audible

Shop Amazon fashion:

Under 50\$ Premium Plus picks

Apple AirPods (2nd Generation)
★★★★★ 489,545

"These headphones charge very quickly and sound amazing. Surprising amount of bass for such a small headphone..."



Scanner

The image shows a web browser window with two overlapping pages. The background page is the Best Buy website, displaying a product page for an Apple MacBook Air 13.3" Laptop. The product details include the name, price (\$999.99), and a large image of the laptop. The foreground page is the Amazon Shop Smart interface, which has a dark header with 'Tracked Items', 'Scanner', and 'Settings' tabs. The 'Detected Product' section lists the product name and price, and offers various savings and shipping options: '\$220.00 in Savings & Prime Shipping', 'Prime Shipping', '\$50.99 in Savings', and a 'shop now' button. The Amazon interface also shows a 'Process' section with a dropdown menu and a 'Total Storage Capacity' dropdown set to '256GB'.



Price History

The screenshot shows the Amazon product page for the Sony WHCH710N Wireless Bluetooth Over the Ear Headset. The main product image is a black over-ear headset. To the right, the product title and price are displayed. A price history overlay window is open, showing a line graph of the price from 10/12/2021 to 2/13/2022. The graph shows a price of \$178.00 from 10/12/2021 to 11/18/2021, a drop to \$100.00 from 11/18/2021 to 12/22/2021, a rise to \$124.00 from 12/22/2021 to 1/13/2022, a drop to \$100.00 from 1/13/2022 to 1/18/2022, and a final rise to \$178.00 from 1/18/2022 to 2/13/2022.

Amazon Shop Smart

Sony Noise Cancelling Headphones WHCH710N: Wireless Bluetooth Over the Ear Headset
Lowest Price: \$98.00 Highest Price: \$124.00 Current Price: \$178.00

Price History

Date	Price
10/12/2021	\$178.00
11/18/2021	\$100.00
12/22/2021	\$124.00
1/13/2022	\$100.00
1/18/2022	\$178.00
2/13/2022	\$178.00

Style: WHCH710N
Brand: Sony
Ear Placement: Over Ear
Color: Black
Connectivity Technology: Wireless
Model Name: WHCH710N

About this item

- Cancel out the world with smart noise cancellation
- Noise cancellation automatically senses your environment with Dual Noise Sensor Technology
- Long-lasting listening with up to 35 hours of battery and quick charging
- Smartphone compatibility for hands-free calls and use with your voice assistant
- Wireless Bluetooth streaming with NFC one-touch
- Hear more detail with the 30 millimeter drive units
- Ultra-comfortable headphones design with adjustable metal sliders

— Show more



Email Notification

The screenshot shows the Amazon Shop Smart interface. At the top, there are three tabs: "Tracked Items", "Scanner", and "Settings". The "Settings" tab is active. Below the tabs, the "Account Settings" section is visible, with a greeting "Hi, Hithesh" and buttons for "Switch Account" and "Log Out". The "Notifications Setting" section is also visible, with "Toggle Auto Pop up for shopping" set to "Pop up by Default". The "Price Alerts" section shows three items with input fields for desired prices and "Submit" buttons: "2021 Apple 12.9in Ipad Pro", "Dyson V7 Animal Cordless Vacuum Cleaner" (with "60" entered), and "Lodge Iron Dutch Oven, 3-Quart".

The screenshot shows an email notification from Amazon Smart Shop. The subject is "Message from Amazon Smart Shop". The sender is "amznsmartshopnotify@gmail.com" with a red circular profile picture containing the letter "A". The email is dated "Wed 2/23/2022 1:53 PM" and is addressed to "Yedlapati, Hithesh". The body of the email reads: "Dear Hithesh, The product,vacuum, on your Amazon tracked list has decreased below your desired price of \$60 with an active price of \$50!". At the bottom of the email, there are two buttons: "Reply" and "Forward".



What's left to do?

- Display tracked items specific to users
- Save login information
- Predict best time for purchase
- Remove an item from the tracked list
- Get Dynamic current price data to compare with Desired Price
 - Update Email Notification Accordingly



Questions?

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