

SmartShop





outline

- Motivation
- SmartShop Workflow
- Demo
- Challenge
- Technique
- Feature work

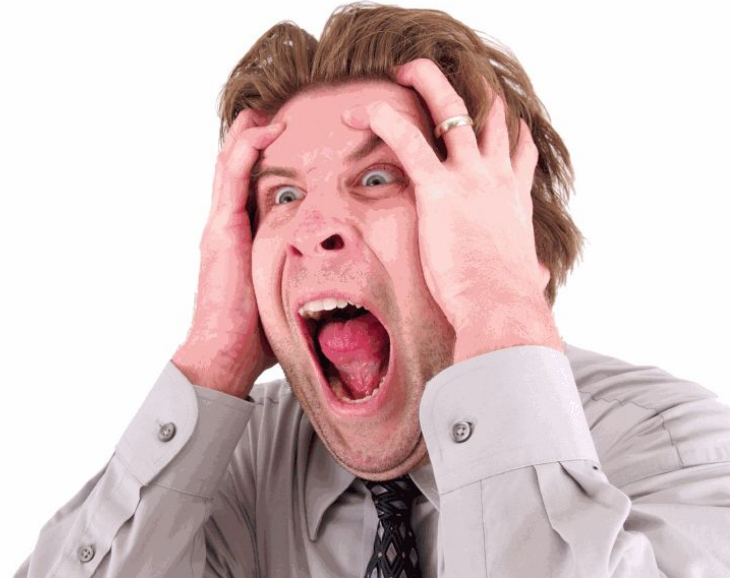
Motivation



When you got the bill...



<https://www.megapixel.com/stressed-out-man-with-computer-stock-photo-54545984>



<http://www.krbe.com/2017/07/19/most-stressed-out-cities-in-america/>

Motivation



Cashback Website

<https://www.thesun.co.uk/money/4964758/we-reveal-how-you-can-get-paid-to-shop-this-black-friday-with-cashback-websites-2/>



Gift Card

<http://mtactraining.com/product/2017-gift-card/>



Coupon

<https://hip2save.com/2016/01/10/craft-store-coupon-roundup-a-c-moore-michaels-j-o-ann-craft-stores-hobby-lobby-4/>



SmartShop

The calculation you may do:

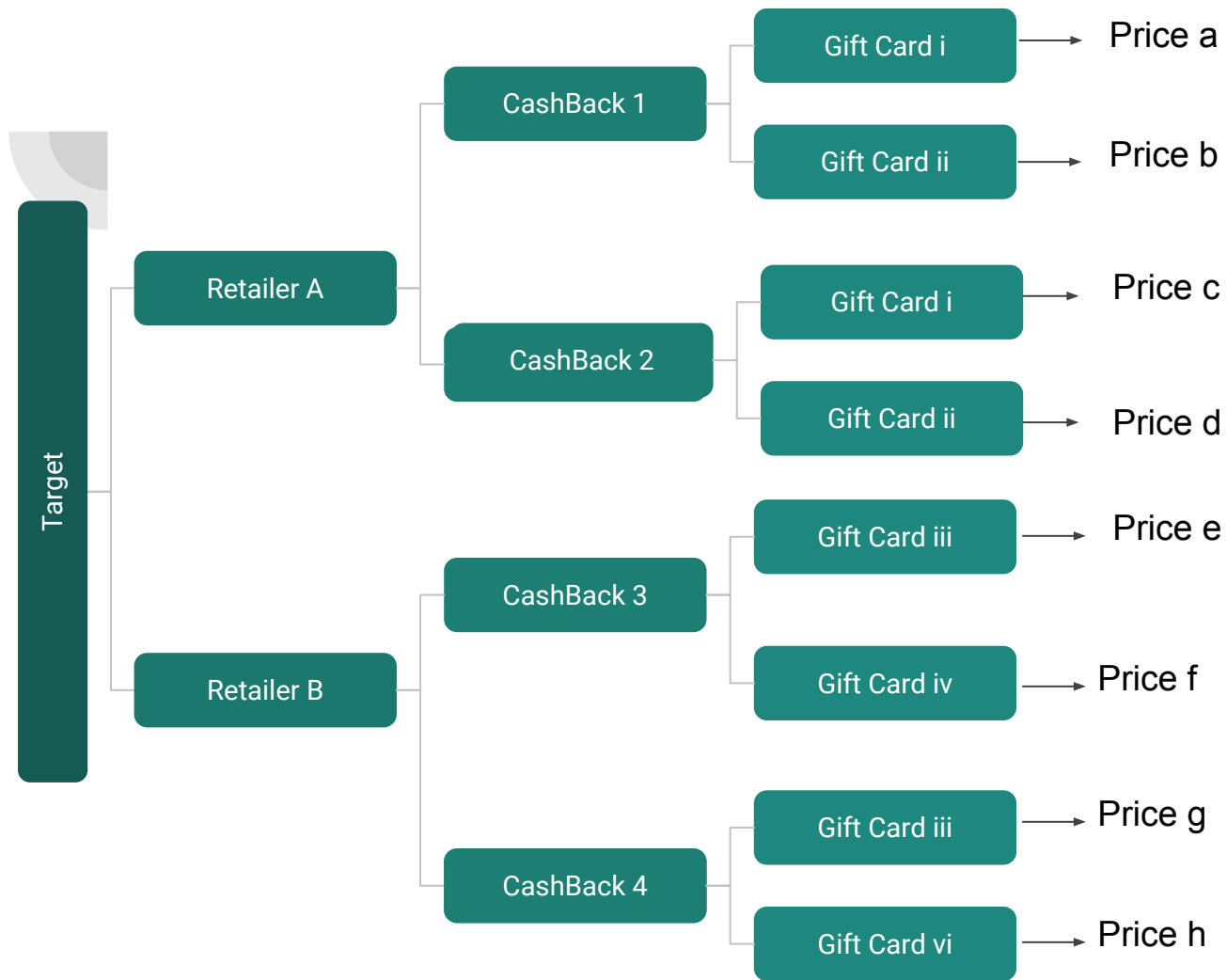
Price A ? = \$100 from Retailer A - 10% Cashback * \$100 - 15% gift card * \$100 = \$85.00

Price B ? = \$110 from Retailer B - 15% Cashback * \$110 - 12% gift card * \$110 = \$80.3

Price C ?

Price D ?

Which one is best shopping strategy ???





Demo

UI Features:

- input : item or URL

Test Cases:

1. kitchen aid mixers
2. Switch
3. Origins Dr. Weil Mega-Mushroom Treatment Lotion, Mens, 6.7 oz.
4. Adidas Boys 8-20 Pull on Pant in Black | Shopko
5. Under Armour Drive 4 - Mens Basketball Shoes 1303010403 Size 12



Design:

1. The price and discount collection
2. Validation of data
3. Shopping Habit



Design

1. Retailers information is from “google shopping”

Price with Tax

Sellers	Seller Rating ▾	Details Special Offers	Base Price	Total Price
EverythingKitchens.com	96% positive (6,287)		\$229.00 Free shipping. No tax	\$229.00
Sur La Table	96% positive seller rating	🔖 1 special offer	\$379.95 +\$31.92 tax and \$18.99 shipping	\$430.86
Dillard's	94% positive seller rating		\$379.99 +\$30.40 tax. Free shipping	\$410.39
BuyDig.com	93% positive (17,670)		\$349.99 Free shipping. No tax	\$349.99
BeachCamera.com	93% positive (3,346)		\$349.99 Free shipping. No tax	\$349.99
Bed Bath & Beyond	93% positive (344)		\$379.99 +\$30.40 tax. Free shipping	\$410.39
Overstock.com	92% positive (177,139)		\$299.00 Free shipping. No tax	\$299.00
Wayfair	92% positive (10,403)		\$299.99 +\$24.00 tax. Free shipping	\$323.99

Design

2. CashBack Site selection

- Top Cashback
- BeFrugal
- Coupon Cactus
- Mr. Rebates
- eBates
- RebatesMe



Cashback Report Tut

Search Cashback Stores

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Target Cashback Comparison & Rewards Comparison


Target Cashback Offers: The highest Target cashback offer is 6% (7% up to \$130.0) (LeMoney). The best credit card cashback offer for Target is 1% (Chase). The highest Target hotel points rewards is 2 pts/\$ (Choice Hotels). The highest airline mileage rewards for Target is 2 pts/\$ (Amtrak Guest Rewards). Totally found 44 cashback offers for Target.


Cashback	Cashback Site	Type	Bonus	Reviews
6% (7% up to \$130.0)	LeMoney	Cashback	c-bonus	★★★★
5.6%	Dubli	Cashback	\$10	★★★★
5%	Gear Obsession	Cashback		★★★★
5%	Simply Best Coupons	Cashback		★★★★
3.5%	Cashback House	Cashback		★★★★
\$3	Coupon Cactus	Cashback		★★★★
up to 2.5%	CoinRebates	Cashback		★★★★
up to 2.5%	Pennyful	Cashback	\$5	★★★★
up to 2.5%	Smile Jar	Cashback	\$5	★★★★



Design

2. Gift card website


 **GIFT CARD GRANNY®**

Search from 161,294 Gift Cards 

[Log In](#) | [Sign Up Now!](#) | [Gift Card Balance](#)


[BUY GIFT CARDS](#) | [SELL GIFT CARDS](#) | [SECRET DEALS](#) | [REWARDS](#) | [CORPORATE / BULK](#) | [MORE](#)

[Home](#) > [Buy Gift Cards](#) > [Target](#)



Filter Results

TYPE
☐ Physical
☐ eGift


VALUE







[Sell Your Gift Card >](#)
Get 86% back on your card!

Buy a Target Gift Card

★★★★☆ (4 stars) **148 ratings**

Granny is the largest website for discount gift cards, gathering all of the best Target gift card discounts, in real time.


[Buy Gift Cards In Bulk](#)

TYPE ▾	VALUE ▾	PRICE ▾	SAVINGS ▾	SAVE ▾	SELLER ▾	
	\$20.00	\$18.56	\$1.44	7.2%	✔ GiftCardBin	View Deal >
	\$220.00	\$204.56	\$15.44	7.02%	✔ Gift Card Spread	View Deal >
	\$150.00	\$139.47	\$10.53	7.02%	✔ Gift Card Spread	View Deal >
	\$100.00	\$92.98	\$7.02	7.02%	✔ Gift Card Spread	View Deal >
	\$240.00	\$223.15	\$16.85	7.02%	✔ Gift Card Spread	View Deal >



Design

3. Personal shopping habit

- Look for good deal for specific item
- Look for good deal for specific website



Technology in Backend

- **NodeJS**
- **ExpressJS:** The Node framework that everyone uses and loves.
- **Request:** Helps us make HTTP calls
- **Cheerio:** Implementation of core jQuery specifically for the server (helps us traverse the DOM and extract data)

Technique - Architecture

