

Imaginary Online Shopping System

Threat modeling example target



EasyShoppe Platform

Online shopping platform connecting sellers and buyers

- Our motto: We take care of the whole online shopping experience
- Anyone can register as a seller
- Sellers will just create their products and ship them to buyers



Note: EasyShoppe is an imaginary online shopping platform and its design contains some weaknesses on purpose. So use this for threat modeling purposes only:)



Features for buyers

Woollen socks - homemade

Seller: Artsy Price: 25 €



1

Add to cart

<< More from this seller << Back to search results

- Buyers can
 - Create an account
 - Login with username and password or Facebook
 - Search products
 - Buy products
 - Give ratings for sellers
 - Give ratings for products
 - Share their purchases on Facebook and Twitter
 - See their purchase history





Features for Sellers

Add items to sale	
Item name:	Insert name here
Item description:	
Add description	
Item price (€):	
Quantity in stock:	
Upload picture:	
Add for sale	

- Anyone can register as a seller
- Sellers can
 - Add items for sale
 - Add and modify their bank account number for payments
 - Get a list or ordered items for delivery
 - Give discounts (per person or seasonal)
 - Get their products listed first by paying an extra fee



Features for Admins

Manage Users

Search user: Insert name here

Buyer1

Enable promo: Select code

Set Status:

Select status

View Profile

Reset Password

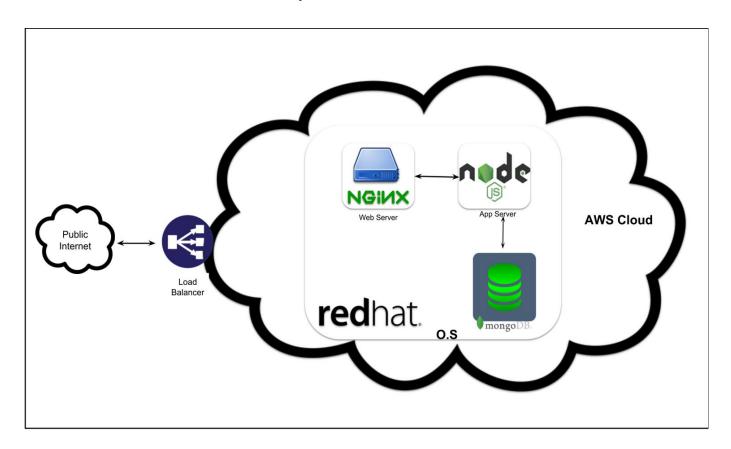
Save

- Admins can
 - Manage users
 - Enable promotional codes
 - Enable / lock users
 - View user's profile
 - Reset Password
 - Cancel or modify orders
- Admin has privileged access to the platform and all user information



Architecture

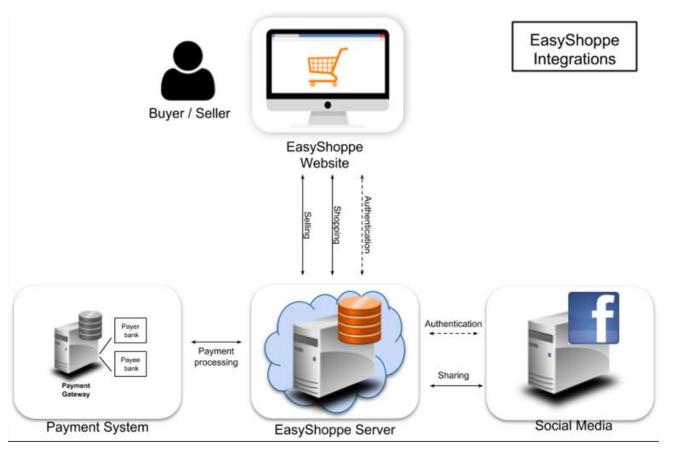
Proof-of-concept architecture



- Deployed in AWS
- Red Hat server
- NodeJS application running on nginx
- MongoDB database
- Single server instances, no redundancy
- Backup default: 7 days
- No monitoring
- No log server



Integrations



- Username and password based authentication
- Alternatively, uses Facebook API for authentication
- Uses Facebook and Twitter API for sharing
- External payment processing

