

### Introduction to Modern Web Technologies

Loyalty One™

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4 June 2014

#### Josh Borts

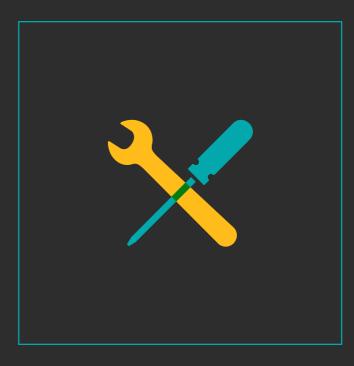


# Co-Founder, Partner Functional Imperative

LIGHTHOUSE LABS

# Founder Lighthouse Labs

- Algorithmic trading systems
- USAID in Mali
- Mobile compression for SAP



### Jon Salis



### Topics

- Atomic Design
- Prototyping
- Modern Web Tools
- Web 101
- HTML & CSS
- Responsive Design
- Server vs. Client Templating
- Testing

#### Agenda

- 10:00a Intro
- 10:30a Atomic Design
- 10:50a Prototyping w/ Balsamiq
- 11:30a Project Intro
- 11:45a Modern Web Tools
- 12:00p Canvas & MVP
- 12:00p LUNCH (60m)
- 1:00p Web 101
- 1:20p HTML, CSS, JS
- 2:05p Break
- 2:15p Responsive Design
- 2:50p Server vs. Client Templating
- 3:45p Break
- 4:00p Testing
- 4:45p Wrap up

# Atomic design

### Atoms

- Building blocks
- HTML elements



Blue Mountain / Monterra - Green Fee & Cart

500 for GOLD Collectors



# Molecules

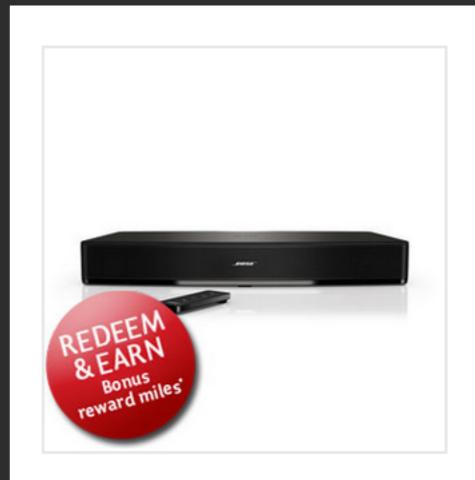
Combinations of atoms



Blue Mountain / Monterra - Green Fee & Cart

625 reward miles

500 for GOLD Collectors



**BOSE® Solo TV Sound System** 

4,200 reward miles

# Organisms

- Groups of molecules
- Header, footer, sidebar





3, 5 & 7 Day **Walt Disney World Resort in** Florida Tickets - Adult From: 2.425 reward

miles



Blue Mountain / Monterra -Green Fee & Cart 625 reward miles

500 for GOLD Collectors



**Sound System** 4,200 reward miles



Calgary Stampede -Rodeo Ticket for Two (2) 325 reward miles



**Calypso Theme** Waterpark -Single Admission **Ticket** 

300 reward miles



Canada's Wonderland -One Day **Admission for** \$42.99 per person



Canon **Powershot Advanced 50X Zoom SX50HS** 4,200 reward miles or 3,360 reward miles + \$135.00



Car Racing in Montreal -Circuit Gilles Villeneuve June 6, 7, 8th, 2014 <del>1,110</del> 750 reward miles or \$110.00



Cavendish **Beach Music** Festival 2,200 reward miles or \$195.00



**Cuddle Down Light Weight** Cuddle Cashmere **Blanket From** 100% Fleeced Cotton - Queen - Slate

1.500 reward miles



Dauphin's Countryfest -Day Pass -Manitoba 1,250 reward miles or \$124.00



Dauphin's Countryfest VIP and Meet and Greet Pass -Manitoba 8,250 reward

4,125 for GOLD Collectors or \$835.00

miles

#### **Filter Results**

**Brand** 

Select a brand...

Regions

Select a region...

**More Options** 

Cash + Miles® Rewards (5) Deals of the Week (3)

Gold Specials (3) My Planet (2) Travel Specials (2) What's New (6)



#### Earn Miles

- In Store

- Payment products
- Offers & Promotions

#### AIR MILES Cash

#### **Redeem Miles**

- Set your balance preference

- Deals & More
- Travel
- Need Help? f Find us on Facebook
  - GLike 1,042,900 people like
  - Follow Us on Twitter
  - View our boards on Pinterest
  - **Watch our videos on YouTube**

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Sign In

Live Chat

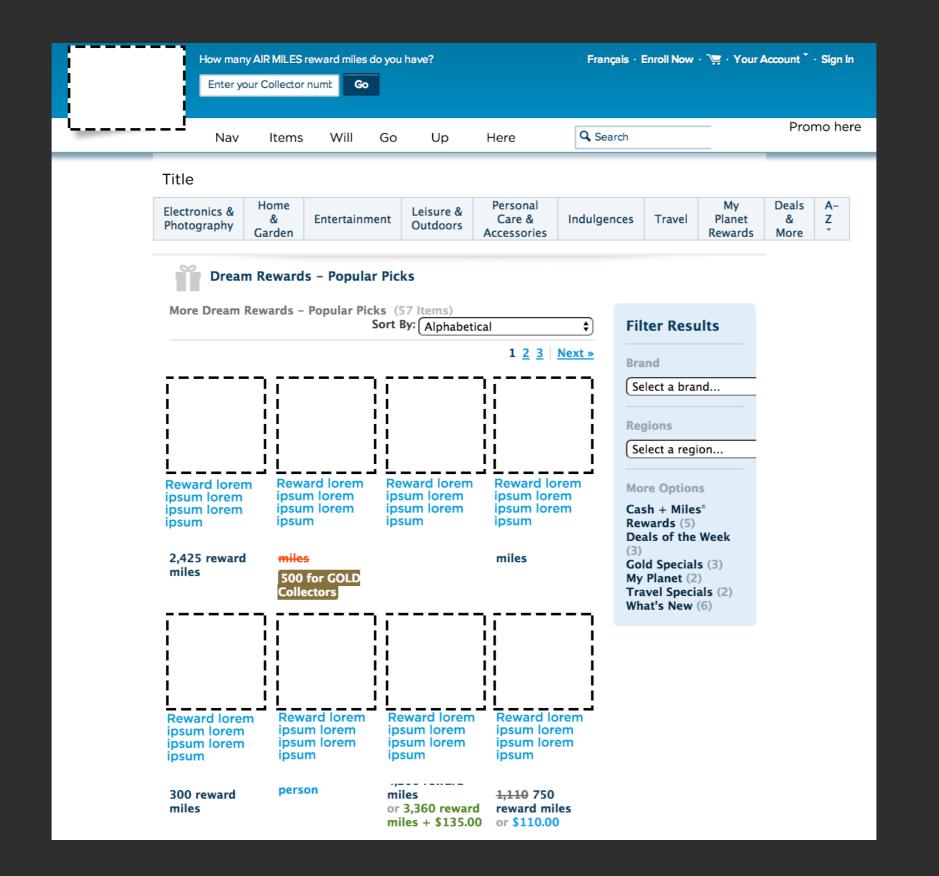
Browse FAQs

Self-Serve Tools

Learn How AIR MILES Works

### Templates

- Where design starts to come together
- Group organisms to create a layout



# Pages

- Instances of templates
- Can test variations of templates

Enter your Collector numb

Earn Miles

Redeem Miles

Need Help? More Q Search

Shop online and earn at 🔟 airmilesshops.ca



#### **Dream Rewards**



#### **Dream Rewards - Popular Picks**

More Dream Rewards - Popular Picks (57 Items)

Sort By: Alphabetical

1 <u>2</u> <u>3</u> | <u>Next »</u>



3, 5 & 7 Day Walt Disney **World Resort in** Florida Tickets - Adult From:

2,425 reward miles



Blue Mountain / Monterra -Green Fee & Cart

625 reward miles

500 for GOLD Collectors



miles

**BOSE® Solo TV Sound System** 4,200 reward



325 reward miles



**Brand** 

Select a brand...

Regions

Select a region...

**More Options** 

Cash + Miles® Rewards (5) Deals of the Week

Gold Specials (3) My Planet (2) Travel Specials (2) What's New (6)



**Calypso Theme** Waterpark -Single Admission Ticket 300 reward

miles



Canada's Wonderland -One Day **Admission for** \$42.99 per person



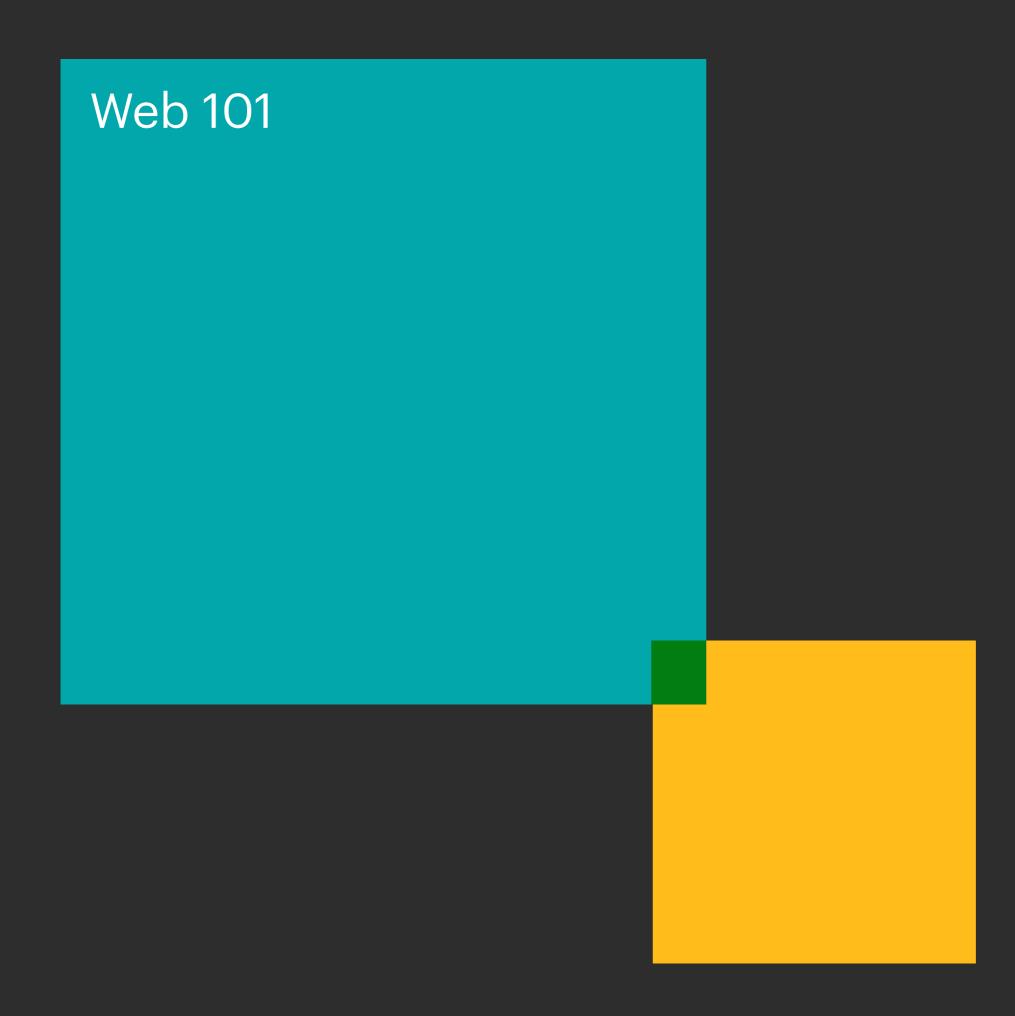
Canon Powershot **Advanced 50X** Zoom SX50HS 4,200 reward

miles or 3,360 reward miles + \$135.00



Car Racing in Montreal -**Circuit Gilles** Villeneuve June 6, 7, 8th, 2014

<del>1,110</del> 750 reward miles or \$110.00



### Hypertext Transfer Protocol

http://

### Request

- Request Line
- Headers

Browser (Client)

Server

### Response

- Status Line
- Headers
- Content





DNS

## HTTP methods/verbs Header Payload



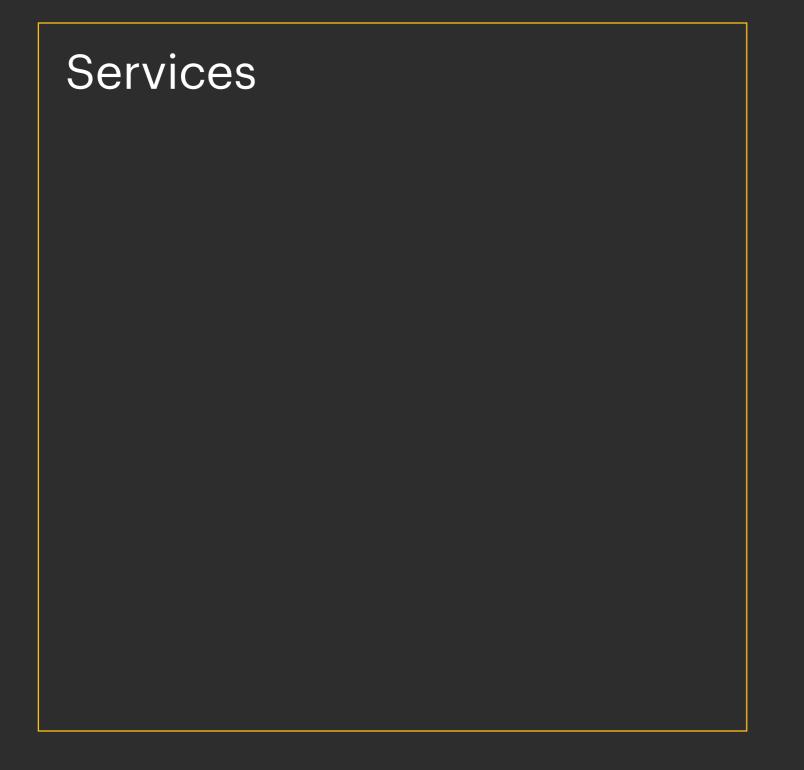


# Web Server





# Database







# Response Creation

# Client



- Load balancers
- · CDN

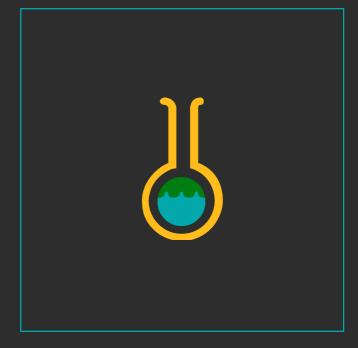
# Web Security 101





Cross-site Scripting (XSS)

# Cross-site request forgery (CSRF)



Man in the Middle



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