ISPYHORSES.COM

Zhang Luo Supervisor: Dr. Ulrich Speidel

Overview

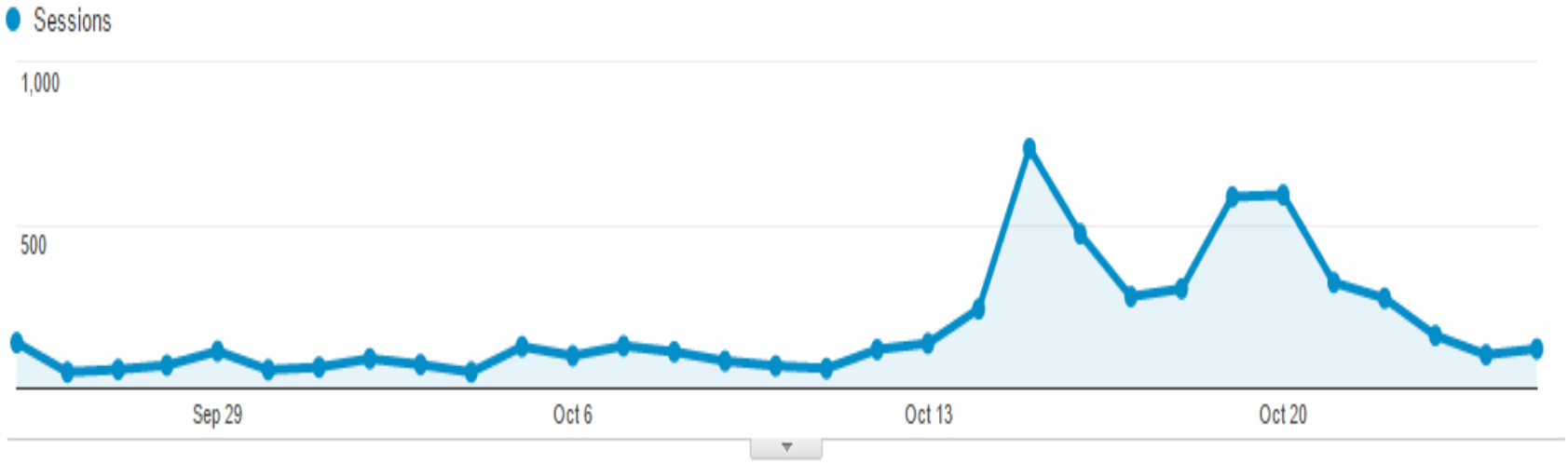
- Introduction
- Server and Hosting
- Framework
- Performance and Website Optimization
- Security
- Limitation

Introduction

- ispyhorses.com connects horse enthusiasts and horses throughout the world.
  - A listing platform
  - News from the world of horses
  - Share daily horse stories
  - Humans and Horses

Launched on 26th Aug 2015

- Around 100 visits per day
  - A promotion competition was held in October
  - 3936 likes on Facebook
  - Around 700 listings on the site



Hosting

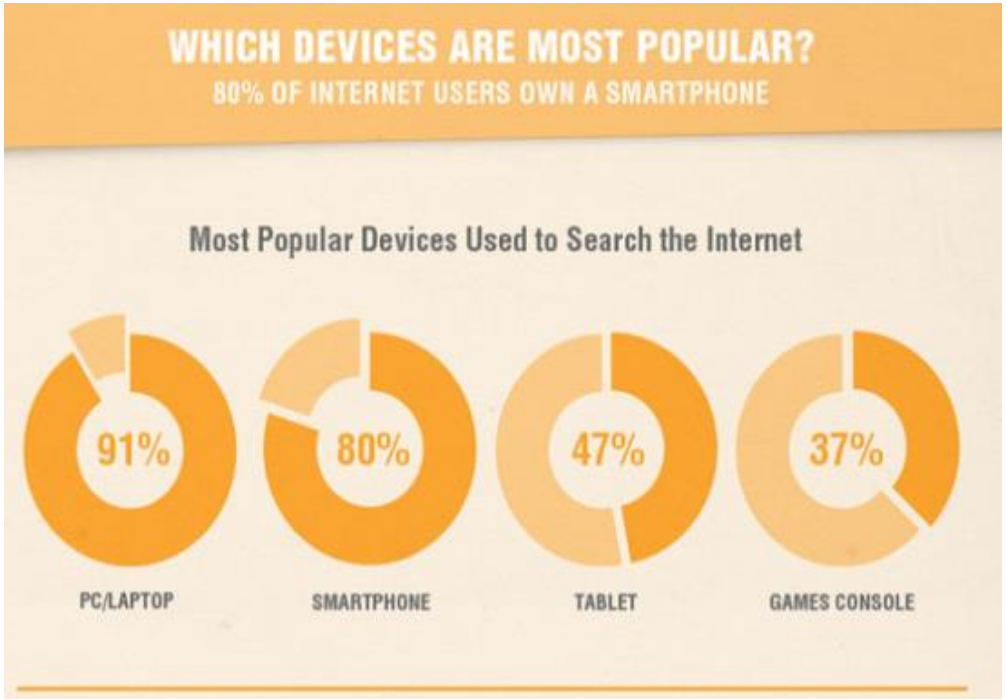
- Optimus System
- Virtual Private Server
  - High priority access to the operating system
  - Functionally equivalent to a dedicated physical server
  - Simple to create and configure

Framework

- PHP language
- Supports the development of dynamic websites, web applications, web services and web resources
- Developed by Latch Digital
- Based on Symfony
- Complements twig template engine
- Overall layout
  - CSS, JavaScript
- MySQL Database

Performance

- Approximately **80%** of internet users search the internet by **mobile**
- Almost **50%** of internet users search internet by **tablet**



- At this stage, customers of iSpyHorses mainly use smartphones and tablets

Resolution Usage of iSpyHorses

Screen Resolution	Acquisition			Behavior		
	Sessions ↓	% New Sessions	New Users	Bounce Rate	Pages / Session	Avg. Session Duration
	4,137 % of Total: 70.00% (5,910)	74.50% Avg for View: 69.64% (6.97%)	3,082 % of Total: 74.88% (4,116)	56.85% Avg for View: 51.51% (10.38%)	2.93 Avg for View: 3.88 (-24.57%)	00:01:50 Avg for View: 00:02:44 (-32.96%)
1. 320x568	1,301 (31.45%)	70.41%	916 (29.72%)	57.11%	2.68	00:01:30
2. 768x1024	700 (16.92%)	75.57%	529 (17.16%)	51.71%	3.78	00:02:34
3. 375x667	693 (16.75%)	73.30%	508 (16.48%)	53.82%	2.82	00:01:44
4. 360x640	670 (16.20%)	77.16%	517 (16.77%)	58.51%	2.93	00:02:00
5. 320x480	212 (5.12%)	86.79%	184 (5.97%)	66.04%	2.15	00:01:02
6. 480x800	83 (2.01%)	62.65%	52 (1.69%)	60.24%	2.20	00:02:01
7. 414x736	79 (1.91%)	82.28%	65 (2.11%)	59.49%	2.89	00:01:50
8. 720x1280	67 (1.62%)	86.57%	58 (1.88%)	70.15%	2.03	00:01:04
9. 320x534	58 (1.40%)	81.03%	47 (1.52%)	60.34%	2.50	00:01:46
10. 1280x800	46 (1.11%)	58.70%	27 (0.88%)	47.83%	5.72	00:04:07

Responsive Layout

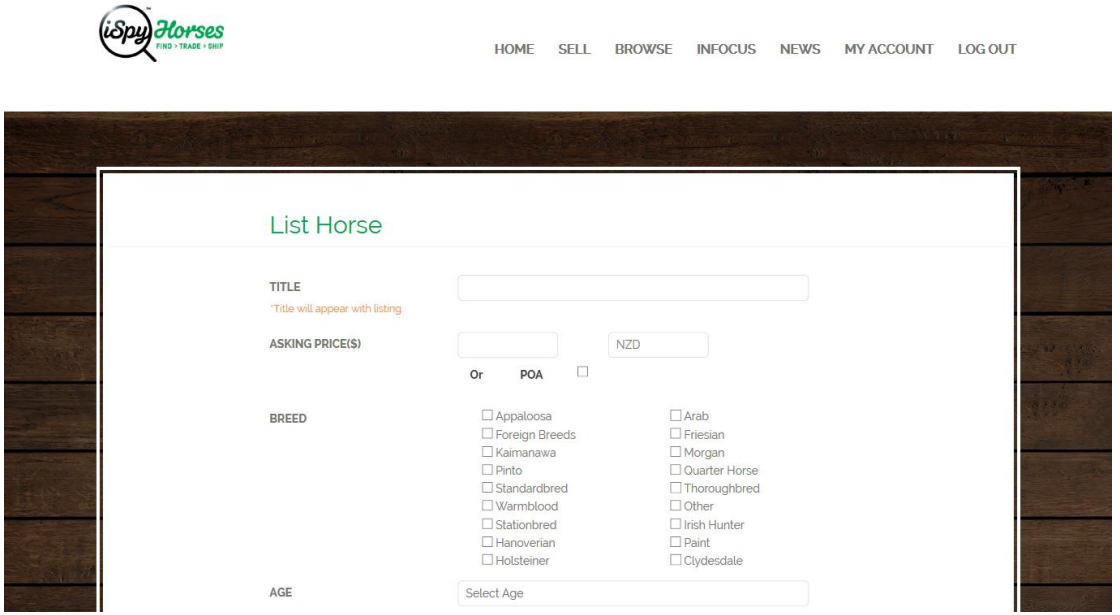
- Bootstrap CSS
  - Grid system
  - Webpage is divided into many rows and columns to layout the content
  - Set maximum width for container in case of large screen size
  - uses the media queries to break all resolutions to four sizes

Responsive Layout

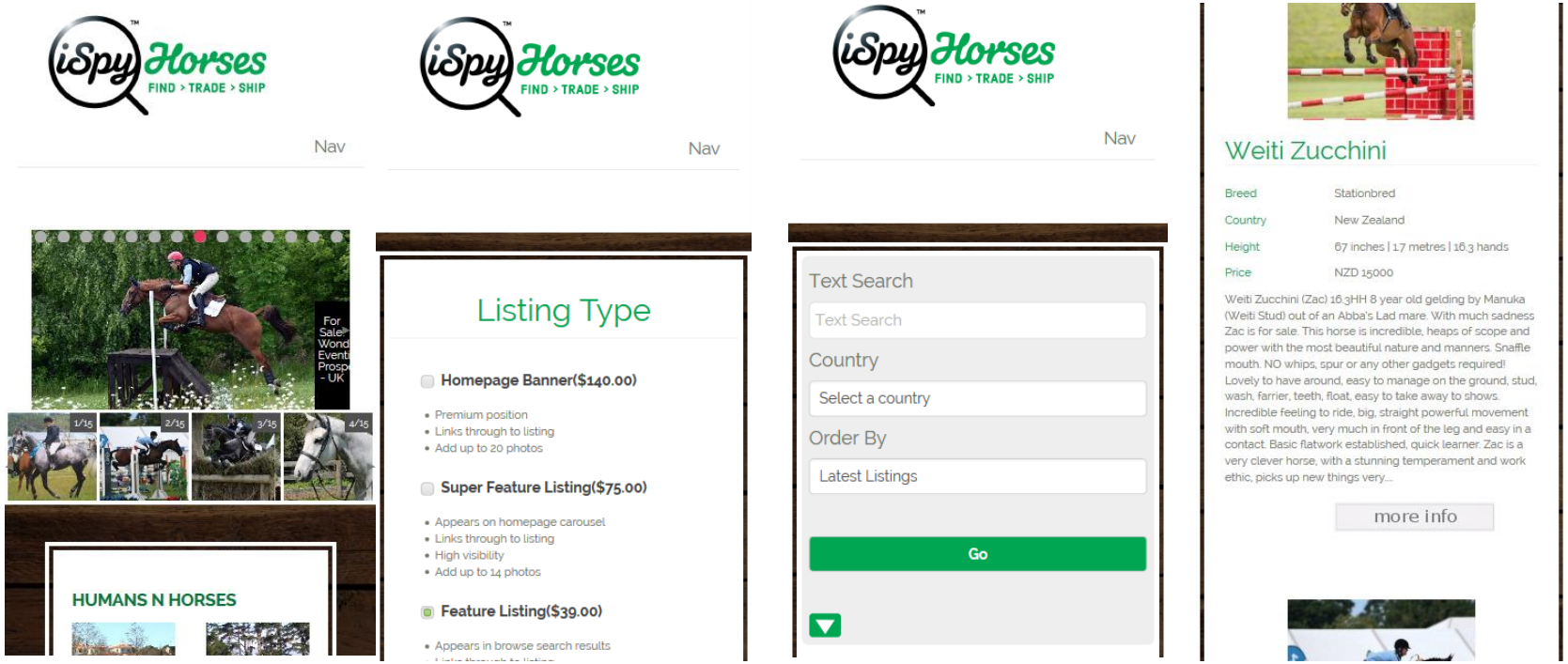
	Extra small devices Phones (<768px)	Small devices Tablets (≥768px)	Medium devices Desktops (≥992px)	Large devices Desktops (≥1200px)
Grid behavior	Horizontal at all times	Collapsed to start, horizontal above breakpoints		
Container width	None (auto)	750px	970px	1170px
Class prefix	`.col-xs-`	`.col-sm-`	`.col-md-`	`.col-lg-`
# of columns	12			
Column width	Auto	~62px	~81px	~97px
Gutter width	30px (15px on each side of a column)			
Nestable	Yes			
Offsets	Yes			
Column ordering	Yes			

HOME SELL BROWSE INFOCUS NEWS LOG IN
www.ispyhorses.com
Weekend Winner
View in
Horses for Sale
For Sale:
Sunkist CSNZ -
NZ

1366x768


HOME SELL BROWSE INFOCUS NEWS MY ACCOUNT LOG OUT
List Horse
TITLE
*Title will appear with listing.
ASKING PRICE($)
NZD
Or POA
BREED
Appaloosa
Arab
Foreign Breeds
Friesian
Kaimanawa
Morgan
Pinto
Quarter Horse
Standardbred
Thoroughbred
Warmblood
Other
Stationbred
Irish Hunter
Hanoverian
Paint
Holsteiner
Clydesdale
AGE
Select Age

360x640


iSpy Horses
FIND > TRADE > SHIP
Nav
HUMANS N HORSES
Listing Type
Homepage Banner($140.00)
Premium position
Links through to listing
Add up to 20 photos
Super Feature Listing($75.00)
Appears on homepage carousel
Links through to listing
High visibility
Add up to 14 photos
Feature Listing($39.00)
Appears in browse search results
Text Search
Country
Select a country
Order By
Latest Listings
Go
Weiti Zucchini
Breed
Stationbred
Country
New Zealand
Height
67 inches | 1.7 metres | 16.3 hands
Price
NZD 15000
Weiti Zucchini (Zac) 16.3HH 8 year old gelding by Manuka (Weiti Stud) out of an Abba's Lad mare. With much sadness Zac is for sale. This horse is incredible, heaps of scope and power with the most beautiful nature and manners. Snaffle mouth. NO whips, spur or any other gadgets required! Lovely to have around, easy to manage on the ground, stud, wash, farrier, teeth, float, easy to take away to shows. Incredible feeling to ride, big, straight powerful movement with soft mouth, very much in front of the leg and easy in a contact. Basic flatwork established, quick learner. Zac is a very clever horse, with a stunning temperament and work ethic, picks up new things very...
more info

Website Optimization

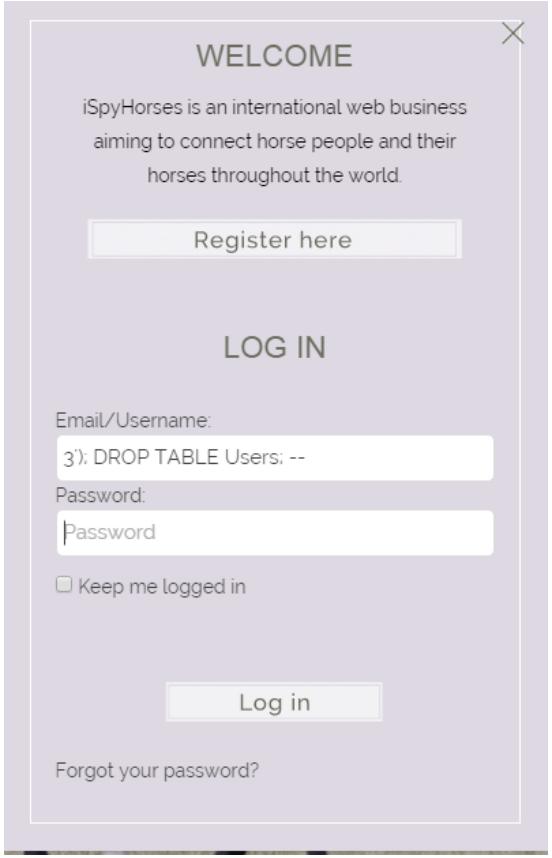
- Search Engine Optimization
  - SEO tools like Google Analytics are used to identify keywords
  - The title tag provides a brief summary of iSpyHorses to inform users of what they will see from the website
  - Description tag describes more details of the page
  - Each page includes only one header tag
  - Sitemap guides search engines throughout the website with the names and locations of pages
  - Image tag with an "alt" attribute provides more keywords

Website Optimization

- Other bits
  - Get rid of useless JavaScript
  - Specific JavaScript only loads when needed
  - Reduce the size of updated images
  - Lazy loading for rotated pictures

Security

- SQL injection
  - a code injection technique, used to attack data-driven applications, in which malicious SQL statements are inserted into an entry field for execution.
  - SELECT * FROM Users
    WHERE UserName = $input;



Cross-Site Scripting

- another type of injection
- allow injection of code into the client side of a web application

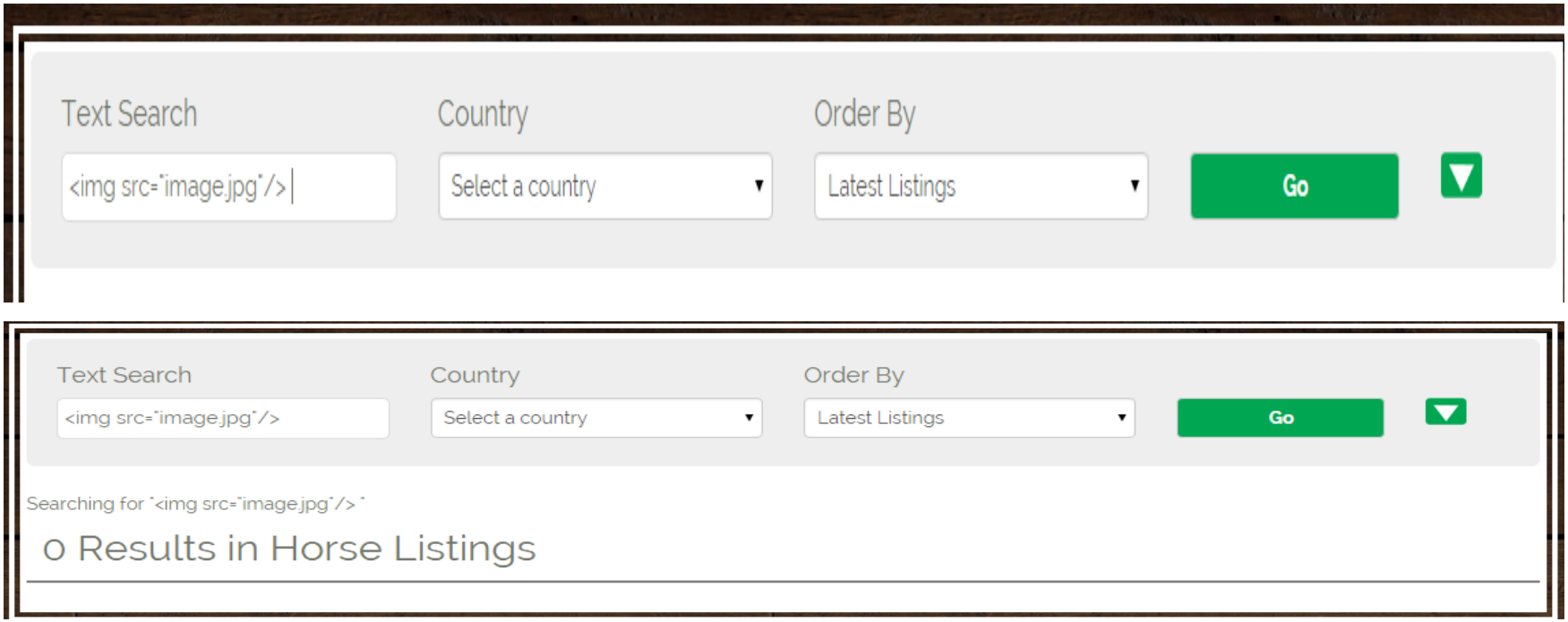


Image Upload

- Users are able to upload their own pictures
- Only allows right image extension (jpg/jpeg/png/gif)
- Resize and rename

Limitation

Originator	username TBC	#210
Message	Hi, I am trying to list a horse for sale however I am unable to upload any photos, when I click on the main photo or extra photo buttons nothing happens.... does your website work with SAFARI?	
Name provided	Michelle Hamilton	

- Several functions are not supported by older versions of some browsers
  - Image preview

Demo

- www.ispyhorses.com
- www.ispyhorses.com/ispy_new/admin/login

Acknowledgment

- Many thanks to Ulrich and Mano for their useful comments and suggestions.
- Many thanks to my mentor, Dave Wilcox

Thank you!

Any

Questions or Comments?