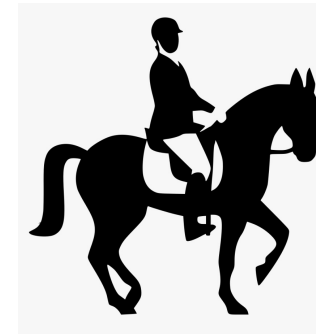


# BMWPHD



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BMW Performance Horse Database

# MEET THE TEAM

- Chirayu Jain
- Jerry Wu
- Madison Gresham
- David Hanft



# OVERVIEW

Introduction

Problem / Solution

Demo

Technical Details

Conclusion

Questions

NRHA Derby

FOUR SIXES

NRHA Derby

MARKEL

SAVING

RU



Video by EquinePromotion.Com

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National Reining Horse Association

# CLIENT: BROOKE WHARTON

- Company: BMW Quarter Horses
- Purpose: breed and raise horses for reining and reined competitions





# PROBLEM

- Almost all modern-day sports assessments are made using data analytics
  - New fans trying to learn the sport
  - Pros/ coaches/trainers/team owners to get the best performance for investments
- Currently all horse data is spread across multiple platforms that do not communicate with one another – hard and time consuming to gather data on horses

# CURRENTLY

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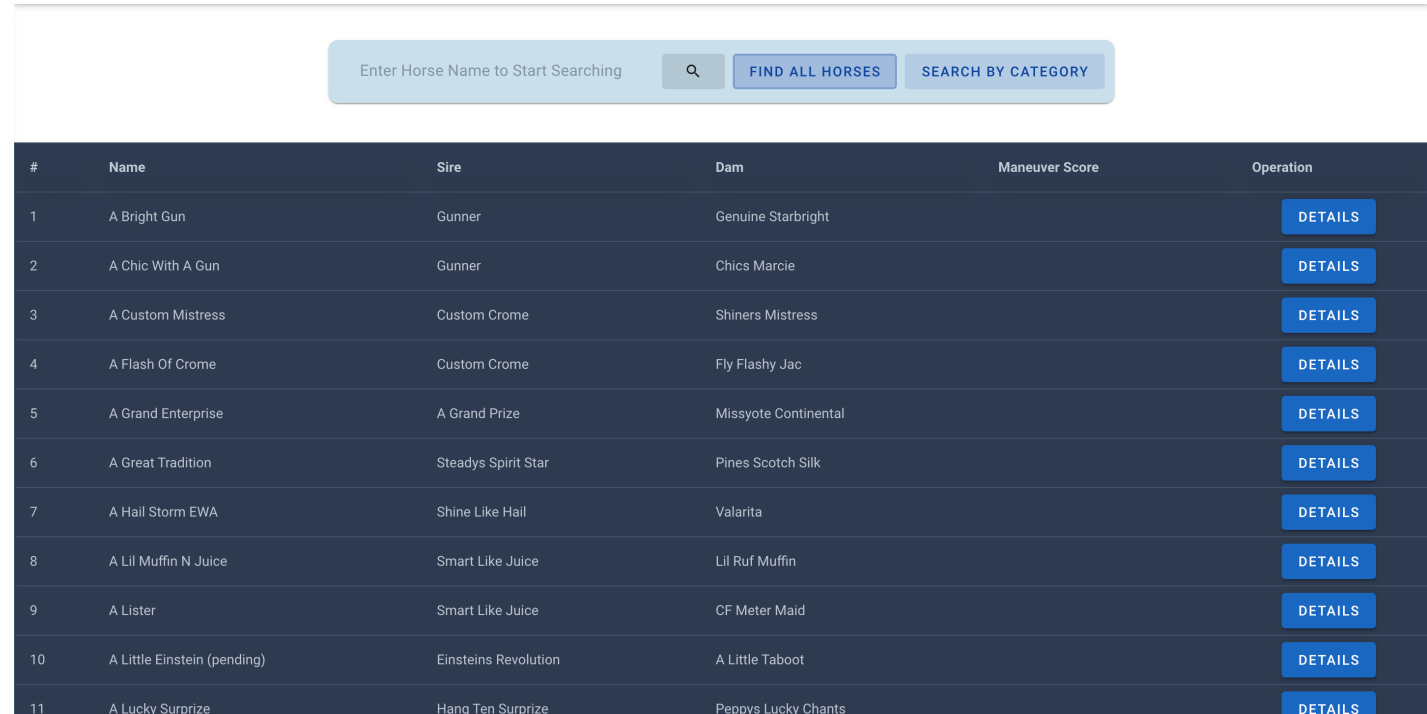
- No maneuver scores
- Data sometimes inaccurate
- Lacks a feature to search for horses based on specific score criteria and generate a report with the matching results.

Horse	Breed	Year	Color	Sex	Sire	Dam
A	ARABIAN			H	DERBES	BINT BIT
A	SHIRE	1864		H	GREAT BRITAIN12	DARLING171
A	QUARTER HORSE	2019		F	COLLEN ALL CHICS	PEPPYS CASH CAT
A		2013		H	MB MAYAL	-
A		~1980		C	-	-

Horse	Rider	Score	Show
SPOOKS GOTTA WHIZ	Shawn FLARIDA	233.5	Alltech FEI World Equestrian Games 2014
Finest Copyshot	Rudi Kronsteiner	233.0	NRHA European Futurity 2011
Tinker With Guns	Andrea Fappani	231.5	NRHA Futurity 2011
Guaranteed A Magnum	Jimmy van der Hoeven	231.5	NRHA Derby 2019
Colonels Shining Gun	Cira Baeck	231.5	Reining International de Lyon 2013
Houston Shine	Shane Allen Brown	231.0	NRHA Futurity 2011
COLONELS DANCING GUN	Gennaro Lendi	231.0	NRHA Breeders Futurity 2018
SHINERS VOODOO	ANN FONCK	231.0	NRHA EURO FUTURITY 2017
RS POLYPHEMUS JAC	PIERLUIGI CHIOLDO	231.0	MATURITY 2012
Great Sun Burst	Bernard Fonck	231.0	SVAG CS Classic and European Championship 2010

# OUR SOLUTION

- Aggregate all data into a single searchable database
- User-friendly interface
- Concrete and enhanced way to track horses



The screenshot displays a user interface for a horse tracking application. At the top, there is a search bar with the placeholder text "Enter Horse Name to Start Searching". To the right of the search bar are two buttons: "FIND ALL HORSES" and "SEARCH BY CATEGORY". Below the search bar is a table with the following columns: "#", "Name", "Sire", "Dam", "Maneuver Score", and "Operation". Each row in the table represents a horse and includes a "DETAILS" button in the "Operation" column.

#	Name	Sire	Dam	Maneuver Score	Operation
1	A Bright Gun	Gunner	Genuine Starbright		<a href="#">DETAILS</a>
2	A Chic With A Gun	Gunner	Chics Marcie		<a href="#">DETAILS</a>
3	A Custom Mistress	Custom Crome	Shiners Mistress		<a href="#">DETAILS</a>
4	A Flash Of Crome	Custom Crome	Fly Flashy Jac		<a href="#">DETAILS</a>
5	A Grand Enterprise	A Grand Prize	Missyote Continental		<a href="#">DETAILS</a>
6	A Great Tradition	Steadys Spirit Star	Pines Scotch Silk		<a href="#">DETAILS</a>
7	A Hail Storm EWA	Shine Like Hail	Valarita		<a href="#">DETAILS</a>
8	A Lil Muffin N Juice	Smart Like Juice	Lil Ruf Muffin		<a href="#">DETAILS</a>
9	A Lister	Smart Like Juice	CF Meter Maid		<a href="#">DETAILS</a>
10	A Little Einstein (pending)	Einsteins Revolution	A Little Taboot		<a href="#">DETAILS</a>
11	A Lucky Surprize	Hang Ten Surprize	Peppys Lucky Chants		<a href="#">DETAILS</a>



**DEMO**






Looking for horse status, recent matches, performance, data, etc? Check out our search engine

START SEARCH

# Welcome to BMW Performance Horse Database

BMW Quarter Horses breeds and raises prospects for the reining and reined cowhorse disciplines with a focus on pedigree, conformation, a good mind, and soundness. Click [here](#) for more information.



Enter Horse Name to Start Searching

#	Name	Sire	Dam	Maneuver Score	Operation
1	A Bright Gun	Gunner	Genuine Starbright		<a href="#">DETAILS</a>
2	A Chic With A Gun	Gunner	Chics Marcie		<a href="#">DETAILS</a>
3	A Custom Mistress	Custom Crome	Shiners Mistress		<a href="#">DETAILS</a>
4	A Flash Of Crome	Custom Crome	Fly Flashy Jac		<a href="#">DETAILS</a>
5	A Grand Enterprise	A Grand Prize	Missyote Continental		<a href="#">DETAILS</a>
6	A Great Tradition	Steadys Spirit Star	Pines Scotch Silk		<a href="#">DETAILS</a>
7	A Hail Storm EWA	Shine Like Hail	Valarita		<a href="#">DETAILS</a>
8	A Lil Muffin N Juice	Smart Like Juice	Lil Ruf Muffin		<a href="#">DETAILS</a>

BMWPHD

14	Highbrow Shugar Cat	Cat And Dulce	Branchs Catty Doc	<a href="#">DETAILS</a>
15	Lady Bright Star	Hesa Smart Chic	Custom Bright Star	<a href="#">DETAILS</a>
16	Mr Briteside	Wimpys Little Step	Go Red Pine	<a href="#">DETAILS</a>
17	Shine Bright Maggie	Shiners Lena Doc	Cats Okey Dokey	<a href="#">DETAILS</a>
18	Skeets Lil Hombre	Skeets Peppy	WSR Retsinas Sugar	<a href="#">DETAILS</a>
19	Smart Like Bruce	Smart Like Juice	Hill Country Sand	<a href="#">DETAILS</a>
20	Starbrights Spook	Smart Spook	Genuine Starbright	<a href="#">DETAILS</a>
21	Starbrite Shiner	Starlights Starbrite	Nic A Shiner	<a href="#">DETAILS</a>
22	Stars N Brite Lights	Starlights Starbrite	PHC Peppy Lady	<a href="#">DETAILS</a>
23	Vintage Peach Brandy	Hollywood Vintage	Hickorys Lil Peach	<a href="#">DETAILS</a>
24	Whiz Starbrite	Topsail Whiz	Chics Starlight	<a href="#">DETAILS</a>
25	Who Whiz Bonte	Who Whiz It	Crome Marks	<a href="#">DETAILS</a>

Enter Horse Name to Start Searching

#	Name	Sire	Dam	Maneuver Score	Operation
1	A Bright Gun	Gunner	Genuine Starbright		<a href="#">DETAILS</a>
2	Anne Get Your Gunner	Gunner	Miss Brim Star		<a href="#">DETAILS</a>
3	Brother Gun	Gunner	Shesa Smart Sister		<a href="#">DETAILS</a>
4	Colonels Rey Gun	Gunner	Reys Starlight		<a href="#">DETAILS</a>
5	Customized Gunner	Gunner	Custom Made Dunit		<a href="#">DETAILS</a>
6	Gotta West Coast Gun	Dun Gotta Gun	West Coast Bay		<a href="#">DETAILS</a>
7	Gray Gunlight	Gunner	Reys Starlight		<a href="#">DETAILS</a>
8	Gun Gotta Star	Dun Gotta Gun	Scarlet Stars		<a href="#">DETAILS</a>

### Categories

Enter Sire

Enter Dam

key word search

Name

Sire

Dam

Foal Date

Owner

# Horse: A Bright Gun

**Sire:** Gunner

**Dam:** Genuine Starbright

**Dam Sire:**

**Second Dam:**

**Maneuver Score:**

**LTE:**

**Show:**

**Horse Class:**

**Level:**

**European Opt.:** Yes

**Foal Date:** 1/6/09

**Year:** 2009

**Nominator:** Lance Griffin

FLAG HORSE: A BRIGHT GUN

GO BACK

DOWNLOAD AS PDF

# Horse: A Bright Gun

**Sire:** Gunner

**Dam:** Genuine Starbright

## Flag Horse: A Bright Gun

Which field would you like to suggest a change for?  
Dam Sire

Suggested Change  
Test Dam Sire

13 / 10

SUBMIT CHANGES FOR REVIEW

CLOSE

**Foal Date:** 1/6/09

**Year:** 2009

**Nominator:** Lance Griffin

FLAG HORSE: A BRIGHT GUN

## Request Management

User Email	Horse Name	Attribute	Suggested Change	Status	Actions		
chirayu@tcu.edu	A Custom Mistress	Show	TESTING	Pending			
chirayu@tcu.edu	A Bright Gun	Maneuver Scores	TEST2	Pending			
chirayu@tcu.edu	A Bright Gun	PE	TESTING FINISHED	Pending			
chirayu@tcu.edu	A Bright Gun	LTE	\$75,000	Approved			
chirayu@tcu.edu	Lonely At The Top	Level	4 Open	Rejected			
chirayu@tcu.edu	A Bright Gun	Name	Catajuice	Rejected			
chirayu@tcu.edu	A Bright Gun	Dam Sire	FLy Fly 2	Pending			
chirayu@tcu.edu	A Bright Gun	2nd Dam	jfoewfb;ouwebf;oubweofb	Pending			
chirayu@tcu.edu	A Bright Gun	2nd Dam	Shiners 2	Pending			
chirayu@tcu.edu	A Bright Gun	Dam Sire	Test Dam Sire	Pending			
chirayu@tcu.edu	Lonely At The Top	Dam	Testing Dam Flagging	Rejected			
chirayu@tcu.edu	A Flash Of Crome	Dam Sire	Test Dam Sire	Pending			









# Request Management

User Email	Horse Name	Attribute	Suggested Change	Status			Actions
<h2>Flaged Horse</h2>							
Horse Name A Bright Gun							
Attribute selected to change Dam Sire							
Suggested Change Test Dam Sire							
<a href="#">UPDATE CHANGES</a>				<a href="#">CLOSE</a>			
chirayu@tcu.edu	A Bright Gun	Dam Sire	Test Dam Sire	Pending	<input checked="" type="checkbox"/>		
chirayu@tcu.edu	Lonely At The Top	Dam	Testing Dam Flagging	Rejected	<input checked="" type="checkbox"/>		
chirayu@tcu.edu	A Flash Of Crome	Dam Sire	Test Dam Sire	Pending	<input checked="" type="checkbox"/>		



# User Management

Name	Email	Role	Active	Actions
Madison	madison@tcu.edu	Fan	true	 
Chirayu	chirayu@tcu.edu	Judge, Admin	true	 

# User Management

Name	Email	Role	Active	Actions
------	-------	------	--------	---------

## Edit User

Name  
Madison

Email Address  
madison@tcu.edu

Role  
Fan

Fan

Judge

Rider

Admin

# BMW Performance Horse Database is sponsored by BMW Quarter Horses

BMW Quarter Horses breeds and raises prospects for the reining and reined cowhorse disciplines with a focus on pedigree, conformation, a good mind, and soundness. They believe in mare power and always have a range of prospects available. BMW Quarter Horses has tailored their breeding program to the western performance disciplines of reining (NRHA) and reined cowhorse (NRCHA). The team is made up of Trainers, Reproduction and Foal Care, Vets, Sale Fitting, and Photographers.

BMWPHD can be contacted through the following:

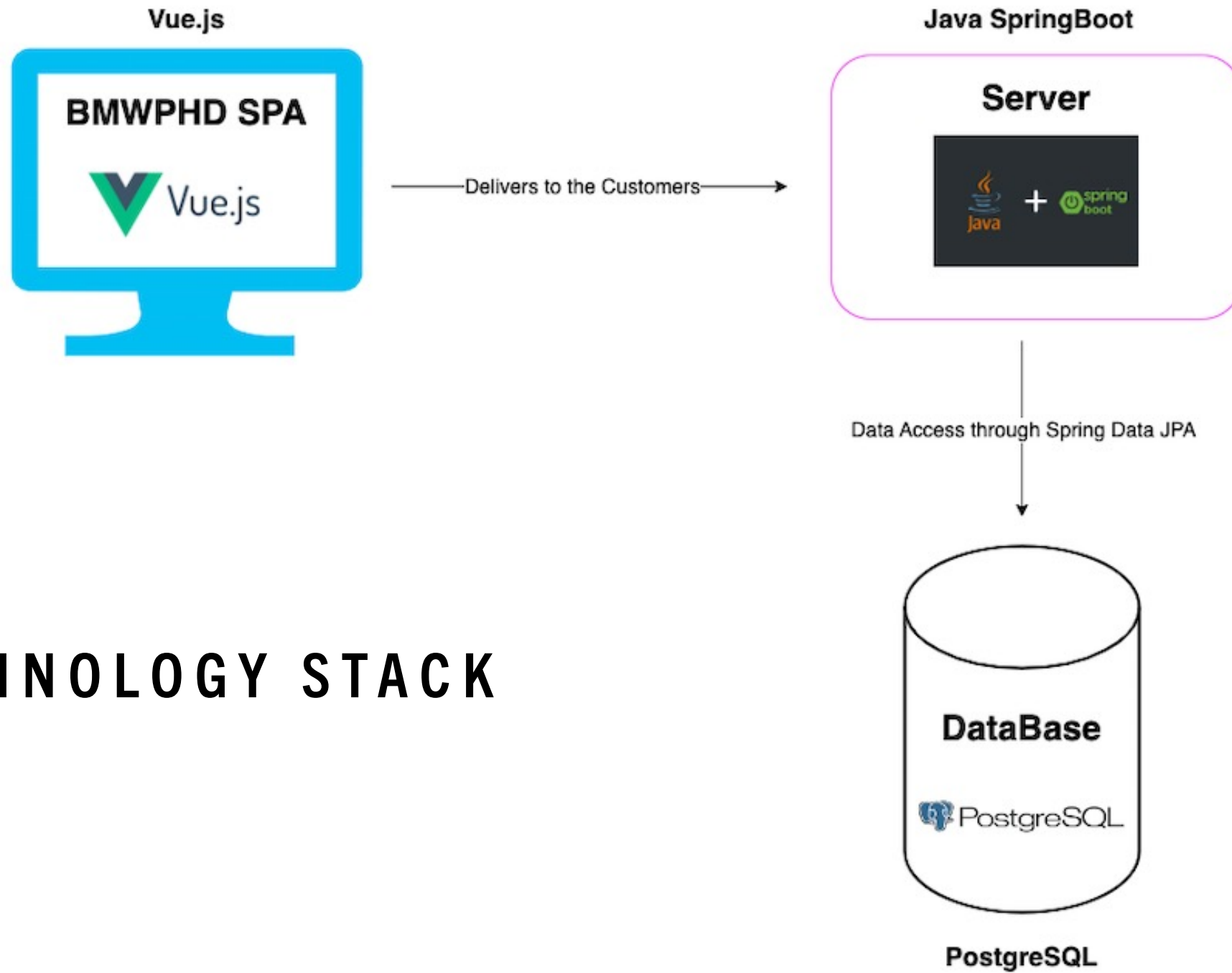
Phone: [\(940\) 357-1998](tel:(940)357-1998) Copy to Clipboard

Email: [bmw@cedartopcapital.com](mailto:bmw@cedartopcapital.com)

More information can be found on their facebook page through the link below:

[FACEBOOK HOMEPAGE](#)





# TECHNOLOGY STACK

# WEB SCRAPING

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Had to collect data from different sources of websites and the data was present in different formats.



Possible solutions:

HTTP Requests

Selenium

Python Scripts using 'requests'



Challenges:

Variety of websites

Durability of the scraper

Format of the data

# CHALLENGES



TEAM DYNAMICS



DATA CLEANING,  
INTEGRITY, AND  
AGGREGATION



SCALABILITY AND  
PERFORMANCE



USER INTERFACE  
AND EXPERIENCE



## LESSONS LEARNED

- Increased experience using a shared GitHub repository
- Present past week's work during standups
- Work will still be there, even if lose a team member
- Client comes first and their feedback is the priority
- Frameworks have pros and cons making it hard to customize



# FUTURE SCOPE



**QUESTIONS?**

