

1.1 Project Title

“Cape Cod Hoofprints, an online community for horse owners on Cape Cod.”

1.2 Capstone Category & Related Courses

Web Development

Related courses:

CSCI E-3- Web Programming/JavaScript

CSCI E-12- Website Development

DGMD E-10- Exposing Digital Photography

DGMD E-20- Mod, Mobile Front-End Design I

DGMD E-37- Motion Graphics, Story Visualization

DGMD E-50- Visual Communication Design

DGMD E-53- Designing Stories for the Web

1.3 Project Goal

The horse community on Cape Cod currently uses Facebook for networking, event planning, buying and selling products, and reviewing services. I want to provide a separate space just for them that they can use for all these things and more. To my knowledge, nothing like this currently exists.

1.4 Learning Goals

I plan to further develop my front-end web design skills using Wordpress. I also want to strengthen my JavaScript skills. As for new technology, I hope to use a new video editing software to create a short home page video for my site. I have only used After Effects and hope to broaden my scope with video editing. I will also be creating an interactive map, so I will be using Google Maps for more than just getting directions for the first time ever!

1.5 Elevator Pitch

“Cape Cod Hoofprints is an online community where horse owners can network, plan events, find reviews of local services, buy and sell items in a virtual yard sale, and use an interactive map to find the most accessible trails for horses in the area. They are currently using Facebook for many of these things, where the information they need can get lost in the shuffle. This community will be interactive and tailored towards their specific needs.”

1.6 Target Audience, Personas, & Empathy Maps

The overall population of Cape Cod is about 200,000 people. In the summer that goes up to around 500,000. This would be my number of potential users. For actual users, there are currently about 3,000 members of a group on Facebook called “Cape Cod MA Equestrian Community Bulletin Board”. I think most of them would use my site. Outside of them, I believe others who are interested in starting to take horseback riding lessons would also use my site.

Personas & Empathy Maps:



LAUREN LEWIS

Horse Owner
30 years old
Female

Location:
Cape Cod, MA

Occupation:
Phlebotomist

“I feel like I spend most of my time taking care of my horse instead of riding. I need a way to save time and money!”

NARRATIVE

- Lauren struggles to find time to ride her horse. She is busy making sure her barn gets cleaned every day, making sure her horse is scheduled for vet and farrier appointments... and working the night shift at the hospital on top of all that! Lauren is excited to try out Cape Cod Hoofprints to help save time.

GOALS

- Make vet, farrier and other necessary appointments all on one site.
- Find awesome trails to ride on that are guaranteed to be horse and trailer accessible.
- Sell old items she no longer needs for extra cash.

FRUSTRATIONS

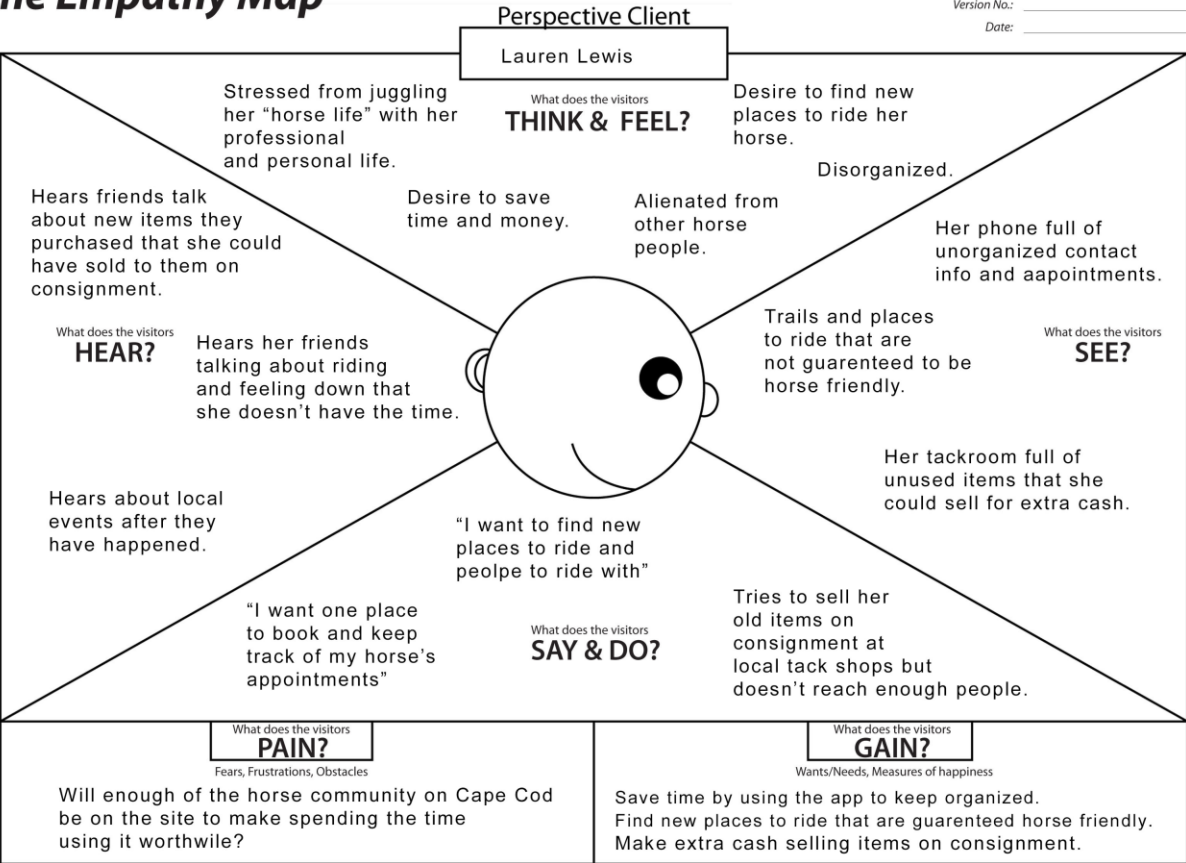
- Having to keep track of appointments
- Trailering somewhere to ride only to find that horses aren't allowed

TASKS

- Create a profile for herself and horse
- Connect with vet and farrier through site
- Enter bank account info so that she can get paid for items sold on consignment

The Empathy Map

Researchers: _____
 Version No.: _____
 Date: _____





MARY ZAR, DVM

Veterinarian
35 years old
Female

Location:
Cape Cod, MA

Occupation:
Veterinarian

“Being a younger vet on Cape Cod, I would love an effective way to market my services and have clients make appointments.”

NARRATIVE

- Mary is a young vet on Cape Cod who just recently opened a new practice. Cape Cod is a small community and it has been hard for Mary to book clients as many horse owners already have someone who they “have been using forever”.

GOALS

- Market her services and gain new clients. .
- Book appointments with new clients.
- Network with other service providers.

FRUSTRATIONS

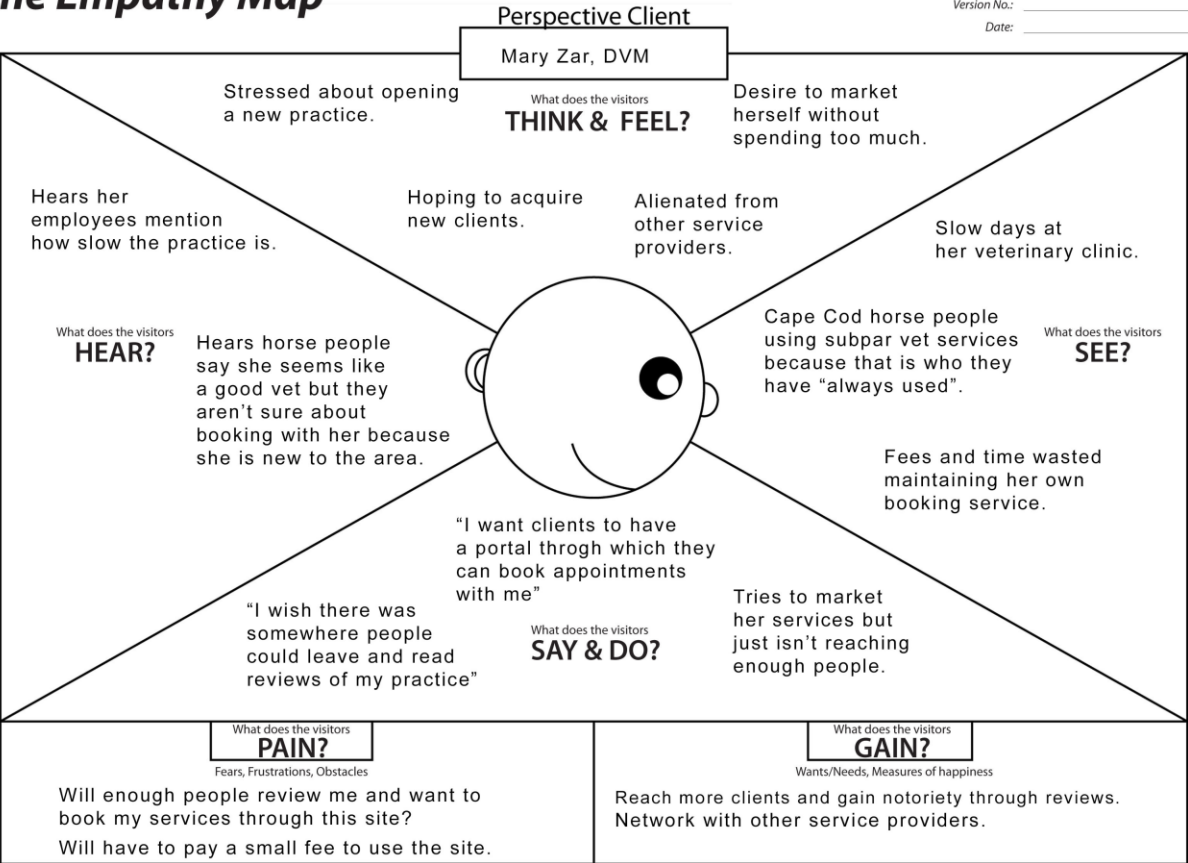
- Not being able to get new clients.
- Missing opportunities to team up with farriers and floaters.

TASKS

- Provide contact information.
- Allow potential clients to book through Cape Cod Hoofprints, maybe offering a discount for the first appointment.

The Empathy Map

Researchers: _____
 Version No.: _____
 Date: _____





PAIGE TURNER

Mother
32 years old
Female

Location:
Cape Cod, MA

Occupation:
Teacher

“I’m looking to sign my daughter Joelle up for horseback riding lessons but I have no idea where to start!”

NARRATIVE

- Paige’s daughter Joelle just turned six years old and has expressed interest in learning to ride horses. Joelle goes to a small school and none of her classmates ride horses. Paige wants to sign her daughter up for lessons but isn’t sure what barn to choose.

GOALS

- Read reviews of local barns and instructors.
- Book a lesson.
- Purchase equipment needed (boots, helmet) on consignment.

FRUSTRATIONS

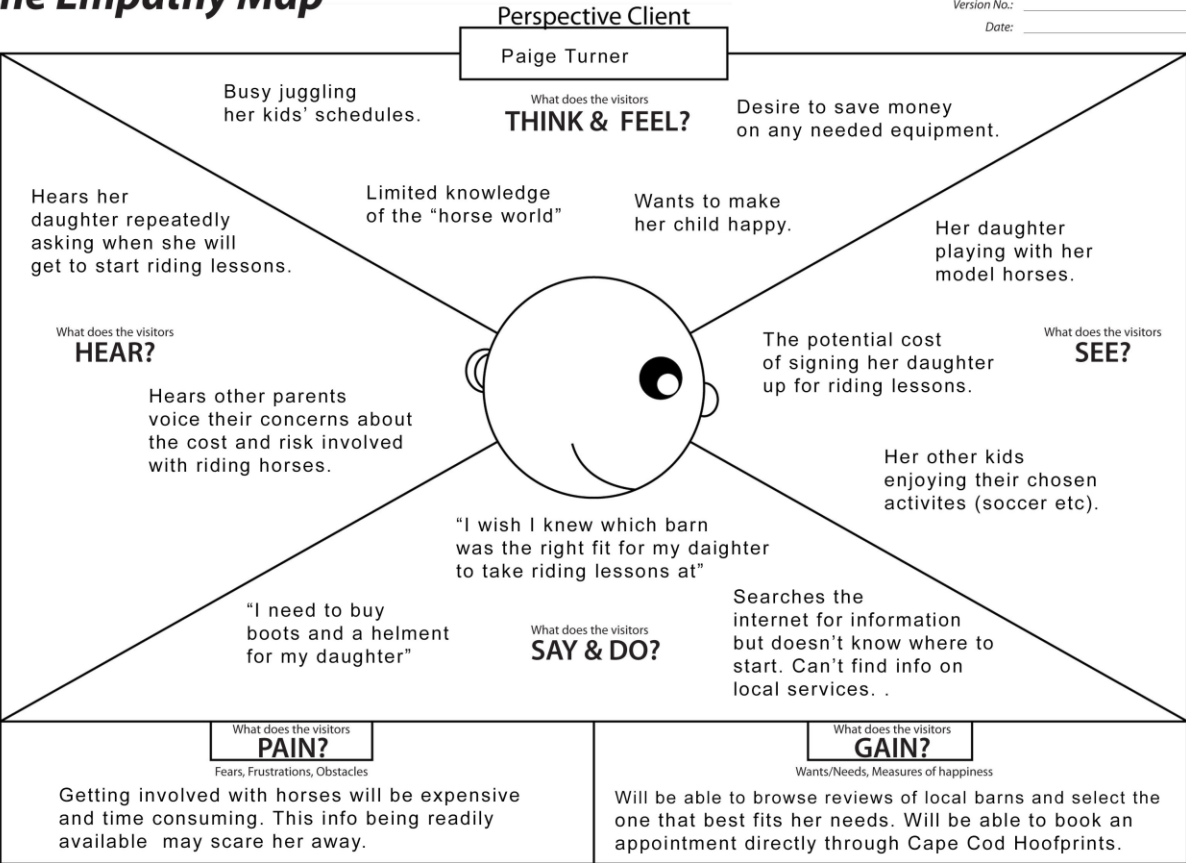
- Knowing nothing about horseback riding.
- Lacking equipment needed and not wanting to pay a lot for new equipment.

TASKS

- Create an account to purchase items on consignment. .
- Familiarize herself with riding disciplines so she knows which barns to consider for her daughter. .

The Empathy Map

Researchers: _____
 Version No.: _____
 Date: _____



1.7 Metrics, Rubric Table, & User Survey

	Minimum Viable Product	Matches the State of the Art	Exceeds the State of the Art
Number of visitors	100-500 visitors in first month	500-1,000 visitors in first month	1,000+ visitors in first month
Conversion rate	25-50 users create profiles in first month	50-75 users create profiles in first month	75-100+ users create profiles in first month
Content + Media	Room for improvement	Solid and some aspects stand out	Unique and memorable
User engagement	Moderate with signs of boredom	High, with few signs of boredom	High. Users return to the site consistently and the website is memorable to them
Comparison to competitors	Comparable to some, but does not stand out	Similar to other successful websites	Higher quality and more popular than other successful websites

User Survey:

- 1.) What features would you like to see added to our website?
- 2.) Is using our website easier than networking on Facebook?
- 3.) Would you recommend this website to your friends and colleagues?
- 4.) What is your preferred payment/delivery method for our shop?
- 5.) Do you find the trail map easy to use?
- 6.) What could make this site more useful for you?
- 7.) Would you ever consider advertising your services or events on our site?
- 8.) What comes to your mind when thinking about our website?
- 9.) How would you rate our website on a scale of 1-10?
- 10.) What do you like the most about our website? The least?

2. Competitor Review

SmartPak Equine

SmartPak began by just selling the SmartPak supplement feeding system, which are custom-made, pre-measured, sealed, and labeled daily doses of your horse's supplements. The company has since grown into something much larger than that and is now the "largest online tack store in the U.S.". For many horse owners, it is the first place they look for horse products.

Pros- This site has everything you could ever need for your horse and farm. They sell supplements, apparel, tack, blankets, and even products for dogs. They offer free shipping on all products to farms, and free shipping on SmartPaks.

According to Yelp, the company has good customer service.

Cons- The CEO of the company, Fraser Cameron, is not an equestrian himself. His bio on SmartPak's website says he is "excited to start taking riding lessons and become an active participant in the equestrian community". This could be a con as he may not currently fully understand the customers' needs. The company has a few apps available which have low reviews.

AllTrails

AllTrails is hoping to be "the largest collection of hand-curated trail guides". This site helps people find "the perfect hike, bike ride, or trail run" and "easily find dog or kid-friendly trails". The site also allows users to create custom maps from their computer. They have both free and paid account options.

Pros- I use this site a lot and find it very helpful in locating trails. The site is very interactive and allows users to upload photos from trails and leave reviews. I find this to be much better than simple descriptions since people can share their individual experiences from different times of the year. I also think it is nice to read the perspectives of people with different hiking abilities. The site also notes whether trails are dog friendly, kid friendly, etc.

Cons- I have sometimes found the site to be hard to use. For example, to find exact trail head locations you click on a map and just see it there. But if I am using my phone and don't have the AllTrails app, this can be hard to use. The actual address for the trail head is not often listed, and it would be better if it was so that users could easily put that address in their own GPS.

Trail Meister

Trail Meister is a guide to horse riding trails and horse camps. The site features trail maps, photos, reviews, horse trailer driving directions, videos, and tips.

Pros- This site caters to a very specific demographic. Most people don't think about maneuvering a horse trailer when going on a trip, but horse people do, and Trail Meister has got them covered. When you search for your location, a seemingly easy to use map comes up with cute little horse symbols marking where horse accessible trails can be found. Below the map is a list of locations with available activities and amenities listed.

Cons- Immediately upon searching my location, I noticed that many trails I have used and that are horse friendly are not there. I think this site is geared more toward the Western part of the country. There are tons of trails in Massachusetts that are horse friendly, and this site only has maybe 10 on the map. The first thing the user sees when they get to the site is an advertisement banner, which I find jarring.

I consider these three websites to be my direct competition. SmartPak is based in Plymouth, which is less than an hour away from where my potential users live. SmartPak is very familiar to them. However, SmartPak does not offer the community aspect I am going to include with my site. Users consume products and information from SmartPak, they do not contribute to it. AllTrails is extremely interactive, but I hope to make my site more user friendly and more specific to my community. AllTrails has over 10 million users, whereas my project will be more personal. I consider TrailMeister to be my most direct competitor, as they feature the trail maps and reviews specifically for “horse people”. I want my site to be more location specific and interactive, but I will look here for inspiration.

Features	SmartPak	AllTrails	TrailMeister	Cape Cod Hoofprints
Media Type	Website	Website/App	Website	Website/App
Audience	General and lifestyle specific	General and region specific (U.S.)	General and lifestyle specific	Region and lifestyle specific
Interactivity	Low interactivity	High interactivity	High interactivity	High interactivity
Photographs	Professional quality	High/medium quality	Medium/low quality	High/medium quality
Maps	N/A	High quality	Google Maps	Google Maps?
Design	High quality	Medium quality	Medium quality	?
Narrative	Written text, photographs	Maps, reviews, photographs	Maps, reviews, written text	Maps, photographs, written text
Narrative Style	Ecommerce	Interactive and informative	Interactive and informative	Interactive, informative, ecommerce
Products	Brand new products	N/A	N/A	Brand new products and resale products
Payment	Credit cards, Paypal	Credit cards, Apple pay	N/A	Credit cards, Paypal, Apple pay, Amazon pay

3. Technologies

Wordpress

Wordpress is a content management system based in PHP and MySQL. It features a plugin architecture and a template system. Wordpress is most associated with blogging, but has evolved to support other types of web content including forums, media galleries, membership sites, learning management systems, and online stores.

Courses: DGMD E-53- Designing Stories for the Web

I will be using Wordpress because my website is going to have a lot going on, and Wordpress is extremely versatile. Competitors for Wordpress include: Ghost, Drupal, Weebly, SquareSpace, Wix, etc. I am choosing Wordpress because I have used a few of these other website building softwares and they just don't compare. Also, whenever I visit a site built using one of these, I feel like it is too clear that the designer used it. I feel that Wordpress is more subtle. Also, I will be able to use plugins to allow people to make accounts, build profiles, buy things from my site, etc. I used Wordpress in DGMD E-53, but we didn't go very deep into what it can do. I will be teaching myself how to use many new plugins and hopefully teaching myself to use Javascript in the backend with Wordpress as well.

Adobe Photoshop

Photoshop is a raster graphics editor. It has become the industry standard in digital art as a whole.

Courses: DGMD E-50- Intro to Visual Communication Design

Professional: Freelance Graphic Designer for Schneider Electric

I took my first Graphic Design class in high school and am very comfortable with Photoshop. I have been using it professionally and personally for over 10 years. I will be using Photoshop to create the brand identity and other media for my site. I will use Photoshop because it is the industry standard and other photo editing softwares just don't compare. I can see why using free softwares like Canva can be attractive, but it does not offer the same versatility.

Adobe After Effects

After Effects is a digital visual effects, motion graphics, and compositing application. It can be used for keying, tracking, compositing, and animation.

Courses: DGMD E-37- Intro to Motion Graphics and Story Visualization

I plan to have an intro video on my homepage, and maybe some informational videos throughout my site. I will use After Effects because I feel fairly comfortable using it and have access to it as part of my creative cloud subscription.

My Maps- Google Maps

My Maps allows users to create and share custom maps, and allow others to see and edit the maps. Users can embed maps in websites or blogs.

I will be teaching myself how to use this technology.

The main attraction for my site will be the interactive trail map for Cape Cod where users can find trails to bring their horses to, add trails to the map, and rate the “horse accessibility” for those trails. I may explore other technologies for this, such as Open Street Maps. However, many people already use Google maps for directions, so I’m hoping using it will make my site more user friendly.

Canon Rebel T6 Camera

This camera is equipped with an 18 MP CMOS image sensor and a powerful image processor for highly detailed, vibrant photos and videos.

Courses: DGMD E-10- Exposing Digital Photography

I am planning to take my own photos and videos for the site. My project is designed for a very specific audience, so I do not want to use stock images. I want it to feel personal. I am excited to further hone my photography skills through this project.

[4. Developer Manual/ Product Design/ Methods](#)

Design Workflow:

Wordpress-

- Purchase my domain in Dreamhost and install Wordpress.
- Choose a theme.
- Install necessary plugins for: user accounts, e-commerce, forums, reviews, etc.
- Use Javascript/CSS to further customize my Wordpress design.

Google Maps (My Maps)-

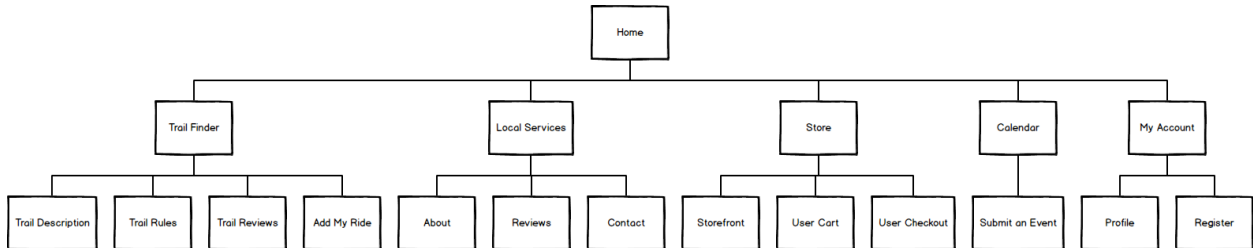
- Create a map.
- Pin trails I am familiar with.
- Embed map onto my site.
- Make map editable by users.
- Link from map to pages with info/photos/reviews for each trail.

Camera-

- Capture images of horse related services/events around Cape Cod.
- Capture images of trailheads for Trail Finder.

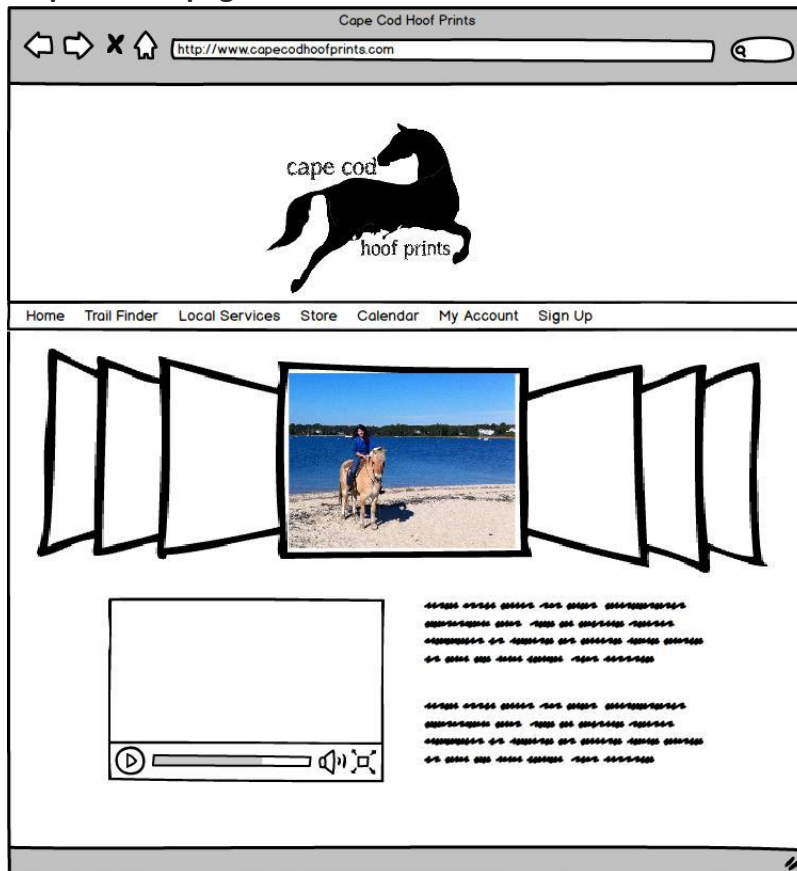
Adobe Creative Suite-

- Use Photoshop and Illustrator to create media for my site.
- Use Lightroom to edit photographs
- Use After Effects or Premiere Pro to make a short intro video for my homepage.



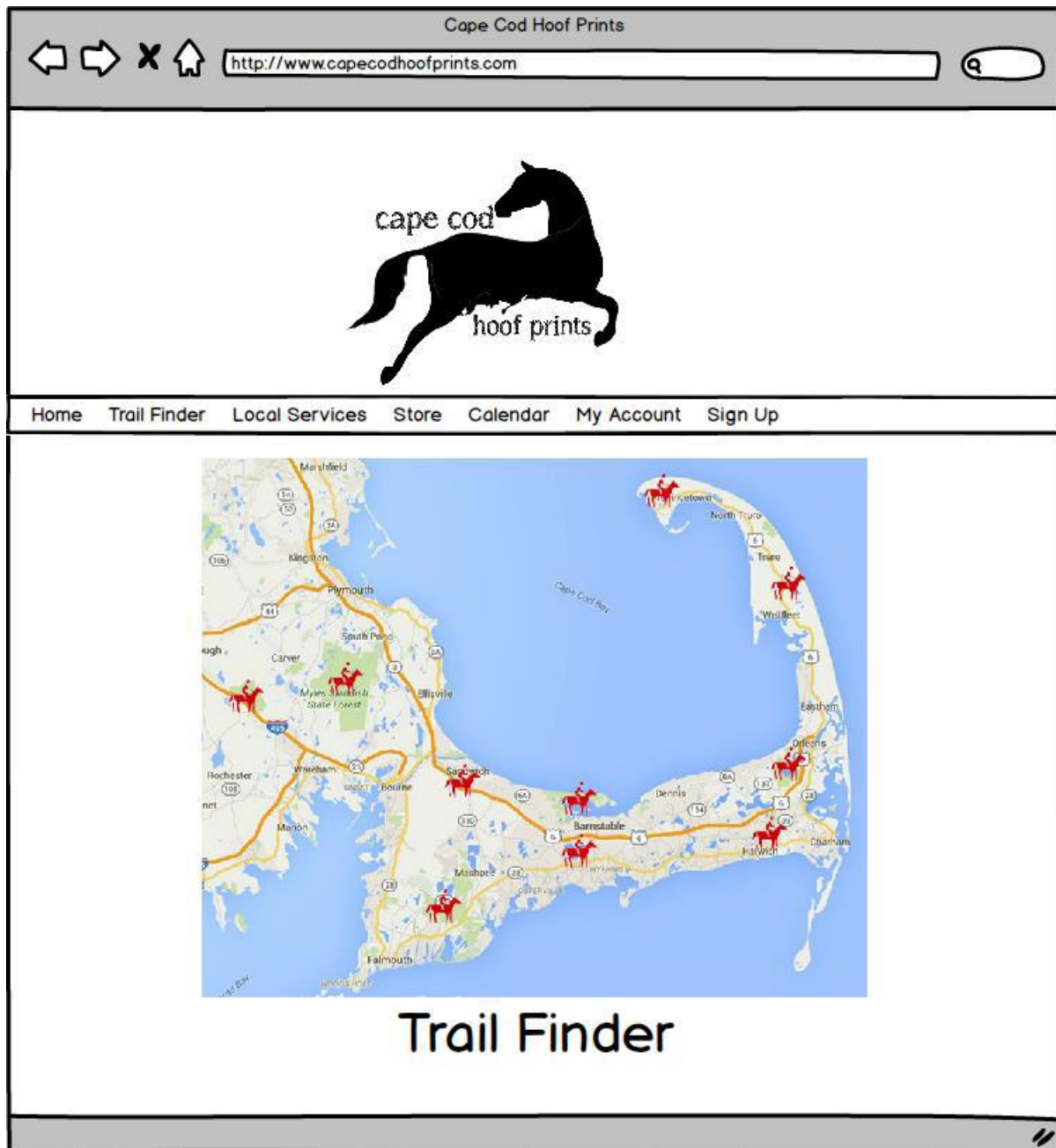
5. User Journey

Step 1- Homepage:



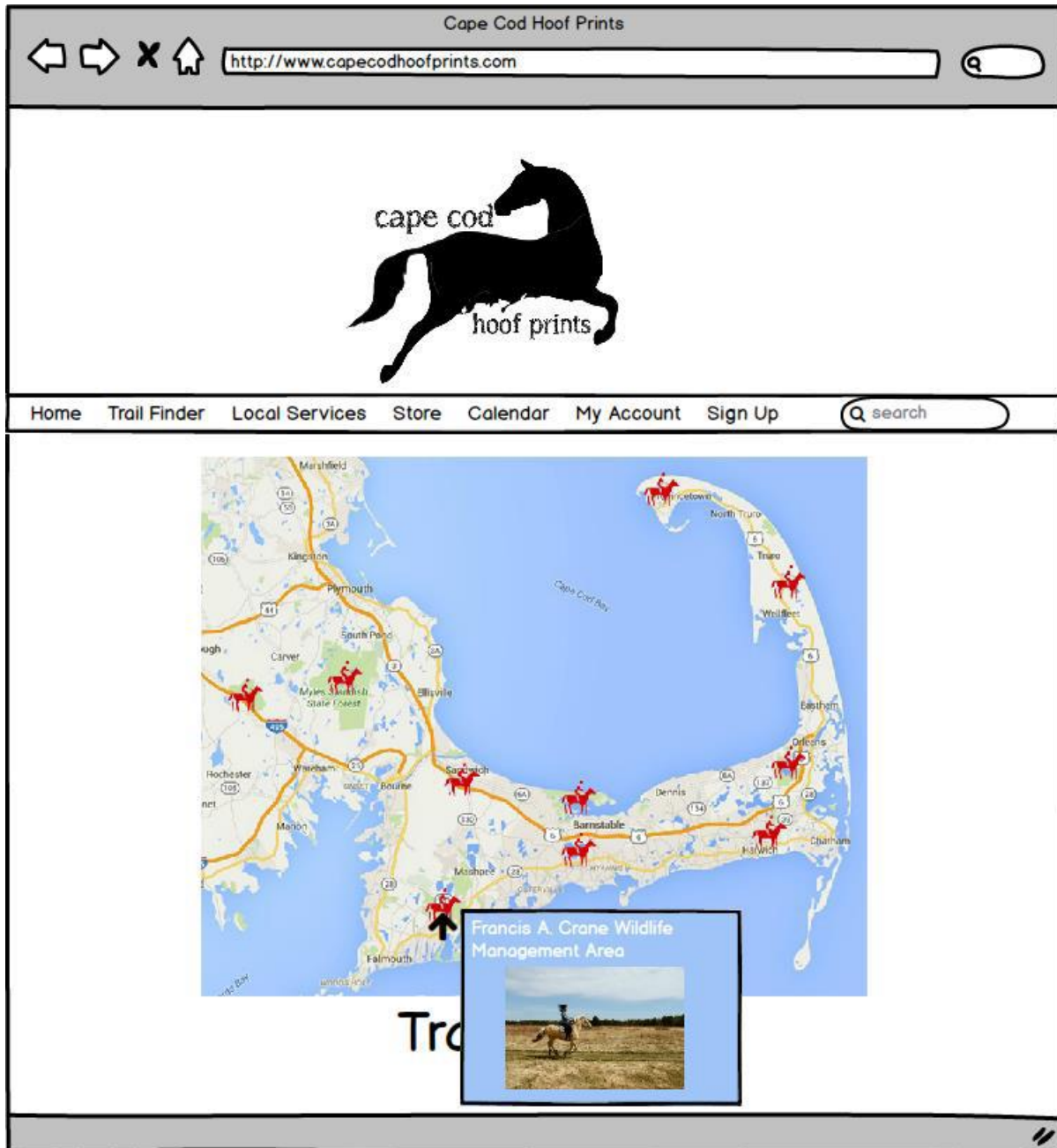
The user is greeted by a homepage which will feature a cover flow of images taken of horses and horse related events on Cape Cod. They will also see a short description of what the site has to offer and a short intro video. From here, they can use the navigation bar to hop to other pages.

Step 2- Trail Finder:

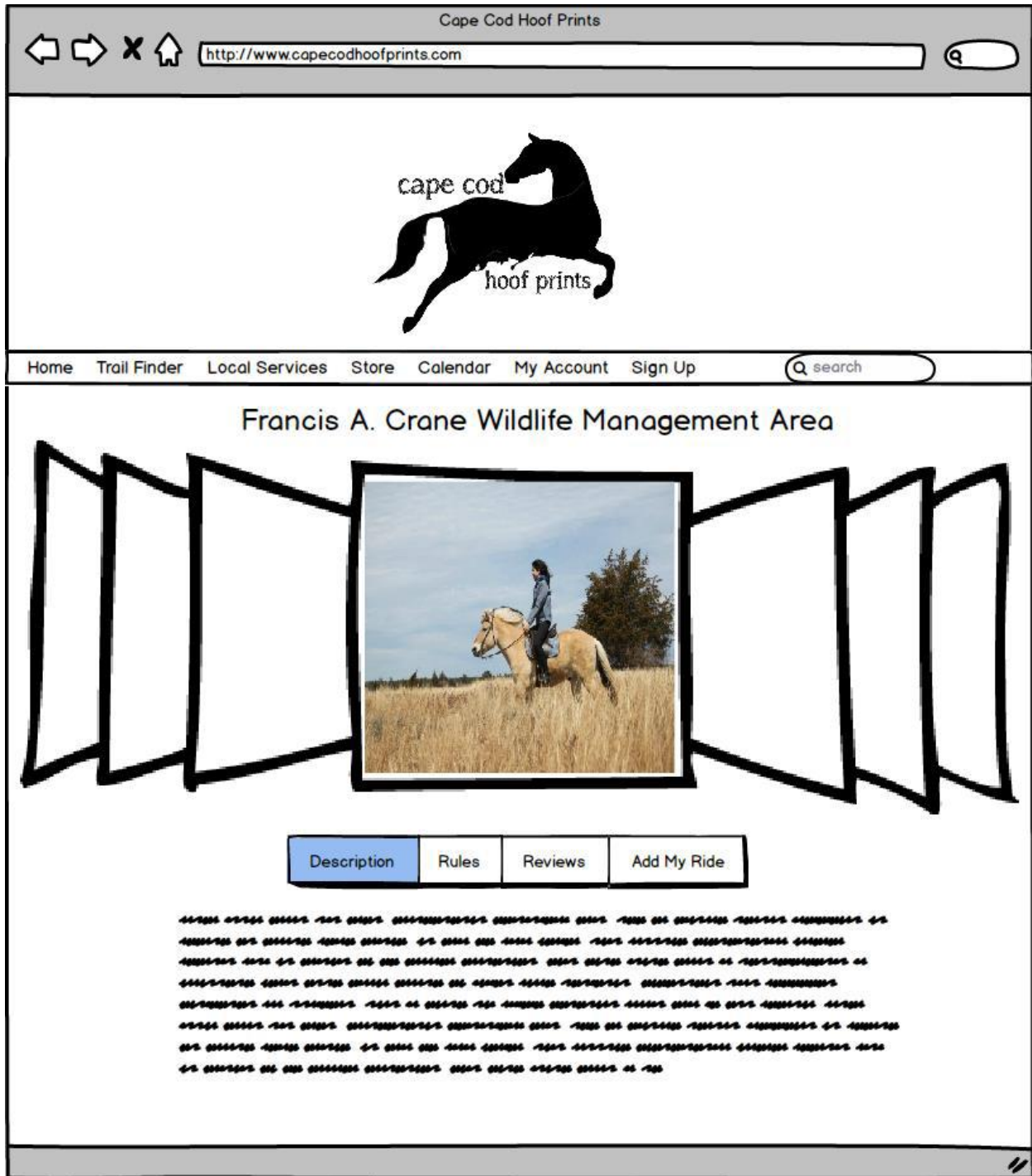


The screenshot shows a web browser window with the address bar displaying <http://www.capecodhoofprints.com>. The page features a logo with a black silhouette of a horse and the text "cape cod" above it and "hoof prints" below it. A navigation bar contains the following links: Home, Trail Finder, Local Services, Store, Calendar, My Account, and Sign Up. Below the navigation bar is a map of Cape Cod with several red horse icons placed across the island, indicating horse-accessible trails. The text "Trail Finder" is centered below the map.

The next page on the navigation bar is the Trail Finder. Here, users will see icons on a Google Map indicating where they can find “horse accessible” trails in the area.



When the user clicks on an icon, the name of the trail and a preview image will pop up. There may also be icons here indicating what amenities are available at the trail. The user can click on the name of the trail to be brought to a page with more detail.




This is what the user will see when they choose to go see the details about a trail. At the top of the page will be an image gallery of admin and user submitted photos from the trail. Here the user can navigate to read a description of the trail, read the rules and regulations for the trail, read reviews of the trail, and “add their ride”, meaning submit photos and a review.

Step 3- Local Services

Cape Cod Hoof Prints

http://www.capecodhoofprints.com




Home Trail Finder Local Services Store Calendar My Account Sign Up search

Local Services Directory

Click on a service to learn more!

Name	Service	Website	Phone Number
Leach Animal Hospital	Veterinary	www.leachanimalhospital.com	555-555-5555
Marina Cesar DVM	Veterinary	N/A	555-555-5555
Highland Hill Veterinary LLC	Veterinary	www.highlandhillvet.com	555-555-5555
Note Viera	Equine Dentist	N/A	555-555-5555
Nick Denson	Farrier	www.equinehoofcare.com	555-555-5555
Alliance Equestrian Center	Training-Boarding-Lessons	www.allianceequestriancenterllc.com	555-555-5555
Mills River Rescue	Rescue	www.millsriverrescue.com/	555-555-5555

Alliance Equestrian Center LLC



About

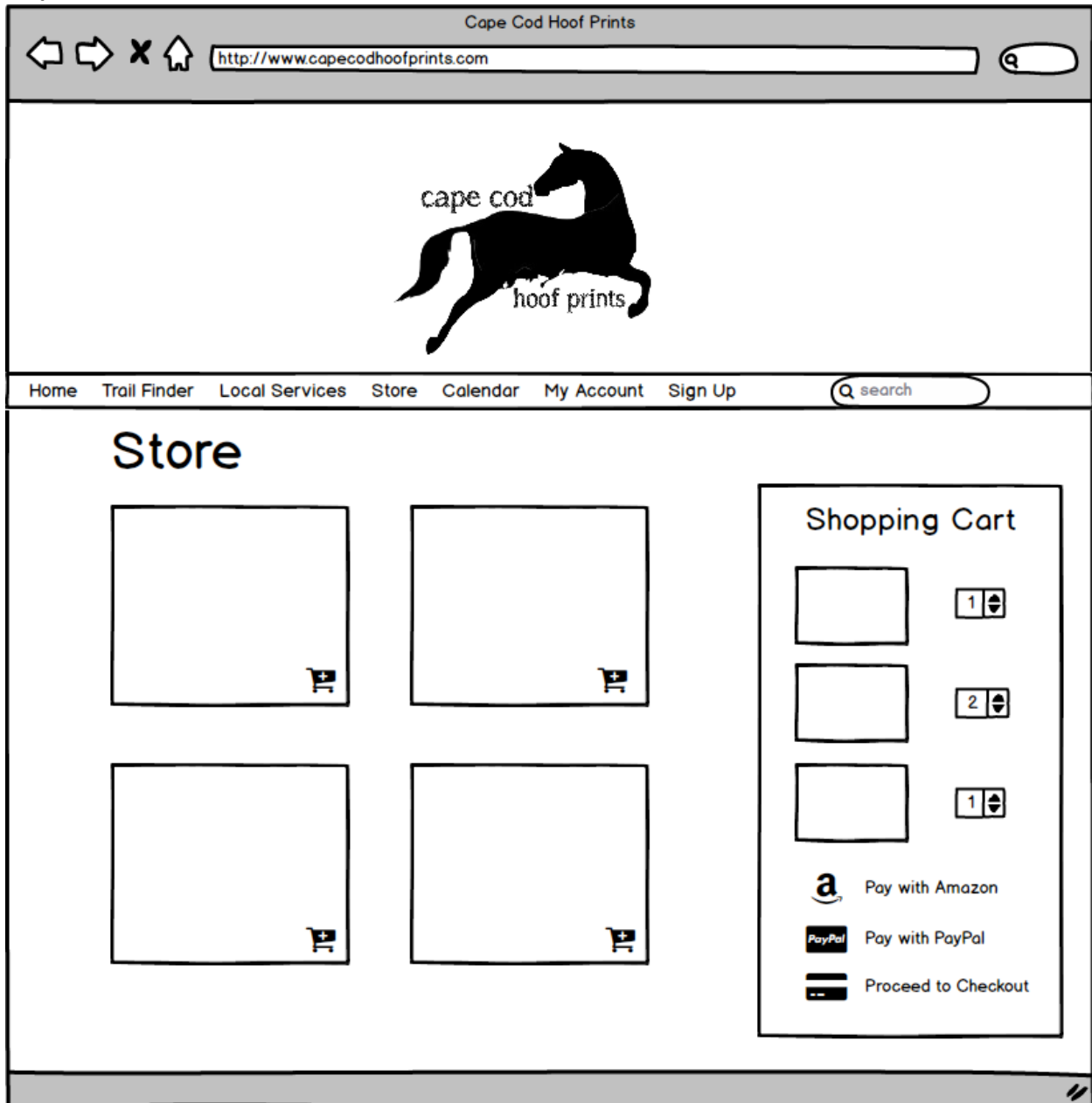
Reviews

Contact

Placeholder text for the Alliance Equestrian Center LLC page content.

The next page available in the navigation bar is “Local Services”. Here users will see a list of veterinarians, equine dentists, lesson facilities, and more in the area. When they click on a service from the list, they will see a description at the bottom. Here they can read reviews of the service and contact them as well. Some services may elect to allow booking (lessons, appointments, etc) through CCHP.

Step 4- Store



Next is the storefront. This will feature items posted for sale by other users, as well as CCHP merchandise. Users will be able to see their cart on the right hand side of the screen. They can choose to pay with Amazon, PayPal, or with a credit card.

(Allowing users to post items for sale and paying them out will be a learning curve for me so I was not sure how to represent this using a sketch just yet!)

Step 5- Calendar:

The screenshot shows a web browser window with the URL <http://www.capecodhoofprints.com>. The page title is "Cape Cod Hoof Prints". The logo features a silhouette of a horse with the text "cape cod" above it and "hoof prints" below it. The navigation menu includes: Home, Trail Finder, Local Services, Store, Calendar, My Account, Sign Up, and a search bar.

Calendar

NOVEMBER 2019

S	M	T	W	T	F	S
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
1	2	3	4	5	6	7

[Click here to submit an event!](#)

Events Happening on 11/2/2019:


Fundraiser at Mills River Rescue
Pony Rides, Face Painting, and More!
12pm-4pm
240 River Rd, Marstons Mills, MA
Visit www.millsriverrescue.com for more info!

NBHA Barrel Show
10am-5pm
1445 Race Lane, W Barnstable, MA
Visit www.cjsranch.net for more info!

The events calendar will feature a monthly calendar. Users will click on a date and the events happening on that date will pop up on the right hand side. If users wish to submit an event, they can click on the button below the calendar.

Cape Cod Hoof Prints


http://www.capecodhoofprints.com



Home Trail Finder Local Services Store Calendar My Account Sign Up search

Submit an Event:

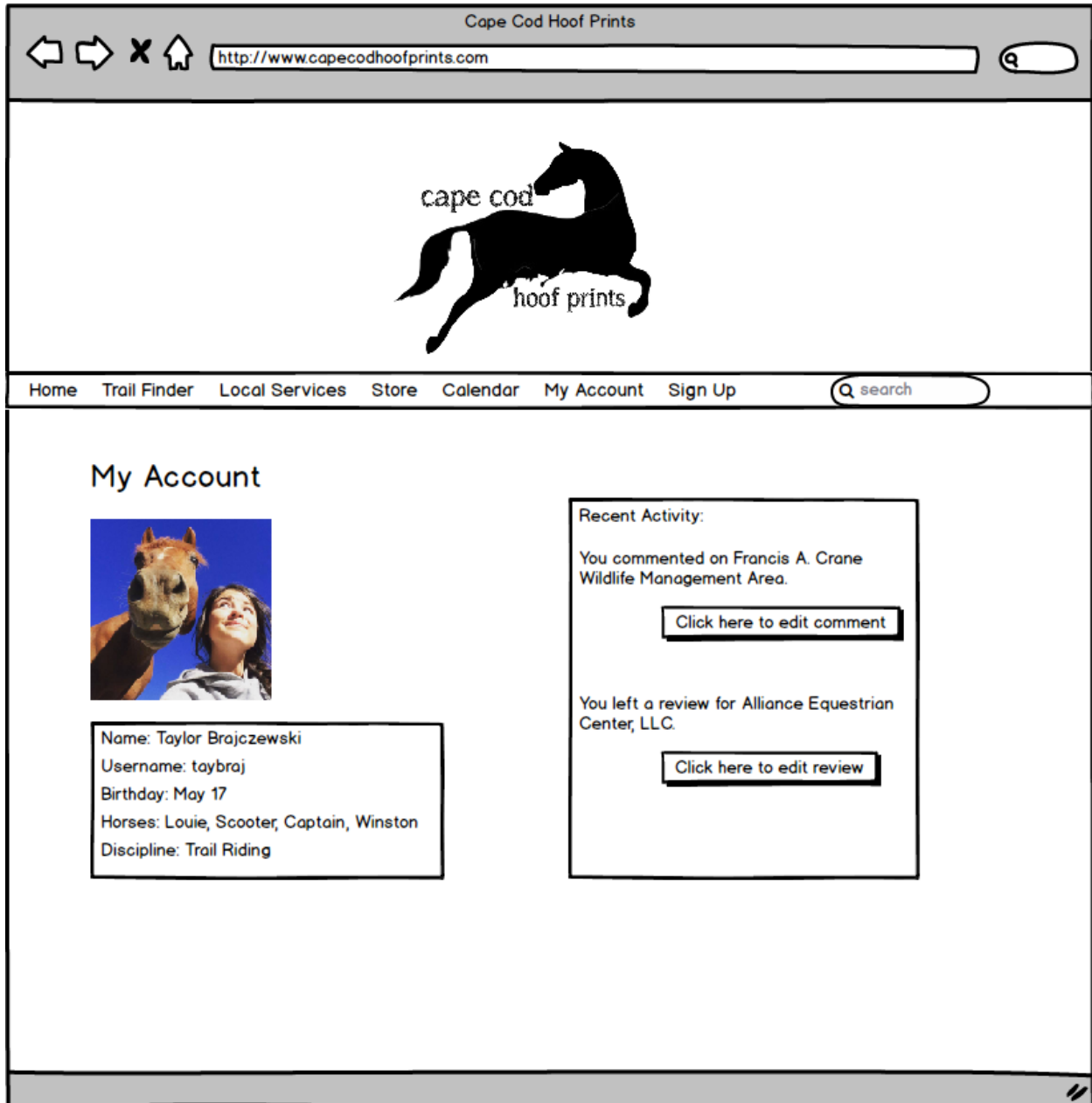
Event Name:

Date & Time: 

Description:

Here is the event submit page. Users will simply submit their event name, date and time, and description for the event.


Step 6- My Account/Sign Up:



All users will have a profile. The profile will feature their information as well as a box to the right linking to their recent activity. When they view other users' profiles, they will see the recent activity and have a link to go respond to the other user. Later we may implement "horse profiles" for each user's individual horses.

Cape Cod Hoof Prints

http://www.capecodhoofprints.com



Home Trail Finder Local Services Store Calendar My Account Sign Up search


Sign Up with CCHP

Name:

Email:


Username:

Billing Address:

Birthdate: / / 

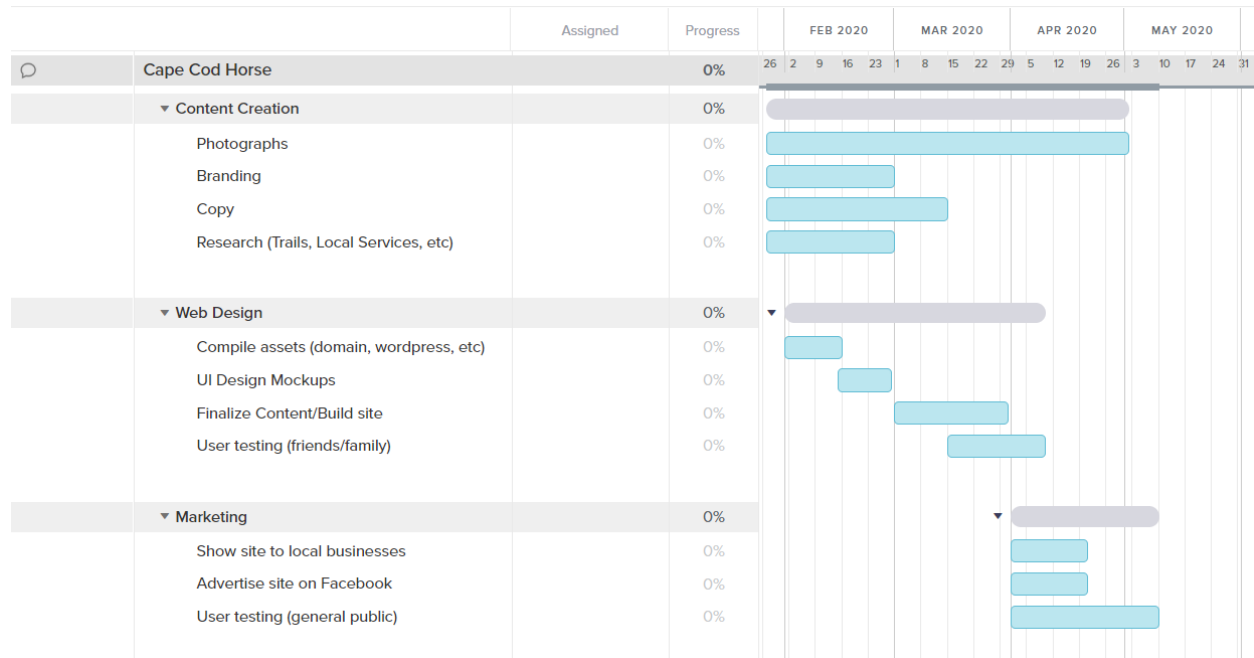
Riding Discipline:

My Horses:



When users click “sign up” they will be brought to a simple form where they will be asked for their information. We may implement a way to verify that they are from the area before sending them an email to complete sign up and create a password.

6. Work Plan and Milestones



Milestone	Completion Date	Description of Deliverables
Compile assets	2/15/20	Decide on domain name, purchase domain with hosting, install Wordpress and necessary plugins. Decide how Javascript may be used on the back end.
Research	3/1/20	Complete research on trails, local businesses and services, and events.
Branding	3/1/20	Complete logos and media for site.
Mockups	3/1/20	Have detailed mockups of the user journey complete using Balsamiq.
Copy	3/15/20	Using information compiled, complete copy for site (trail descriptions, local services descriptions, etc).
Site Build	4/1/20	Have polished draft of site live.
User Testing (Friends/Family)	4/10/20	Have friends and family use site, create accounts, and give feedback on UX. Make necessary adjustments.
Marketing	4/20/20	Market site to local businesses and horse community on Facebook.
Photographs	5/1/20	Finalize photographs for site (late completion date so they are not all winter photos!)
User Testing (Public)	5/10/20	Collect feedback from initial marketing efforts, make adjustments, and begin expanding marketing efforts.

6. References

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