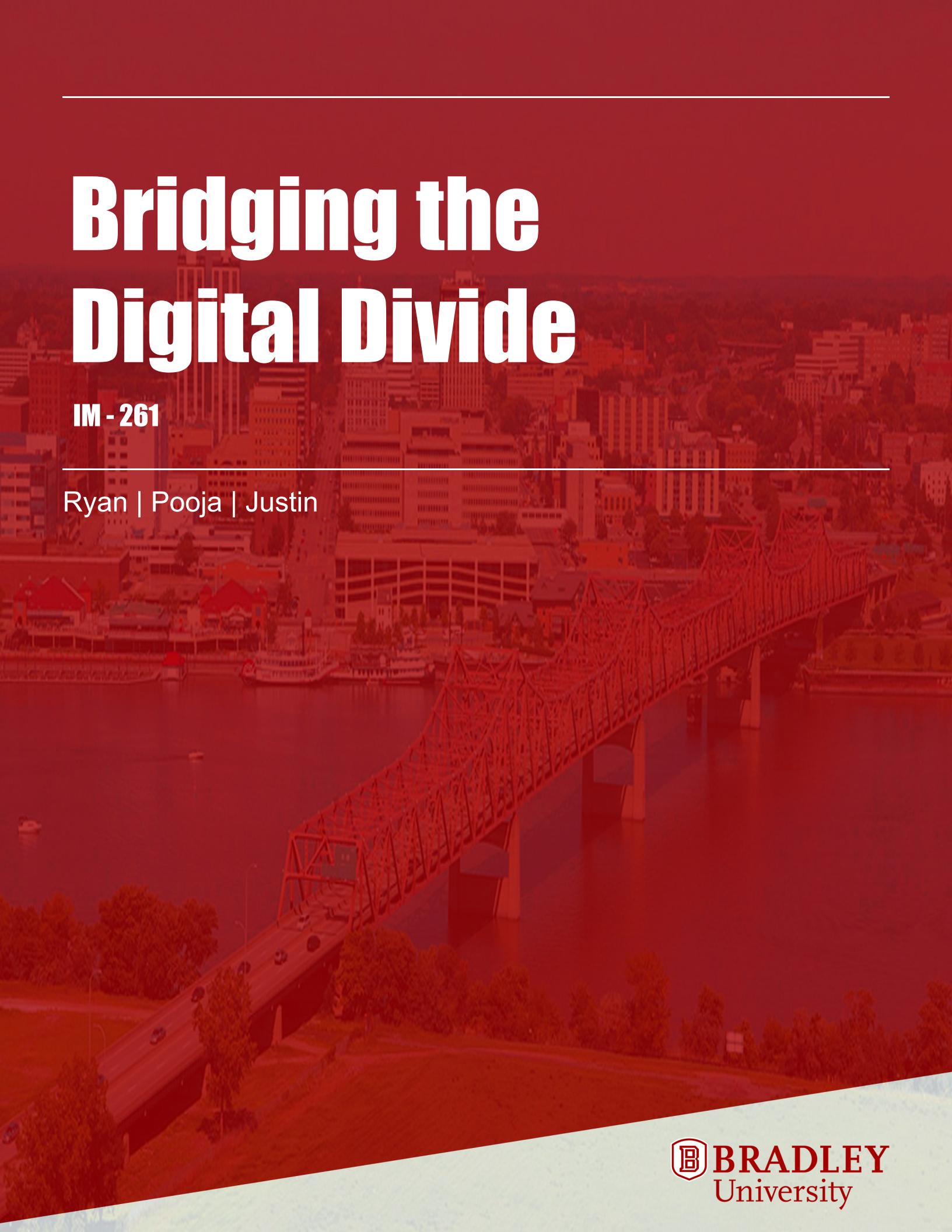


Bridging the Digital Divide

A photograph of a bridge, likely the Ohio River Bridge in Cincinnati, spanning the Ohio River. In the background, the city skyline of Cincinnati is visible, featuring numerous buildings and skyscrapers under a clear sky.

IM - 261

Ryan | Pooja | Justin

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Executive Summary

Objective

Utilizing a human-centered design process, we have designed a solution that will provide a solution to bridging the digital divide that Peoria's small businesses experience when it comes to competing with online retailers. We have strategized objectives, solutions, goals, and content strategy of this project. Research and analyzed activities were implemented such as questionnaires, interviews, surveys, on-site visits, and user shadowing. This document lays out our findings, data, solution and price on solving the digital divide for Main Street.

Findings

After meeting with local businesses on main street, we have found that many have little to no online presence. They expressed concerns with not having the resources and/or time to be able to run them properly or having the knowledge to maintain them. Many of them want to have an online presence because of the possible increase in revenue and foot traffic, but are struggling to get started.

Proposed Solution

After reviewing our findings and data collected from the other groups, and our group, we have decided to make an application for community members to view business information and upcoming events. Within our application *Main Buzz* businesses link their Facebook pages, (they will create one if they do not have one) link their Instagram account, (if this form of social media applies to their business). They also upload a description of their business, hours of operation and address. Business owners will be able to create Facebook events for sales, concerts, special events, or joint events with other local business. These events will be posted on their Facebook page and will also populate on their page within *Main Buzz*.

Cost Estimate

Total Cost: \$12,400

Contingent Cost: \$15,000

Observations Of Main Street

Main Street

- It has a lot of potential
 - Community garden
 - Public parking
 - Paintings on the streets
 - Unique stores
- If they made the streets more colorful
 - Buildings look really old and creepy
 - Close to Sheridan, the stores down there look really nice (If all of the streets could resemble that)
 - Paint buildings, more murals

Community Garden

- Good incentive
- If they painted more of the bricks
- More colorful

Public Parking

- Good incentive to have public parking space
- Needs to be advertised how long to street park

Painting on the streets

- Murals by Los Delicias and Broken Tree
- Sidewalk
- More of this should be on this street

Unique Stores

- So many different type of stores
- Broken Tree
 - Hippy vibe
- Costume Trunk
 - Price range varies (inexpensive and expensive)
 - Really small place

User Goals

Our users should be able to easily and efficiently be able to find information on the local business, events happening in the area, and be able to communicate to each other by giving reviews and recommendations on things in the area. This website should promote a positive image of the surrounding stores and community. A few bullet points on what the user should be able to find on the page.

- Website/ social media accounts for the business on main street/ surrounding area.
- Hours of operations of the businesses.
- Local events happening in the area
- Coupons for the stores or sales they are having
- Joint partnerships events with only two or three businesses
- Write reviews/ recommend places on a message board.

Business Goals

Overall Goals

Lower the digital divide and help increase online sales for businesses on Main Street. Generate more revenue for the local business and the surrounding area. For this website we want business to be able to be able to easily link websites, social media accounts, and events.

Costume Trunk

- Do more with Facebook
- Provide what they are selling online

Broken Tree

- Get more customers in the door
- Grow an online presence
- Want to market more on social media

Business Interviews - Costume Trunk

1. When are your peak times during the week?
Monday and weekends
2. What is your biggest strength/ weakness?
Strength - Quality of product
Weakness - live in disposable social so quality is not taken highly
3. What is something you want to improve but don't have time to fix?
Been here long time hard to change things. Do more business but not interested in changing to online retailer/ party store. Getting close to retirement.
4. What are some frequent questions customers ask?
Request for items
5. What is a common problem that you face?
Change in quality, our products are not cheap
6. What makes you stand out from the rest in the area?
Quality of items, we have high quality stuff for the area. Unique items
7. What is your short and long term goals with the digital divide?
Got a website, but do lots on Facebook not the business for online shopping website is just a overview of what we got.
8. Are you interested in having a larger online presents?
Different kind of business doesn't think it would work for this.
9. What would you define as success for your business?
Doing what I want to do. I have been successful now for last 36 Years
10. Have you considered expanding your hours?
Always available by appointment but do have set hours
11. Have you tried partnering up with any other businesses in the area?
Studios on Sheridan when they stay open late we do. Partnering with the artsy area.

Business Interviews - Broken Tree

1. When are your peak times during the week?
Fridays and Saturdays
2. What is your biggest strength/ weakness?
Strength - Quality of product, pizza and drinks made from scratch
Weakness - Not many people on staff, her and husband a few other people
3. What is something you want to improve but don't have time to fix?
Extend their hours.
4. What are some frequent questions customers ask?
Are they a coffee shop? (Started off as one, now progressed into a bar)
When are we going to have more food?
5. What is a common problem that you face?
It's hard to get customers based on their hours as well as other businesses near their place.
6. What makes you stand out from the rest in the area?
Only place where drinks and food are made from scratch.
7. What is your short and long term goals with the digital divide?
Wants to do more advertising on their Instagram and Facebook platforms.
8. Are you interested in having a larger online presence?
Yes, she is interested.
9. What would you define as success for your business?
Been in business for five years. Have regulars. Provide live music.
10. Have you considered expanding your hours?
Yes, currently low on staff.
11. Have you tried partnering up with any other businesses in the area?
Studios on Sheridan and the record shop for dance parties.

Photo of Main Street - Bourland and Main



A look down Main Street on the corner of Bourland showing the daily traffic down the Street.

Photo of Main Street - Local Mural



Mural by Los Delicias facing Main Street.

Photo of Main Street - Overgrown Tree



Overgrown tree obstructing the sidewalk for pedestrian to walk down.

Photo of Main Street - Bradley Building



Bradley owned building for entrepreneurship department and students.

Photo of Main Street - Sheridan and Main



The corner of Main and Sheridan showing the local businesses building and traffic.

Photo of Main Street - Community Garden



Renaissance Park Community Garden, that allows members of the community to plant, grow, and harvest anything they want.

Photo of Main Street - Storm Drain



Street art over a storm drain by local Bradley students on the corner of Main and Sheridan.

Photo of Main Street - Flower Pots



Painted road barriers with added flowers to give the street corner more color.

Photos of Main Street - Light Post Signs



Streetlight sign welcoming visitors to the street/area.

Photos of Main Street - Broken Tree Store Front



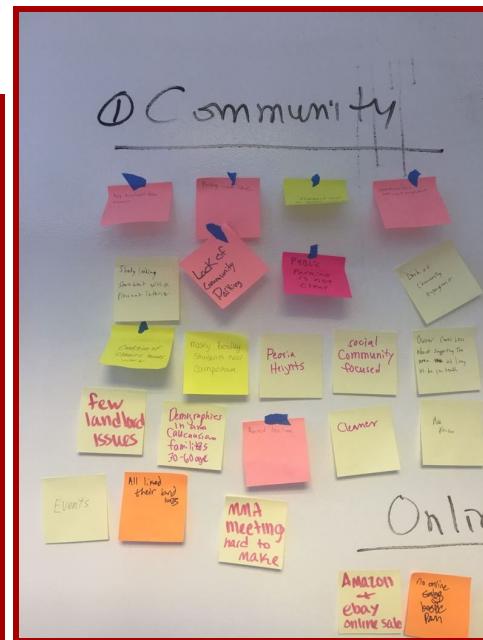
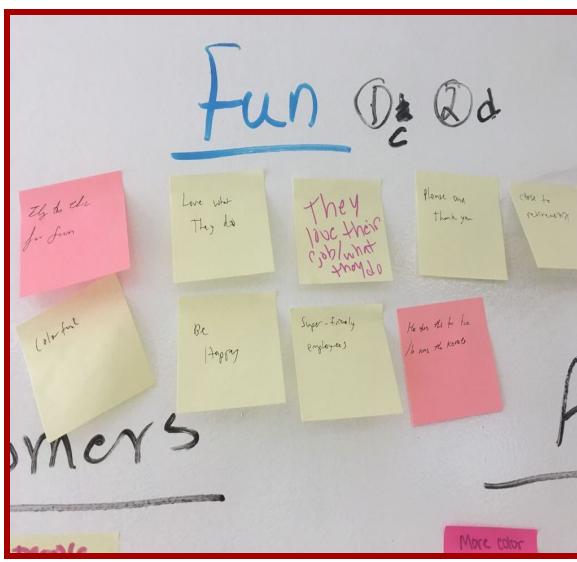
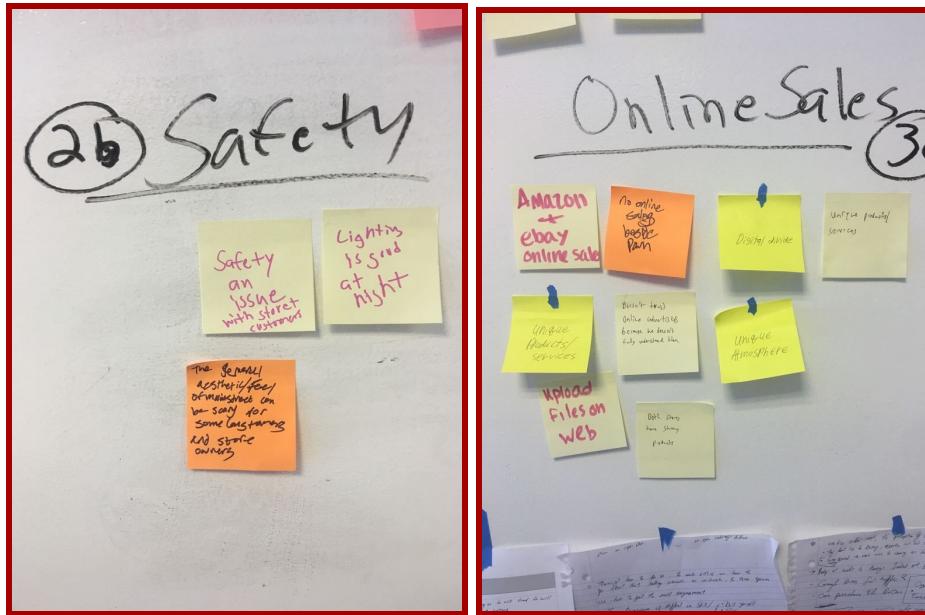
Broken Tree storefront view at nighttime.

Photos of Main Street - Nighttime Sidewalk

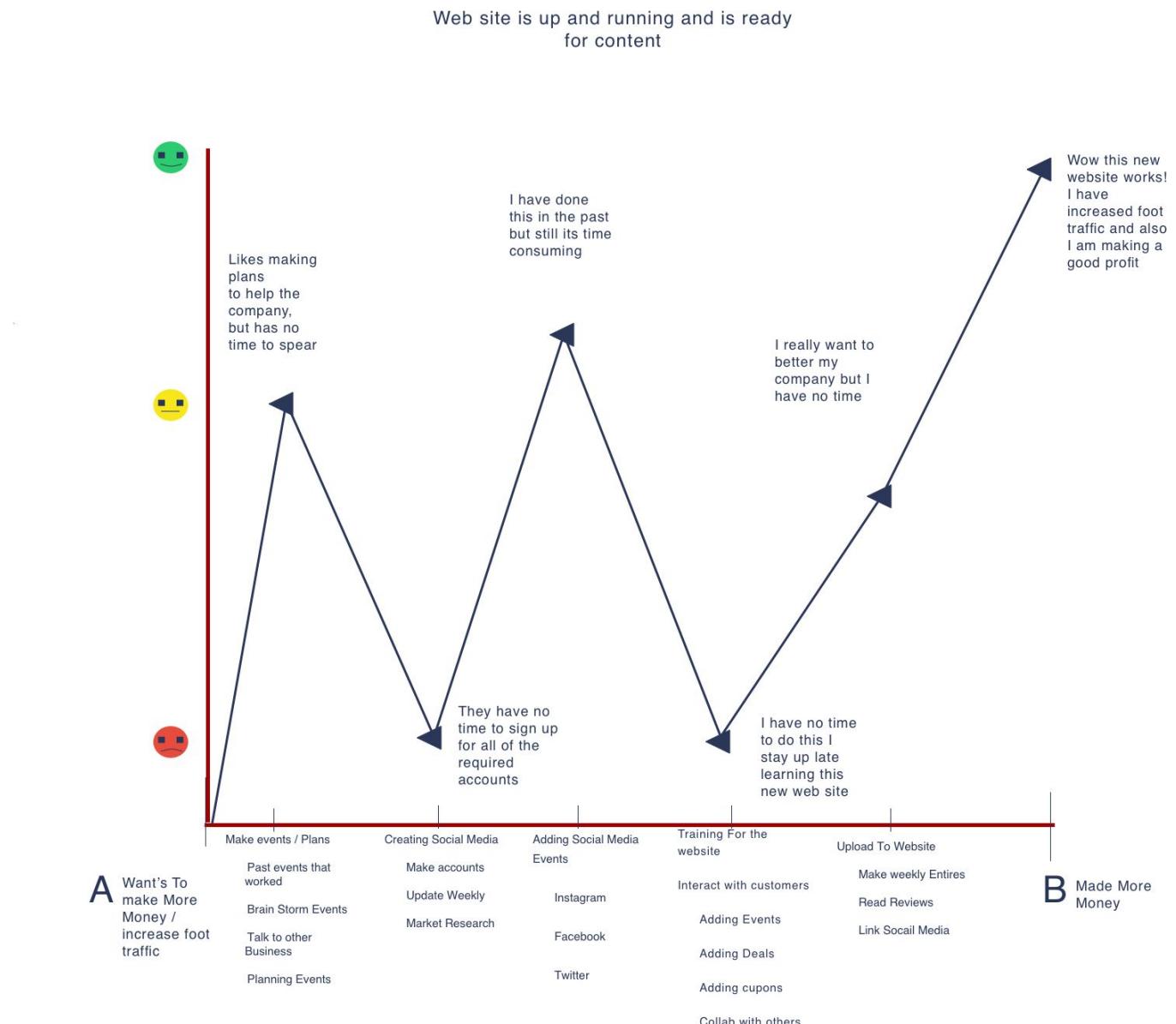


Costume Trunk storefront view at nighttime.

Card Sorting



Journey Map



Persona - Mike

Mike Smith



AGE: 20
WORK: Student
FAMILY: 4
LOCATION: Bradley Campus
ARCHETYPE: Customer

Adventurous Hardworking
Ambitious Teach Savvy

Bio

Mike is a student at Bradley University looking to explore the local area around campus. He is interested in finding new places to get food with his friends, and finding some local places to shop, and finding more weekend activities to do in the area.

Personality

Introvert	Extrovert
Analytical	Creative
Loyal	Fickle
Passive	Active

Goals

Be able to find events in his area, and information about local shops and restaurants on one website or forum of media.

Frustrations

- Having to visit each shop's website to see when they are open.
- Unable to find information about local events

Brands

Preferred Channels

Instagram	Twitter	Email	Facebook
High	Medium	Medium	High

Persona - Julie

Julie Johnson



AGE: 45
WORK: Business Owner
FAMILY: 4
LOCATION: Bradley Campus
ARCHETYPE: Owner

Determined Passionate
Hardworking Loyal

Bio

Julie Johnson is a business owner for one of the local businesses in Peoria, Illinois. Besides from running a business, in her spare time she takes care of her two kids. Because she is low on staff, she is looking for simple ways to market on social media about her events.

Personality

Introvert	Extrovert
Analytical	Creative
Loyal	Fickle
Passive	Active

Goals

Be able to find ways in her busy time to market on social media platforms to advance her online presence.

Frustrations

- Does not have the time to market on social media platforms.
- Hours does not meet customer's standards because she has to take care of family.

Brands




Preferred Channels

Instagram
Twitter
Email
Facebook

Quad Chart

Digital Divide Website	
Concept	Capabilities
 <ul style="list-style-type: none"> A website linking all of the stores of Main street. Market towards local people of Peoria, tourist and business owners. 	<ul style="list-style-type: none"> Provide users a main source of information (linking store hours, address, social media). Good for a main source of advertising. Creates a community.
<h3>Technical Approach</h3> <ul style="list-style-type: none"> PHP HTML CSS Linux Server    	<h3>Deliverables</h3> <ul style="list-style-type: none"> User testing and research - 1 month Web developers and designers - 3 month End product - Website up and running

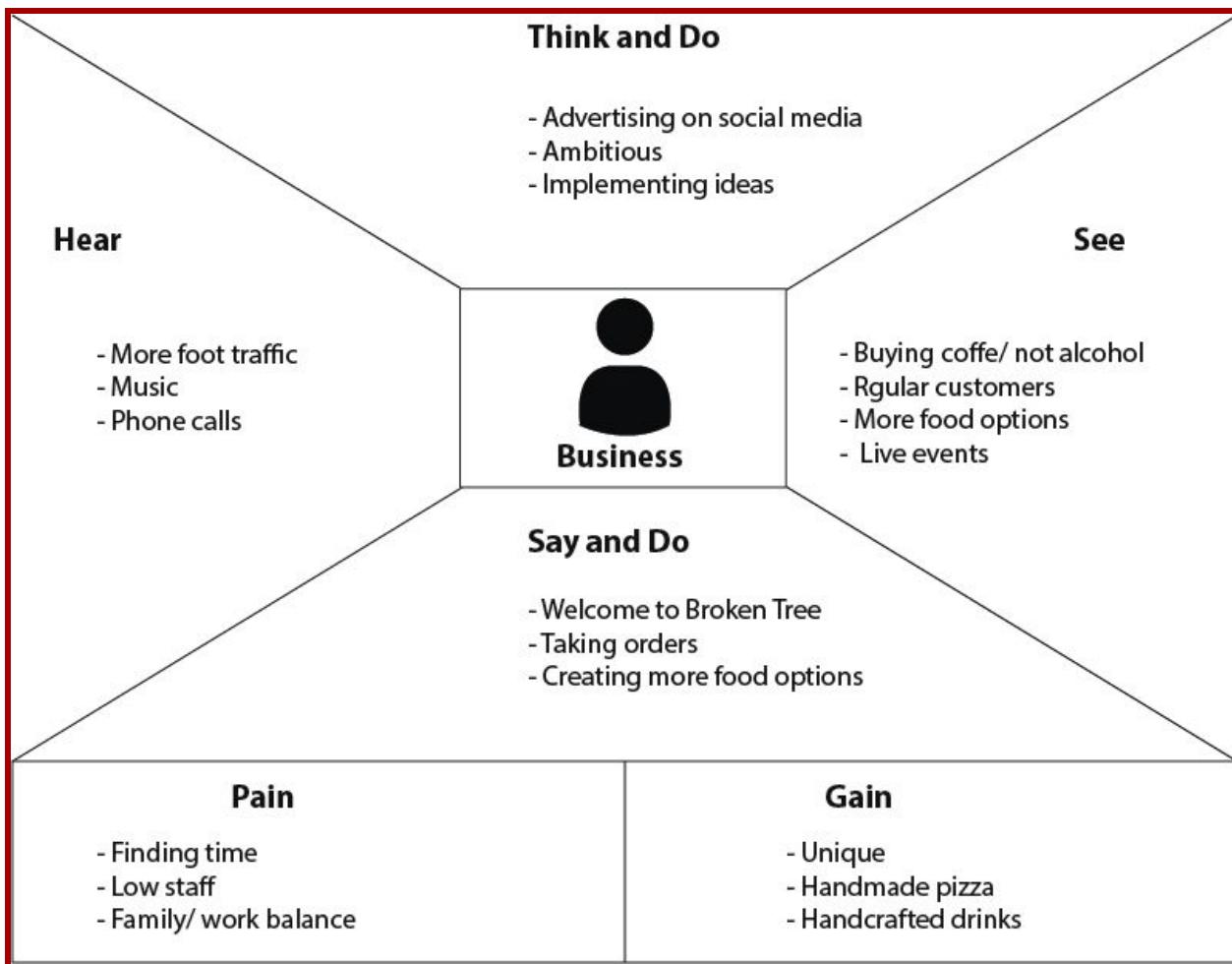
Summary of the Findings

Overall, Peoria is in the right direction to becoming a revitalized town. The biggest strength is that down Main Street, there are a variety of unique stores. One of the weaknesses is that there is limited parking available for these stores. It is also very hard when the hours do not meet the customer's standards. One main assumption that we all had was people from these stores needed help to expand their online presence. When we interviewed Costume Trunk, we recognized that was not the case. However, Broken Tree was on board with creating an online presence, they just did not have the time. The stores along Main Street have different needs and I believe that if their goals were more unified that it would help make this street more marketable.

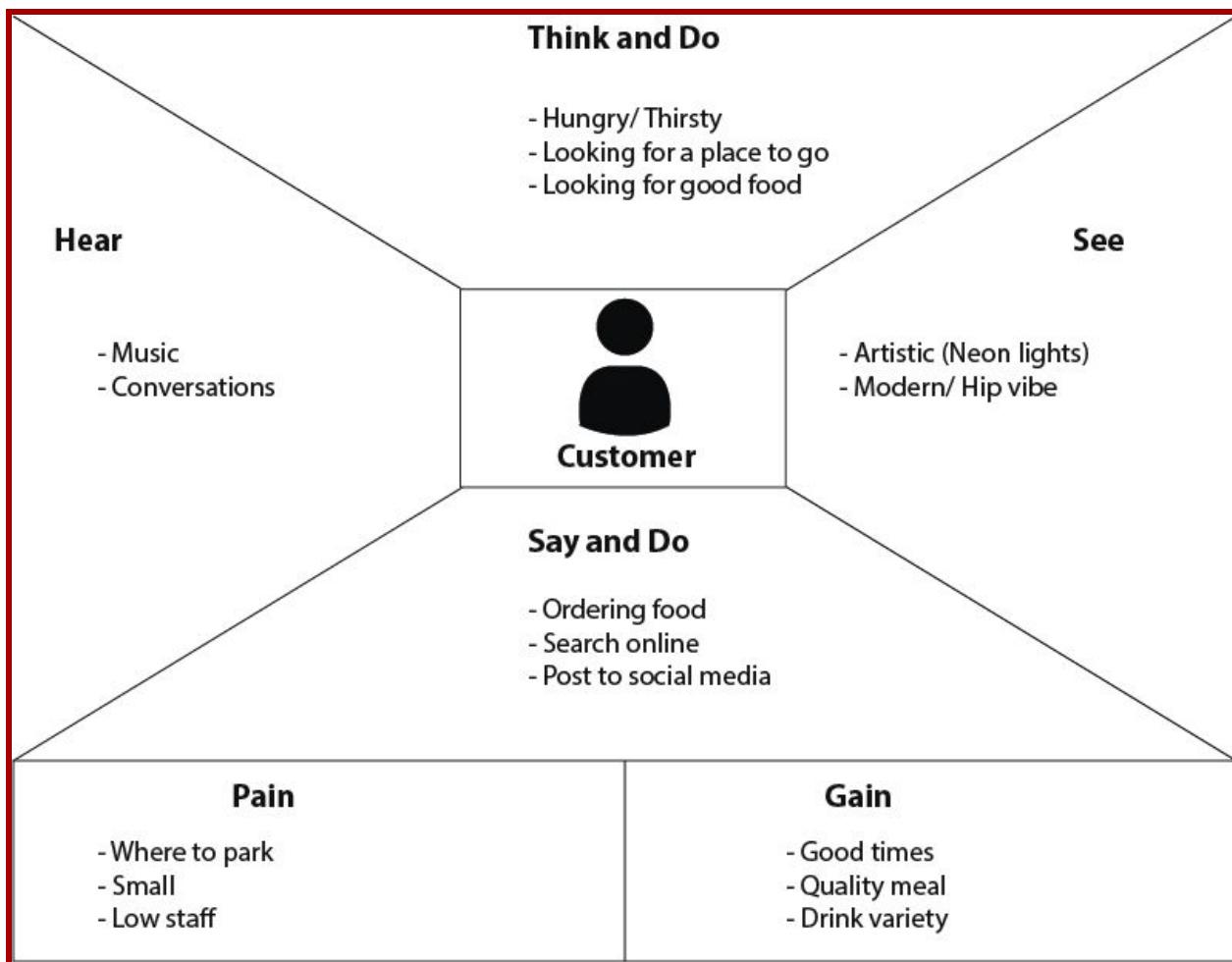
Golden Thread

-
1. Sarah the business owner wants to **update** her menu for a music event this weekend. She **posts** it to the application and has her business social media accounts linked to the website so it **posts** it to her social media as well. Facebook events, menu details, location and time of event will be **posted** on the application as well.
 2. Tim a local customer is looking into the local area for **events** this weekend. He wants to go out with his friends to have some fun. Tim hears about a event happening on main street this weekend and starts to become interested in local area events.
 3. He searches online for more information and **checks** social media to try and find more information about things happening.
 4. He finds the business owner's information and **downloads** the application so he will have the information for this weekend and will be able to see future information when it comes.
 5. He can **confirm** that he is going to the event and shares on social media he is going for his friends to see. He can also **submit** recommendations on the app for the event ("Can you play this song?" "Make sure you guys have BBQ chicken pizza this weekend!") He can also comment on the post on the application to start a conversation with others going.
 6. Tim and his friends go to Sarah's event and have a great time and **share** about their experience on social media and can **leave a review** on the application about the event and the business.

Empathy Map Business



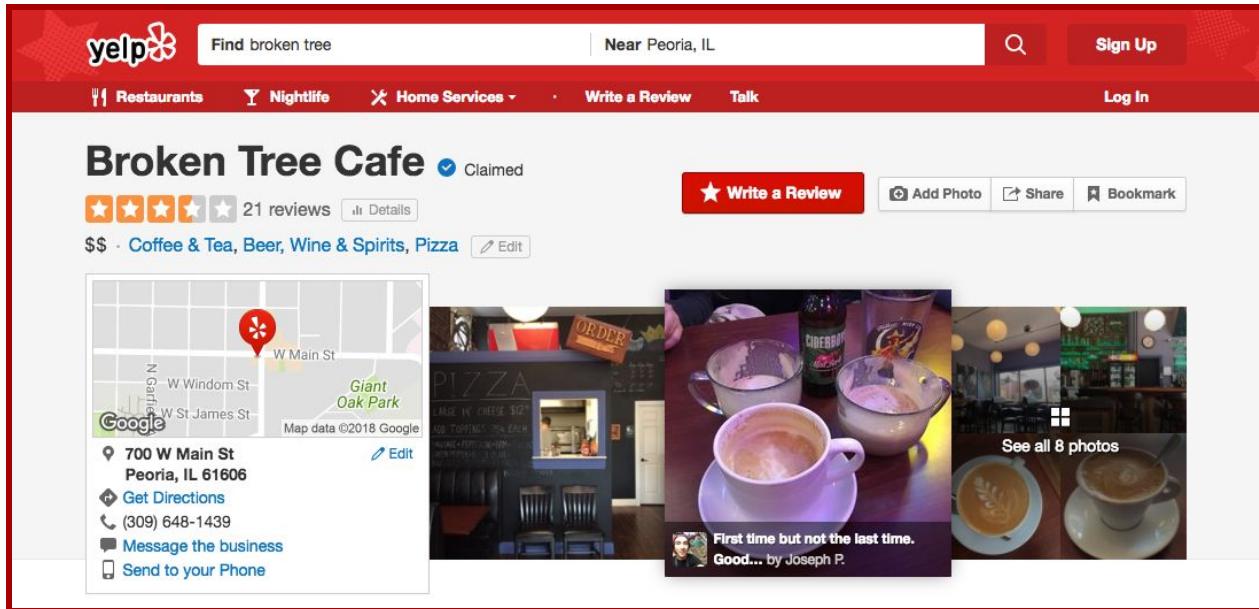
Empathy Map Customer



Updated Quad Chart

Digital Divide Mobile Application	
<h3>Concept</h3> <ul style="list-style-type: none">• An app linking all of the stores of Main street.• Market towards local people of Peoria, tourist and business owners.	<h3>Capabilities</h3> <ul style="list-style-type: none">• Provide users a main source of information.• Linking social media on app.• Good for a main source of advertising.• Creates a community.
<h3>Technical Approach</h3> <ul style="list-style-type: none">• PHP• HTML• CSS• Linux Server• Apache Server• Ionic 	<h3>Deliverables</h3> <ul style="list-style-type: none">• User testing and research - 1 month• Web developers and designers - 3 month• End product - Website up and running

Competitive Example



A good example of a potential competitor to our application is Yelp. It has a lot of similar functions in that it has business hours, location, photos, information about the business and reviews from customers.

Potential Content

Overview of Content

Photos

- Instagram Feed
- Physical store location
- Event photos

Description/ summary of business

Location/ Address

Hours of operations

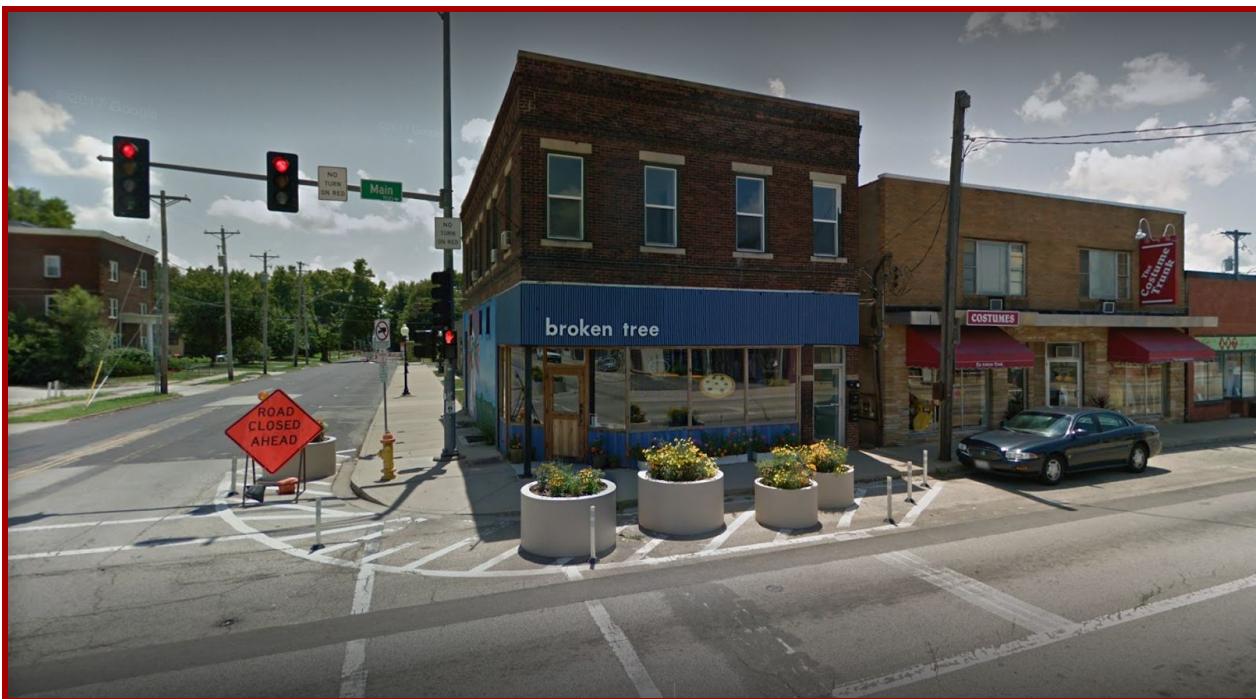
Facebook link

Instagram link (if applicable)

Website link (if applicable)

Upcoming events

Street View Photo



Potential Content Continued

Upcoming Events

April 20th - College Night

- Show your College id for drink specials and no cover

April 27-29th - \$4 Pizza weekend

- Grad some friends and enjoy any topping pizza for \$4 this weekend

May 11th - Live Music Event

- 8pm - 10pm concert from a local band.
- Drink specials during the performance.

Description of Business

Looking for a place to grab a afternoon coffee or pizza? Broken Tree Cafe in the place to be offering a wide range of coffee bean selections and the best homemade pizza on Main Street. After hours we have a full bar and drink selection and have live music events. Check out our events below to find out what events and specials we will be having below.

Location/ Address

700 W Main St
Peoria, IL 61606

Hours of Operation

Sunday	Closed
Monday	Closed
Tuesday	4-10PM
Wednesday	4-10PM
Thursday	4-10PM
Friday	4-10PM
Saturday	4-10PM

Potential Content Continued

Instagram Feed

If a business does not want or have a Instagram account it will be populated with images from their facebook feed instead.

Photos for Instagram Feed

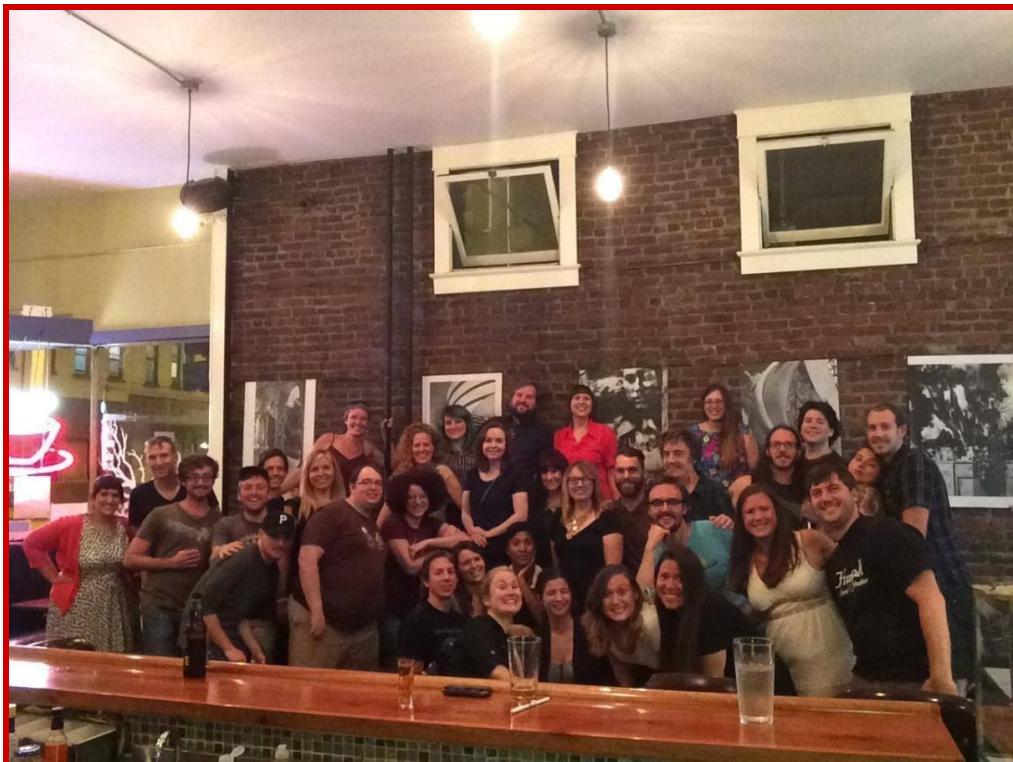


Photo of guest from this weeks past event.

Potential Content Continued



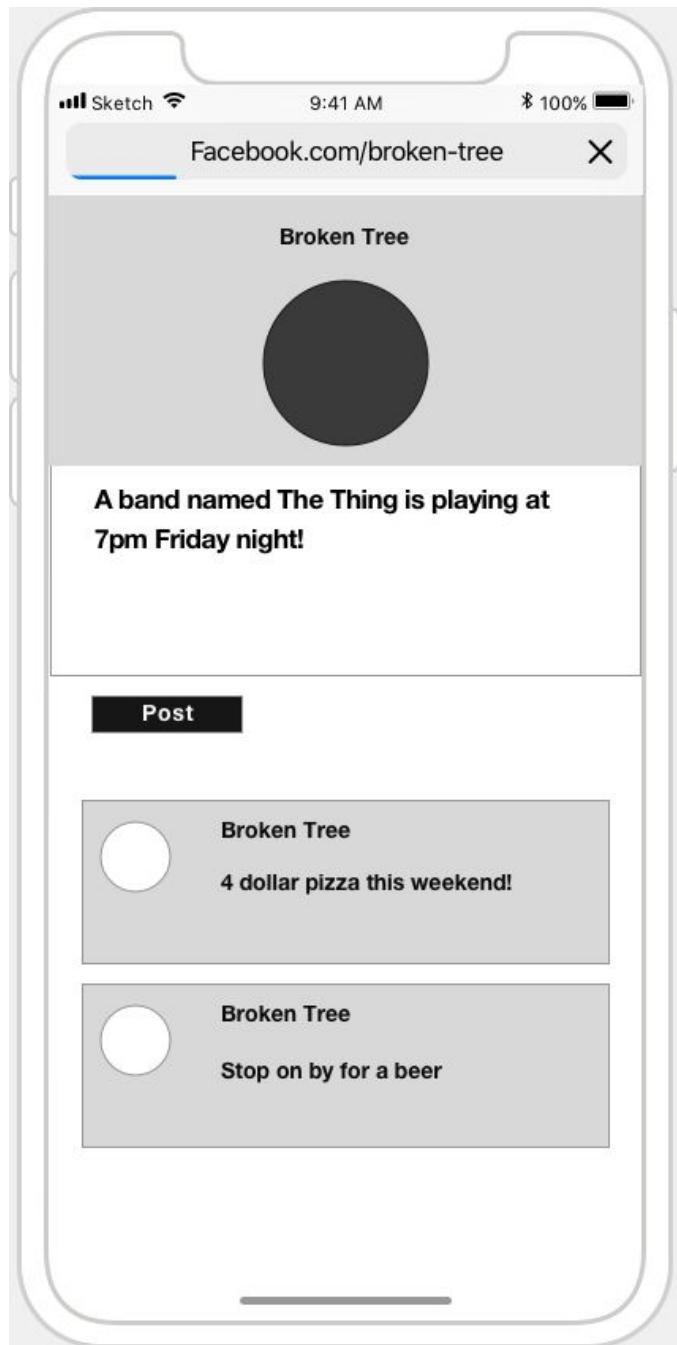
Upcoming Anniversary event advertisement.

Potential Content Continued

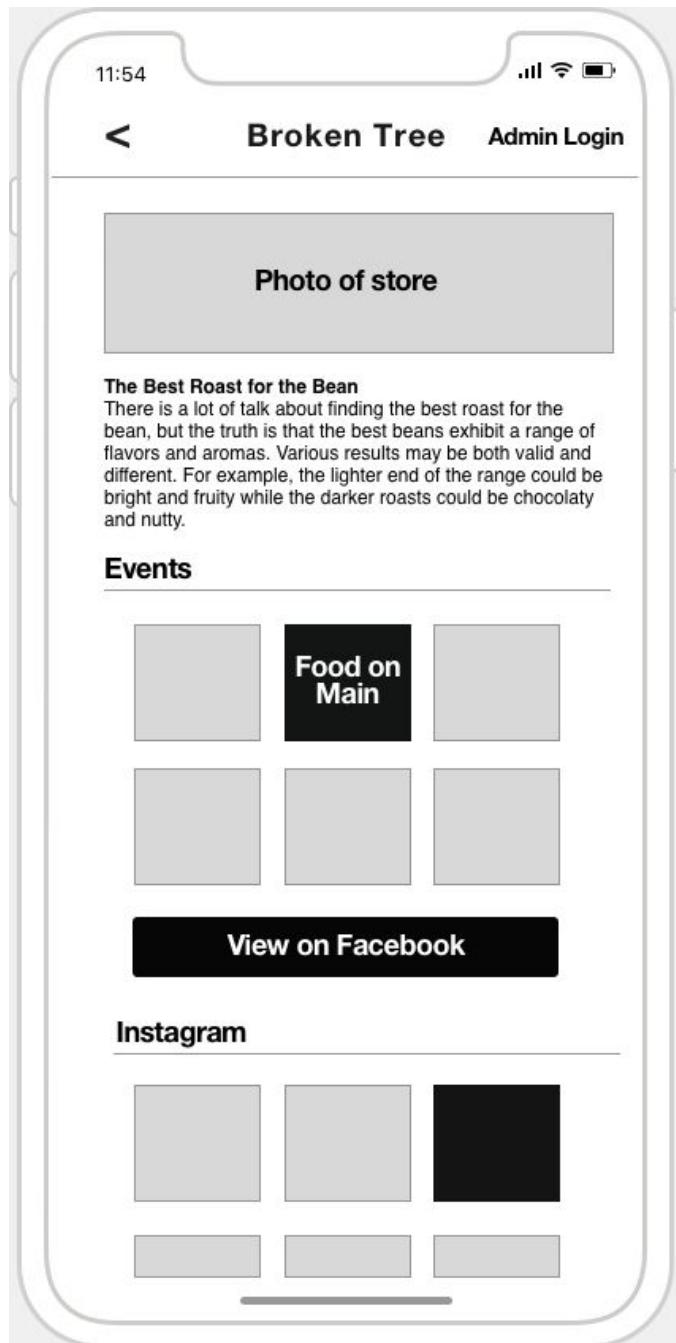


Handmade pizza that is now being served.

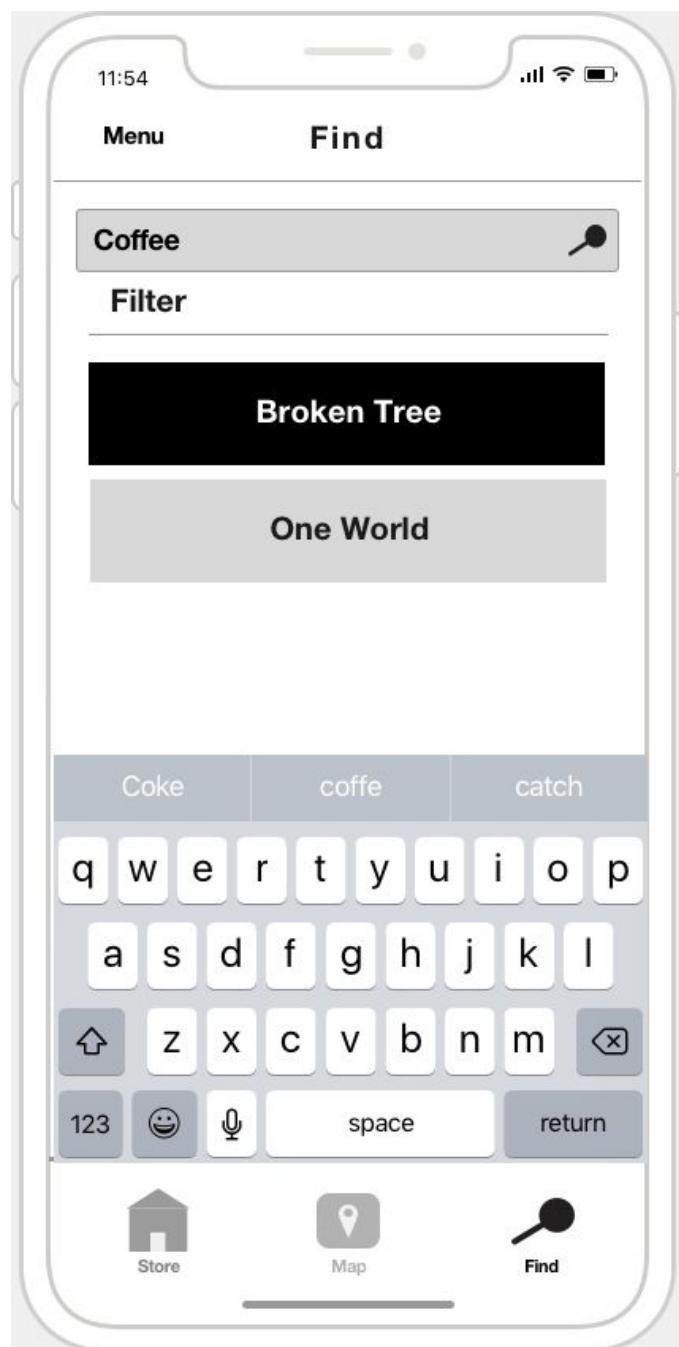
Wireframe Mockups



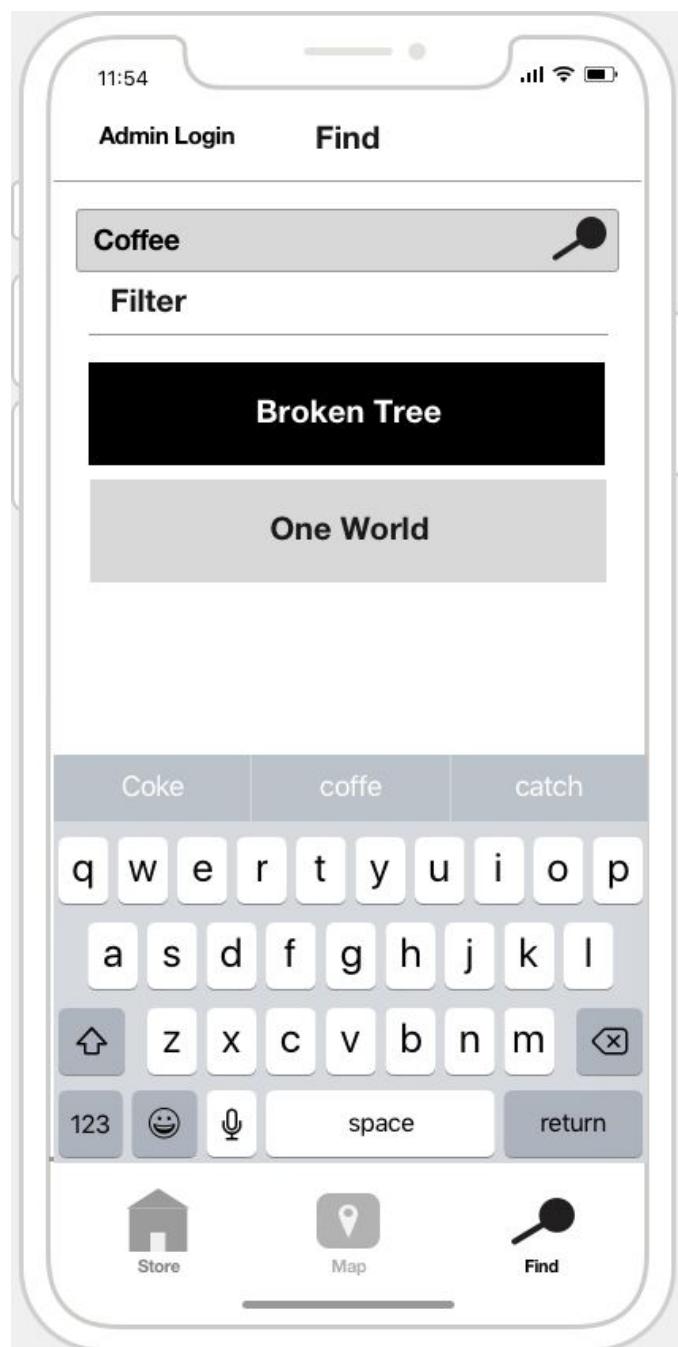
Wireframe Mockups Continued



Wireframe Mockups Continued



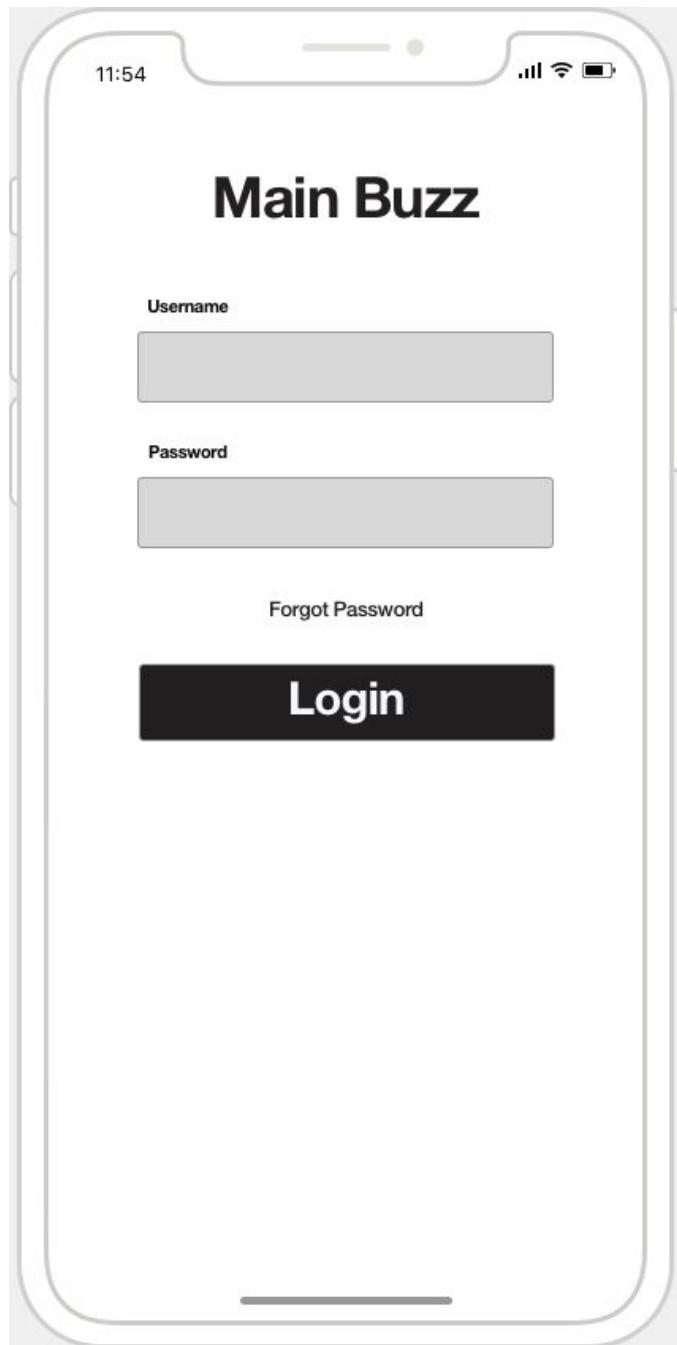
Wireframe Mockups Continued



Wireframe Mockups Continued



Wireframe Mockups Continued



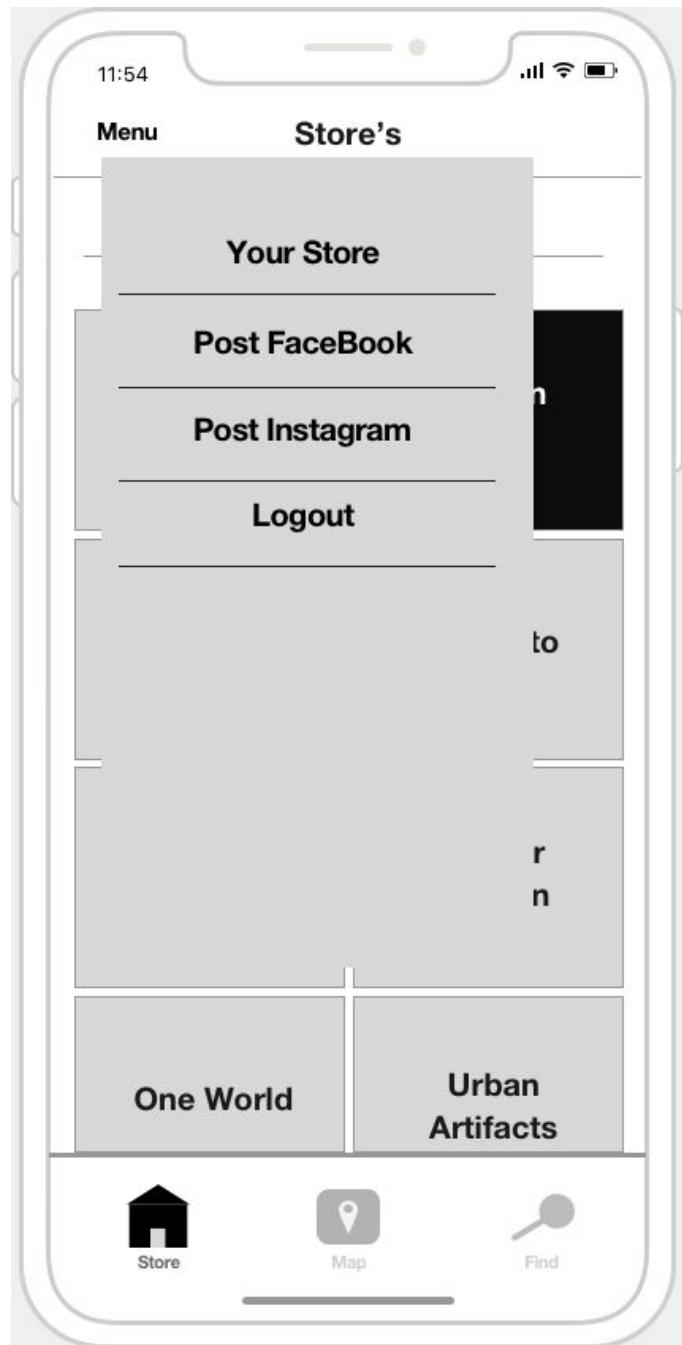
Wireframe Mockups Continued



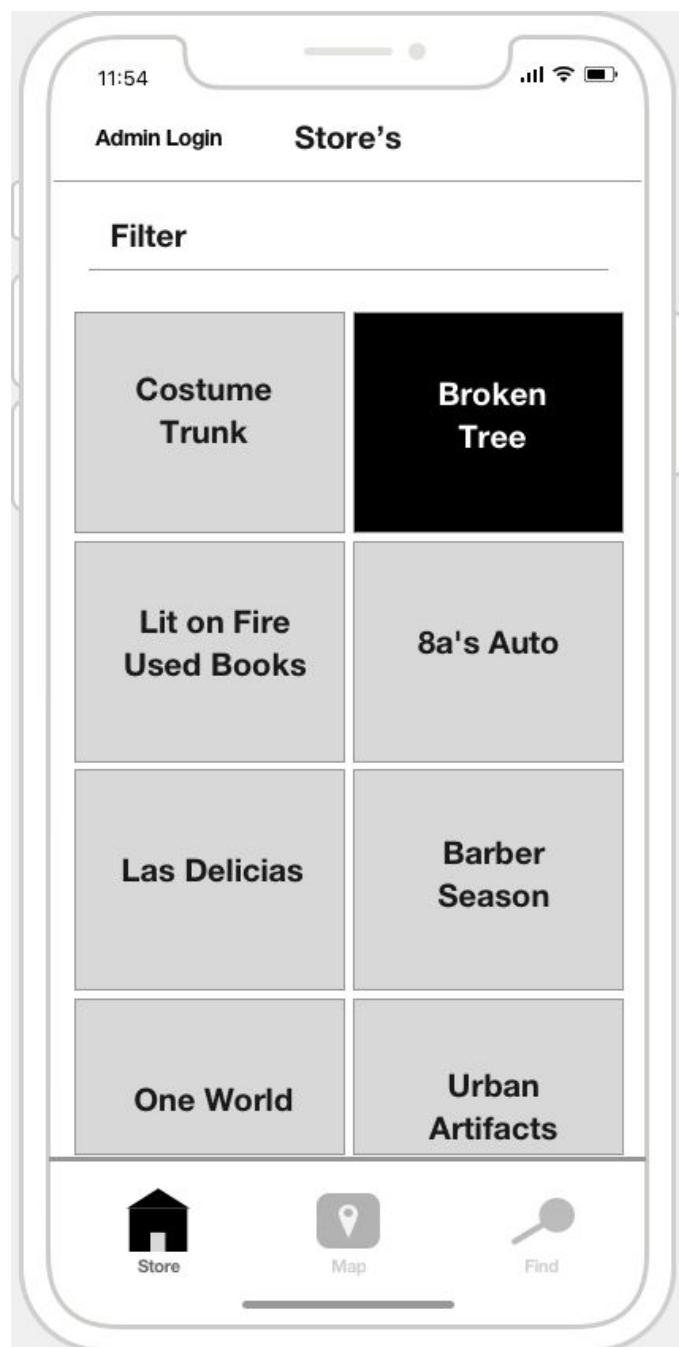
Wireframe Mockups Continued



Wireframe Mockups Continued



Wireframe Mockups Continued



User Flow - Business Testing

User 1: Peter

	Task	Passed	Failed	Proctored	Comments
Customer screen	Look up Broken Tree	X			
Login screen		X			
Store Screen		X			
Company site screen	Post event to Facebook			X	He was confused on where the post button was. He said If it just an image it may not be clear that it is an event.

User 2: Katie

	Task	Passed	Failed	Proctored	Comments
Customer screen	Look up Broken Tree	X			
Login screen		X			
Store Screen		X			
Company site screen	Post event to Facebook			X	She was confused on where the Facebook post button was.

User Flow - Business Testing Continued

User 3: Haley

	Task	Passed	Failed	Proctored	Comments
Customer screen	Look up Broken Tree	X			
Login screen		X			
Store Screen		X			
Company site screen	Post event to Facebook	X			She said overall this app is easy to use and she had no problems.

User 4: Intern

	Task	Passed	Failed	Proctored	Comments
Customer screen	Look up Broken Tree	X			
Login screen		X			
Store Screen				X	She was confused with this screen because she thought that the main page would go to the business page.
Company site screen	Post event to Facebook	X			She suggested the exact hours address, description, link to website to be consistent on each page for each store.

User Flow - Business Testing Continued

User 5: Dan

	Task	Passed	Failed	Proctored	Comments
Customer screen	Look up Broken Tree	X			
Login screen		X			
Store Screen				X	
Company site screen	Post event to Facebook			X	He had to ask if he was clicking the correct button.

User Flow - Customer Testing

User 1: Peter

	Task	Passed	Failed	Proctored	Comments
Customer screen	Look up Broken Tree	X			
Store Screen		X			
Company site screen	Share event to Facebook			X	He was confused on where the post button was. He wanted to know if Facebook posts were synced to this app.

User 2: Katie

	Task	Passed	Failed	Proctored	Comments
Customer screen	Look up Broken Tree	X			
Store Screen		X			
Company site screen	Share event to Facebook	X			

User 3: Haley

	Task	Passed	Failed	Proctored	Comments
Customer screen	Look up Broken Tree	X			
Store Screen		X			
Company site screen	Post event to Facebook	X			Didn't know that Facebook was linked to the app.

User Flow - Customer Testing Continued

User 4: Intern

	Task	Passed	Failed	Proctored	Comments
Customer screen	Look up Broken Tree	X			
Store Screen		X			
Company site screen	Share event to Facebook	X			Confused on how to share event on Facebook.

User 5: Dan

	Task	Passed	Failed	Proctored	Comments
Customer screen	Look up Broken Tree	X			
Store Screen		X			
Company site screen	Share event to Facebook	X			

Overall User Feedback

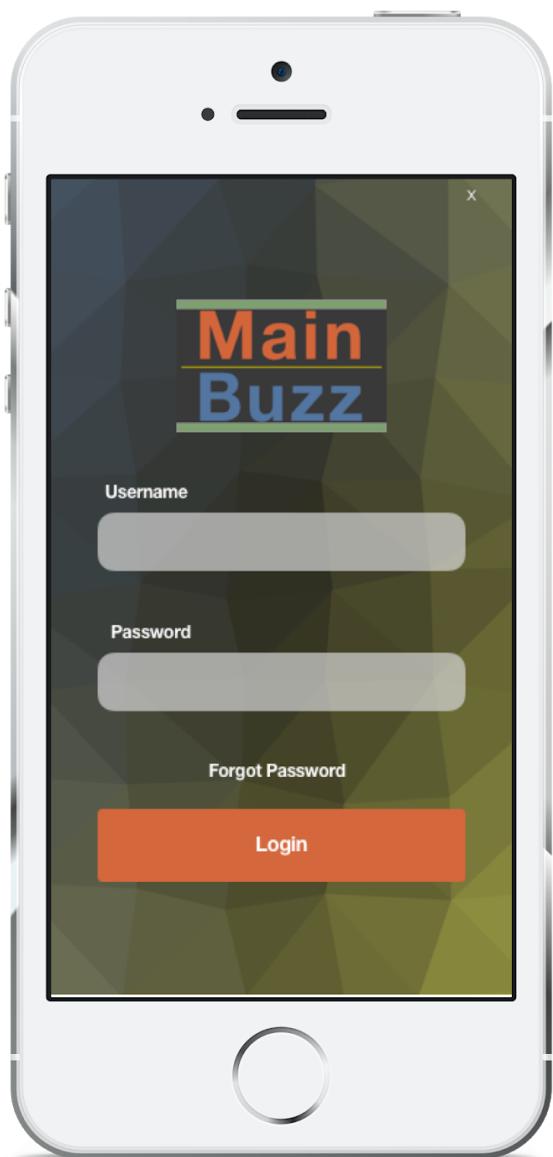
Peter: How to know if the right people are the admins of the store. How many businesses have Instagram or any other social media platforms.

Katie: She liked that we were doing an app and it is user friendly. She wanted to know how people in the community would find out about this app.

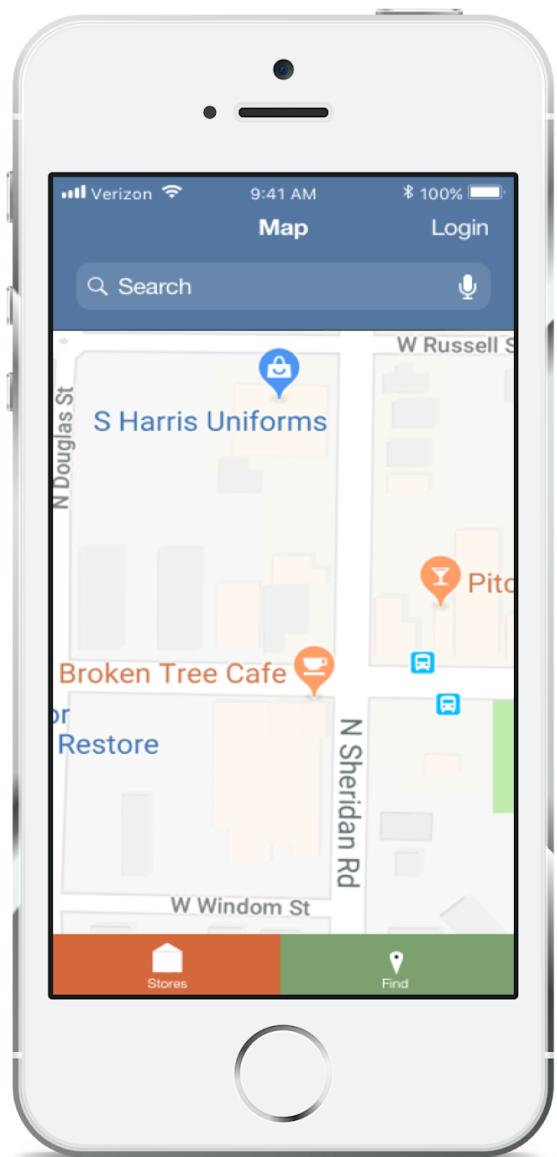
Intern: Wanted to know if we could put more than the general information about the website. Putting more than what is just happening.

Dan: How are you going to promote this app to a business owner content with his/her position. Where should the website be managed? Design this app also for people who don't know the area.

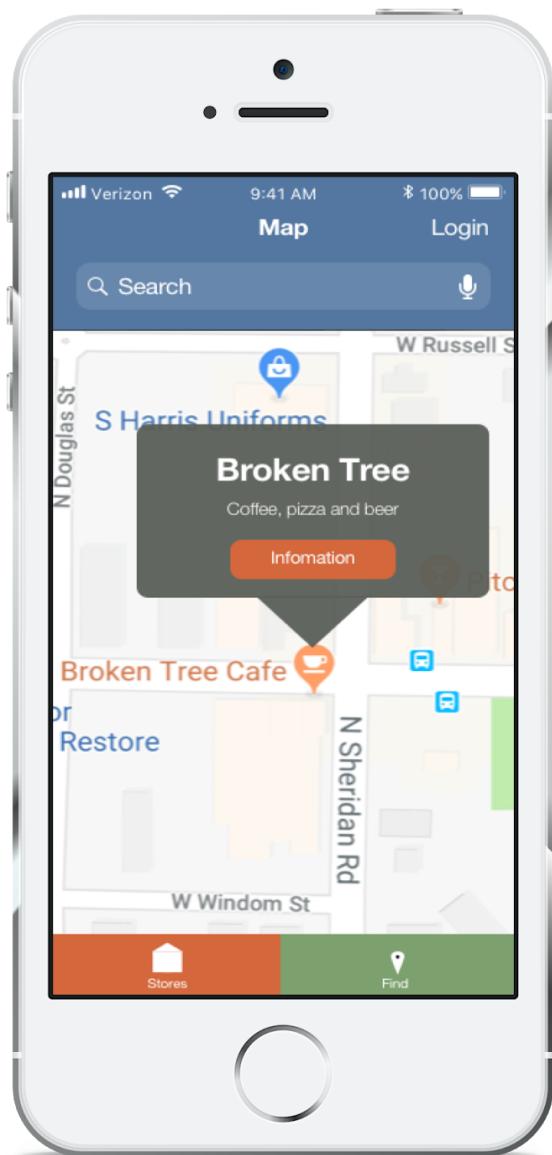
Final Prototype



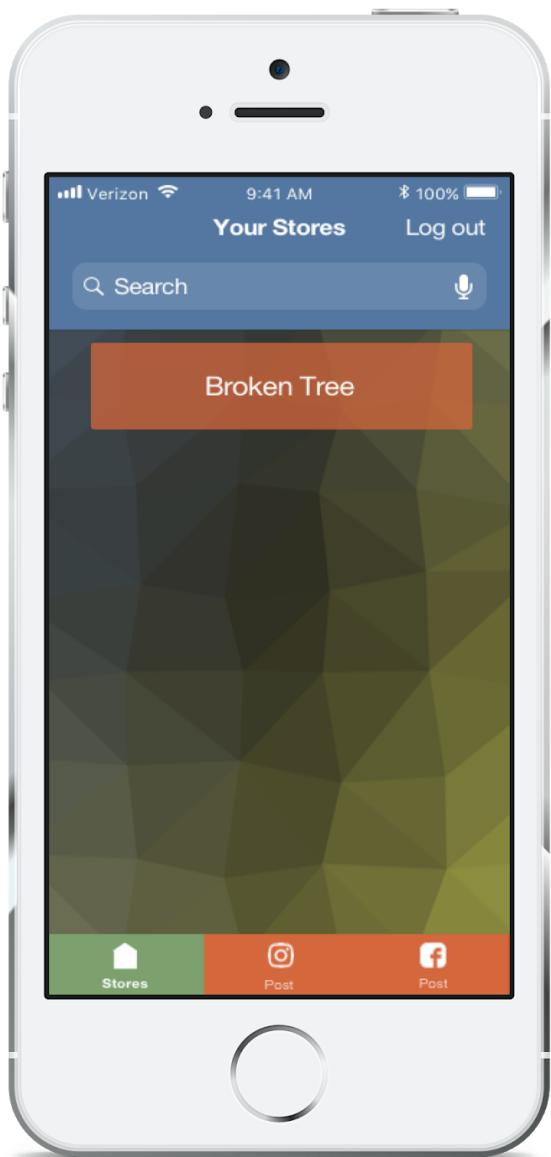
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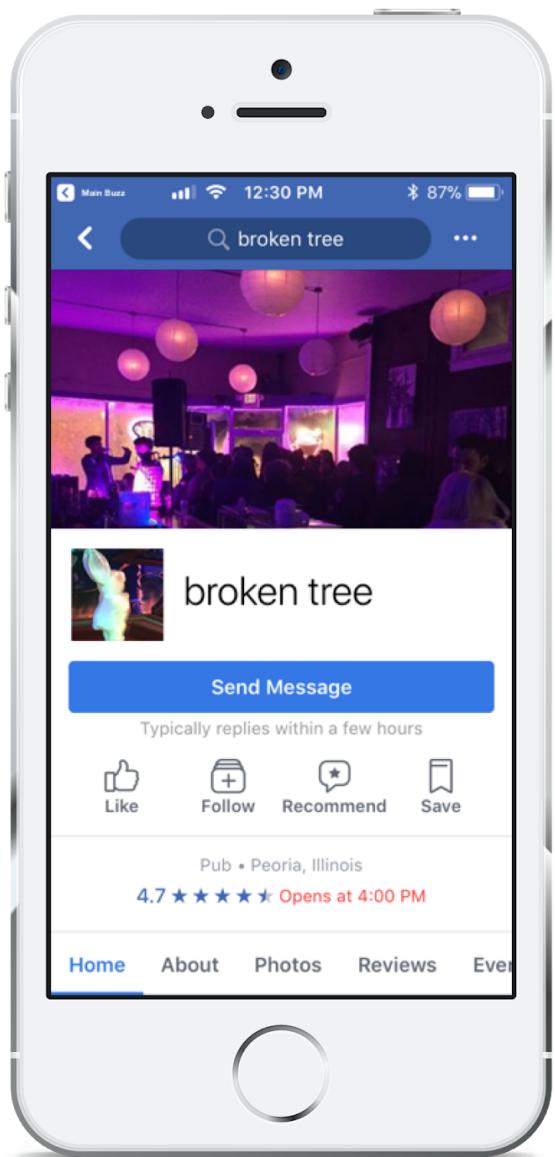
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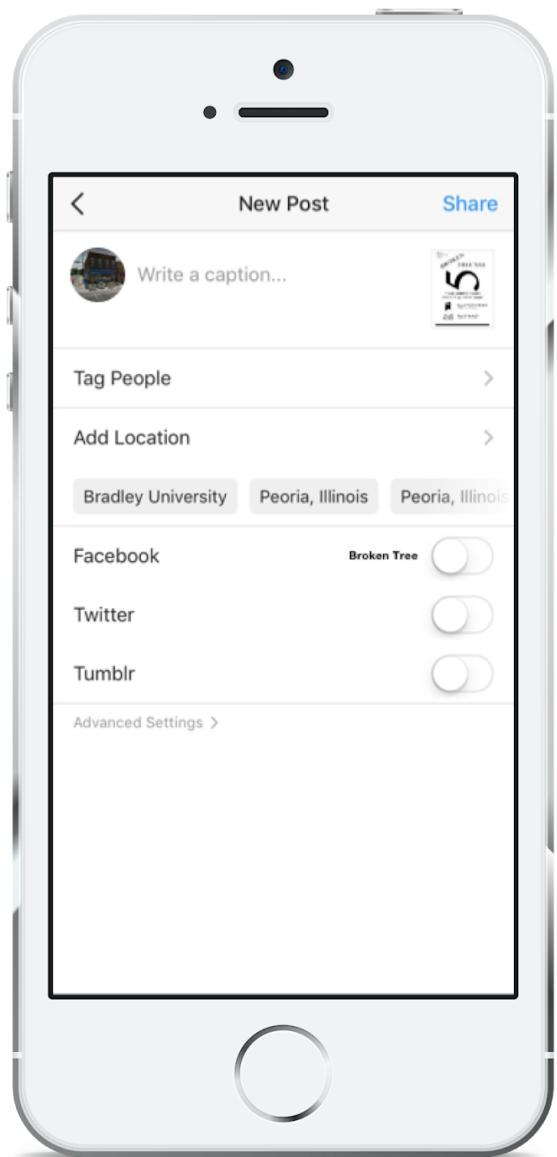
Final Prototype Continued



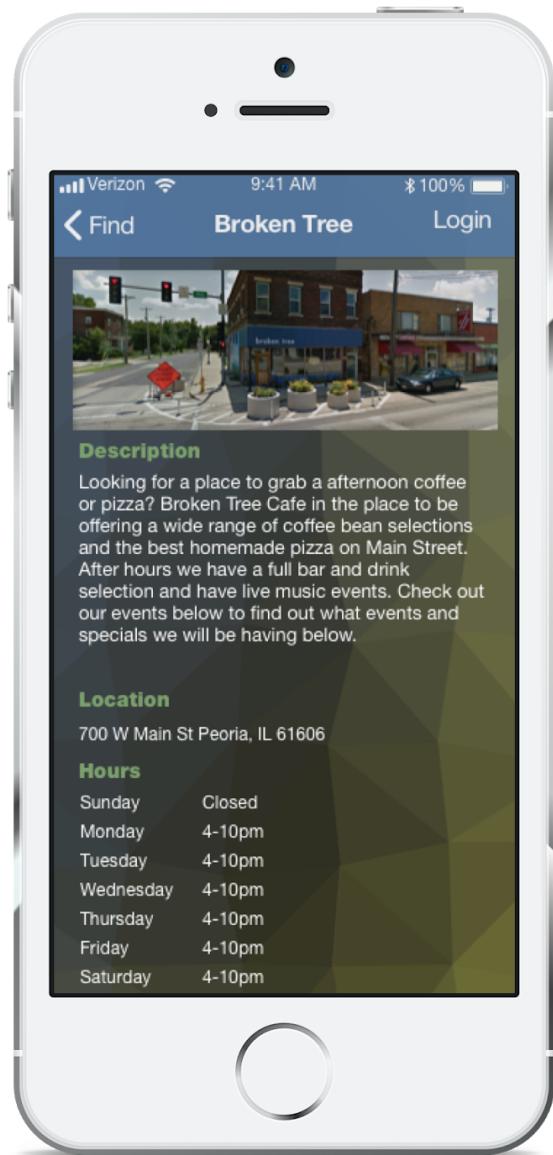
Final Prototype Continued



Final Prototype Continued

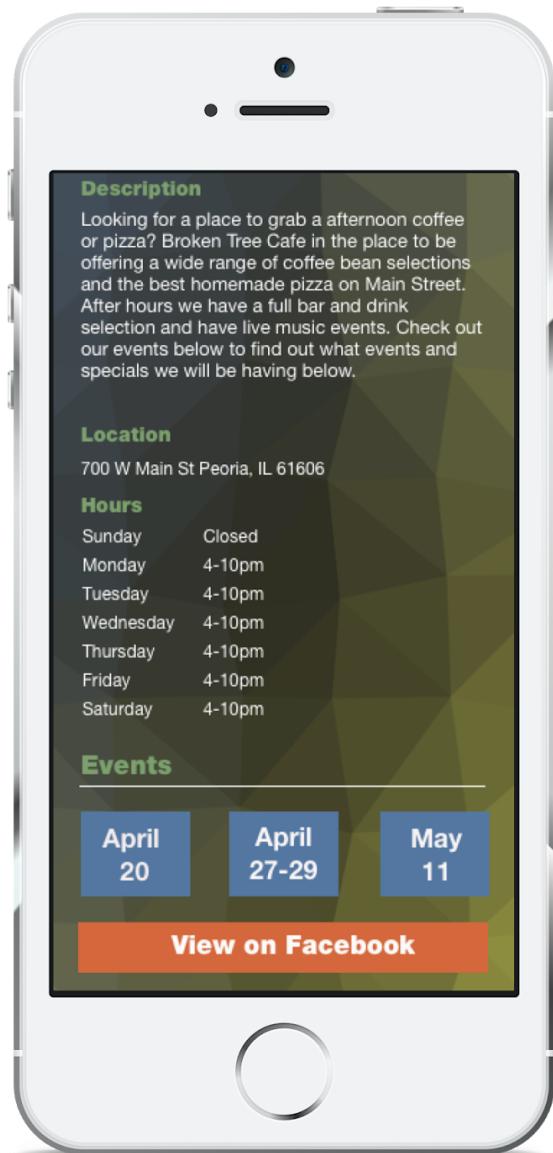


Final Prototype Continued



Sunday	Closed
Monday	4-10pm
Tuesday	4-10pm
Wednesday	4-10pm
Thursday	4-10pm
Friday	4-10pm
Saturday	4-10pm

Final Prototype Continued



Cost Projection

Total Cost Estimation: \$12,400

Contingent Cost Estimation: \$15,000

Hours:

- Back-end: 400 hours
- Front-end: 190 hours
 - UI Design: 90 hours
 - UX Design: 100 hours
 - Quality Control: 100 hours
 - Project Manager: 100 hours

People:

- Web Designers (Students): \$12/hour
- Web Developers (Students): \$15/hour
- UI/UX Designers (Students): \$12/hour
- Quality Control (Student): \$12/hour
- Project Manager (Student): \$12/Hour

Training:

- Interviews: 2 week
- User Research: 1 week
 - User Flows
 - Journey Map
 - Flowchart
- Mockup: 3 weeks
 - Low-Fidelity
 - High-Fidelity
- User Testing: 1 day
 - Paper Walkthrough
 - Digitized Walkthrough
- Revision: 1 week
- Additional Testing and Repairs: 2 weeks

Programs and Software:

- Ionic
- PHP mySql
- Sketch
- Xcode/API
- LINUX