



Champlain Tours

App Prototype and SEO Marketing

Keith Neil

App Team

Team Lead: Matt Ellison

(303) 947-3241

m@mattellison.me

Justin Karpan-Lowman

(719) 232-6001

admin@jayklo.com

Isaac Fraire

(719) 659-5726

isaacmfraire@gmail.com

Brendan Gingras

(719) 271-5541

bgingras@uccs.edu

Quintin Barrette

(303) 590-8259

qbarrett@uccs.edu

SEO Team

Team Lead: Tai Martinez

(719) 433-1449

tmartin5@uccs.edu

Mauricio Aquino

(719) 660-7035

maquino@uccs.edu

Swan Garcia

(719) 232-5634

sgarci18@uccs.edu

Sam Layton

(719) 425-5954

slayton@uccs.edu

Gavin Urban

(719) 651-5061

gurban@uccs.edu

Table of Contents

Introduction	2
Executive Summary	2
Statement of Accomplishments (App Team)	3
Statement of Accomplishments (SEO Team)	3
Recommendations and Innovation Discussion	4
Conclusion and Discussion	5
Appendix / Supporting Materials	6
Scope of Work	6
Team Charter	11
App Documentation	14
Online Dashboard Documentation	14
App Demo	18
Code Release & Usage	19
SEO Documentation	20
Logos	20
Slogans	23
Advertisements	24
Business Cards	25
Buffer with Example Posts	26
Research Documents	29
How-To Guides	38
Passwords	44
Work Cited	45

Introduction

The Bachelor of Innovation™ (BI) is a unique family of degrees unlike those in Bachelor of Arts or Bachelor of Science in that it emphasizes the process of innovation and entrepreneurship. The University of Colorado Colorado Springs (UCCS) is the first university to offer this innovative program, combining classroom education with interdisciplinary team projects. Said teams work for real-world clients, assisting them in business ventures while gaining first-hand experiences. The teams courses challenge students with working in diverse teams with their clients to transform ideas into impact. Client Keith Neil and the Champlain Tours BI team epitomized the rewards of such a challenge while working together across the school semester.

Executive Summary

Champlain Tours, owned and operated by Keith Neil, is a travel agency located out of Burlington, Vermont that focuses on providing stress-free global travel experiences for its customers. Keith Neil came to the BI Teams with a vision for creating a user-friendly mobile application for his company. During the Fall 2018 Semester, Keith Neil received two teams. One developed an iOS and Android application while the other optimized Champlain Tours' search engine visibility and marketing strategies.

Over the course of 3 months, the App Team designed a fully-operational app prototype that works on both iOS and Android. The app's purpose is to allow the user to access information during tours to enhance the customer experience, provides means for customers to

locate their tour guide and vice versa. Further, the app redirects users to the company website, serving as an additional sales channel for Champlain Tours.

The SEO Team optimized Champlain Tours' web presence by updating current social media outlets and creating example posts and "how-to" guides for various social media sites. The team also organized an automatic social media posting system to save the client time. The team then assembled extensive research regarding SEO optimization and connecting former customers through Facebook community group pages. To upgrade the company's marketability, the team wrote numerous slogans, and developed advertisements targeting specific trips and customers. As a capstone unifying the company's marketing identity, the SEO team designed logos for the app and the company as a whole. The team modified both logos to allow Keith Neil to print them on various merchandise as his company's presence grows.

Statement of Accomplishments (App Team)

The app team constructed a functioning application from a wireframe prototype. With this app, customers can log in to their own accounts, Keith can manage locations of the attending parties, customers can manage vacations, and customers can visit Champlain Tours social media.

Statement of Accomplishments (SEO Team)

The SEO team first conducted research on post prioritization for social media platforms, on building a following, and on the best times to post. In reference to that research, the team then created how-to guides for posting on each platform. The team paired each guide with example posts for easy reference. Based on which platforms Keith Neil's customer base used, these posts

targeted aspects which compliment Facebook's prioritization algorithm. Accomplishing this, the team set up a buffer account to automate Champlain Tours related posts on all major social media platforms. Another how-to guide accompanied this milestone, allowing the client to maintain his social media presence after this semester.

To improve the client's search engine presence, the team decided to then improve his company's marketability. First, the team generated dozens of unique logo designs and slogan prototypes. Following Keith Neil's feedback, they perfected two logos. The first represents Champlain Tours' identity, while the other captures the purpose of the app. The SEO team then shaped tens of different ads for upcoming trips. These include a Mississippi River Boat Trip, the Trains of the Colorado Rockies Tour, and a trip to Switzerland. They also include a general company ad, ads targeted towards the children of the target market for special events, and three different business card designs for our client. To set a positive first impression with potential customers, the team made a Yelp account for our Champlain Tours. These accomplishments sought to aid Keith Neil in reducing his workload in maintaining an online presence.

Recommendations and Innovation Discussion

The App team recommends that Keith Neil takes the app prototype to a professional mobile application developer to build on a complete product. The mobile application developer must submit the app to the App Store for verification and make any necessary changes following Apple's regulatory policies. Android does not have such a process. Thus, the teams recommend releasing a version on Android as the developer makes adjustments to the iOS build. Finally, the App Developer must negotiate with Keith to get access to the API stored on DigitalOcean.

The SEO Team recommends that Keith Neil uses the buffer account to automate posts of the new advertisements. They also recommend adopting the new logo and any of slogans of his choosing. When making future advertisements and social media posts, the team recommends that Keith Neil references the appropriate research. To accelerate his social media following, the team suggests he set up Facebook Community groups to connect previous and future customers through conversation.

Conclusion and Discussion

Client Keith Neil wanted the BI Teams to help accelerate his company's growth so he can communicate his vision to the world. He also wanted a team to design a prototype application to keep track of tour attendees. To address Keith's needs, the teams divided and conquered. One constructed the app while the other optimized Champlain Tours' marketability and online presence. After a semester's work, the teams present Keith (1) a prototype iOS and Android application and (2) research, advertisements, slogans, logos, various how-to guides, and a way to automate social media posts. After numerous meetings with the client, the teams report that they have exceeded Keith's expectations. Upon delivery of this package, we recommend that Keith take the presented research, marketing assets, and app prototype and put it to work. This suggestion includes bringing the app prototype to a larger professional developer for realization extending far beyond the scope of a semester.

Appendix / Supporting Materials

A. Scope of Work

Name of the Project: Champlain Tours App and Website Teams

Name of the Sponsor: Keith Neil

Purpose of the Project: One purpose of this project is to create a functioning app prototype for Champlain Tours for customers to use during tours. This app will allow users to access information during current tours to help aid the tours. Another purpose of this project is to focus on growing the company by increasing web presence in social media and with search engine optimization.

Objectives and Success Criteria:

- Create a Social Media Campaign
 - The system is able to be automated
 - Includes example advertisements that could be used for immediate posting
 - Larger outreach on multiple social media channels
- Search Engine Optimization
 - Gather strategies for search engine optimization
 - Implement strategies gathered for search engine optimization
- Travel App Develop o Functioning app prototype with essential functionality
 - Easy-add template for future tours
 - Location tracking of users and tour guide

High-level requirements:

- The team will provide a working app demo for the client.
- The team will construct a social media advertising campaign
- The team will develop and implement strategies to optimize search engine results

Assumptions:

- The team assumes that the client will be available for feedback and guidance throughout the project.
- The team assumes the client will give us access to necessary marketing material, i.e. company logo, colors, etc.
- The team assumes that the client will give us access to the website's code in order to optimize search engine results.

Constraints:

- Distance from the client limits the types of interaction we can have with our client
- The client's busy schedule limits our ability to communicate
- Expertise on business marketing strategies, as our team contains majority CS majors
- Expertise on full Android app development

High-level Project Description and Boundaries:

The team's overall scope is to build a basic functioning app prototype or demo based on the client's views and optimized Champlain Tours web presence through social media. Included in the app will be the base framework, designs, and functions for user to apply while on a tour. Optimizing web presence will include updating current social media outlets with the potential of adding more as well as creating an automatic way to post to social media thus improve search engine results. Additionally, all work will support the current Champlain Tours company vision as well as the client's.

Not including in the team's scope of work is a completely scalable functioning app that is able to immediately be put on the app store. This app will only be a prototype with room for improvements or additions. Furthermore, not all wanted functions may be immediately implemented due to timescale and expertise of the team.

High-level Risks:

- Bad User Experience
 - A low-level risk would be a bad user experience for the target demographic. The goal of the app is to make it easy to use.
 - Low
 - High
- SEO does not improve
 - It remains a high-level risk that all of our optimization strategies still do not result in better SEO.
 - Low
 - Medium
 - Constantly checking how search engine results have improved week-to-week will be the most important step at mitigating this risk. Using different strategies to optimize search results, and changing them depending on weekly results will also help mitigate this risk.
- Marketing outreach is not successful
 - If our marketing strategy is not successful for the client, either because it is too expensive or too time intensive, the social media, and marketing portion of the project would be severely impacted.
 - Low
 - High
 - Remaining in constant contact with the client about our proposed strategies and ideas to ensure that the client is pleased with the progress and ideas will be critical for mitigating this risk. Remaining adaptable for the client's needs and desires will also help to mitigate this risk.

Summary Milestone Schedule:

- Basic app wireframe
 - Description
 - October 1, 2018
- The basic functionality of the app
 - Have basic login functionality for app to manage user information.
 - October 8, 2018

- Completion of app prototype
 - Complete design and app functionality for prototype
 - December 1, 2018
- Creation of mock ads
 - Create several ads to post on social media
 - October 1, 2018
- Create an automated process for posting advertisements
 - Create an automated process to post advertisements to social media for client
 - November 1, 2018
- Gather strategies for search engine optimization
 - Find ways to optimize search engine results
 - November 1, 2018
- Update current social media outlets and potentially add others
 - Find methods to update current social media profiles to grow and possibly add more social media outlets
 - November 1, 2018
- Implement search engine optimization strategies
 - Implement found optimization strategies for search engines
 - December 1, 2018

Stakeholder List:

- Keith Neil
 - As the sole owner and operator of the business, the success of all portions of our project will affect Keith directly. If successful, the automation of the marketing strategies we develop will alleviate time spent, which would allow Keith to focus on other aspects of the business.
- Champlain Tours
 - The success of our advertising strategies, search engine optimization strategies, and tour application will have a direct impact on the Champlain Tours business. If successful, the business could see potential growth, better customer retention, and a better user experience during the course of the tour.
- Users of Champlain Tours

- The users of the Champlain Tours app will be directly impacted by the user experience that we provide through the application. It is critical that our app provides a good experience that encourages users to remain engaged with the features of the app.

Signatures

Isaac Fraire

Isaac Fraire

Justin Karpan-Lowman

Justin Karpan-Lowman

Brendan Gingras

*Brendan
Gingras*

Swan Garcia

Swan Garcia

Samuel Layton

Samuel G Layton IV

Tai Martinez

Tai Martinez

Matt Ellison

Matthew Ellison

Gavin Urban

Gavin Urban

Quintin Barrette

Quintin Barrette

Mauricio Aquino

Mauricio Aquino

Client Keith Neil

Keith Neil



B. Team Charter

Champlain Tours

Statement of Purpose

Champlain Tours team's purpose is to create a functional app prototype and optimizing SEO with social media and marketing to meet our client's expectations.

Team Core Values

- Creativity
- Responsibility
- Honesty (about strengths and weaknesses)
- Commitment
- Communication

Team Member Expectations

- Every member should attend our weekly class sessions
- Treat other team members with respect
- Notify team lead should you realize that you've been delegated a task too difficult to accomplish alone
- Produce quality work throughout the semester on time
- Maintain communication with team throughout each week

Core Competencies

Name	Core Competencies
<i>Matt Ellison</i>	iOS App development using Obj-C, back end code with PHP and SQL Databases, technical writing
<i>Tai Martinez</i>	Web Development and design, programming, technical writing
<i>Justin Karpan-Lowman</i>	iOS development using Swift, UI design, PHP, mySQL, C++, web development, team and project management
<i>Swan Garcia</i>	in Java and C, marketing analysis, technical writing
<i>Mauricio Aquino</i>	Programming experience with C++, Java, C, bash shell scripting.
<i>Brendan Gingras</i>	Backend Web Development, PHP, Laravel, SQL, C++, C, Java
<i>Samuel Layton</i>	C#/C++ programming, UI design, technical writing

<i>Quintin Barrette</i>	Python, C++, C, Java, PHP, Web Development
<i>Isaac Fraire</i>	C# Programming
<i>Gavin Urban</i>	Business research, marketing

Conflict Resolution Strategy

Conflict Between Team Members

-Disagreements

-Team members in conflict should first attempt to solve the disagreement themselves

-If either party is not comfortable with that, then they should contact the team leaders so that they can facilitate communication.

-If the disagreement continues then it will be addressed during a meeting between the members involved and the team leads.

Conflict with the Team and Team Leads

-The Team Leads and the upset team member will try to resolve the issue immediately.

-The disgruntled member can bring in another team member to mediate the issue.

If the entire team has an issue with the Team Leader, the team will call a meeting with the lead and make them aware of the issue.

-If the problem persists with the Team Lead, the team can take the issue to Dr. Stiles or Col. Stewart in order to find a resolution or to fire the team leader.

Conflict with the Team and Client

- If there is an issue between the client and the team, the Team Lead will set up a personal meeting with the client to discuss the issue and find a solution to the problem.

- If the problem is not solved immediately, the Team Lead will bring the issue to faculty so that they can take action.

Signatures

Isaac Fraire

Isaac Fraire

Justin Karpan-Lowman

Justin Karpan-Lowman

Brendan Gingras

*Brendan
Gingras*

Swan Garcia

Swan Garcia

Samuel Layton

Samuel G Layton IV

Tai Martinez

Tai Martinez

Matt Ellison

Matthew Ellison

Gavin Urban

Gavin Urban

Mauricio Aquino

Mauricio Aquino

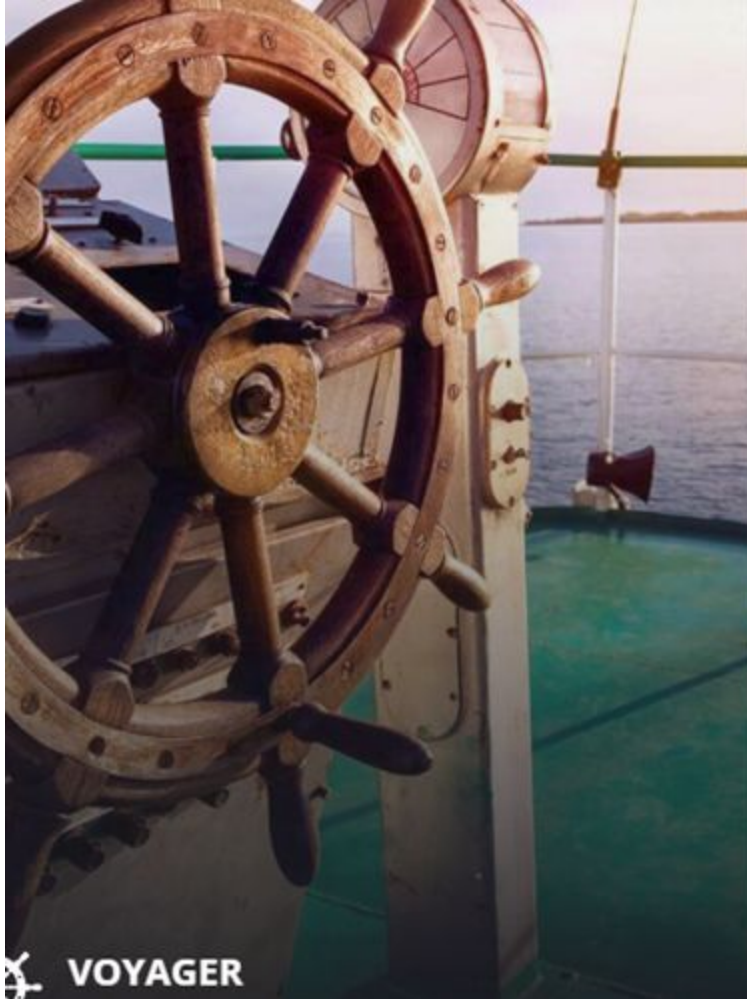
Quintin Barrette

Quintin Barrette



C. App Documentation

a. Online Dashboard Documentation



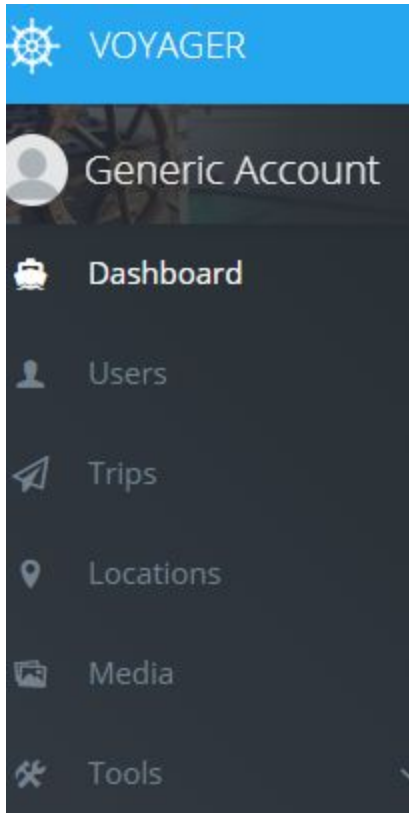
SIGN IN BELOW:

E-mail
E-mail

Password
Password

LOGIN

To use the online dashboard, one must login using an administrator/travel guide account. The login page is available at the /admin page. Once logged in, the main screen will appear. On the left, the following options are available:



The dashboard page is the homepage; where one can see visitor statistics/user activity.

Apart from this, the other pages are as follows.

On the users page, one can see all active users registered in the system. This includes all App users and Administrators/Tour Guide accounts. Administrator/Tour Guides can log into the online dashboard, and app; however, regular app users are restricted to just the app.

One can search for a specific user using the search bar. Otherwise, all users are listed. To delete a user; one selects the account using the leftmost field and presses the delete button at the top of the page. Alternatively, to create a new user directly from the Admin Panel, pressing the Add New button creates a new user.

	Name	Email	Created At	Avatar	Role	Roles	trips	Phone Number	Actions
<input type="checkbox"/>	Generic Account	letmein@email.com	2018-10-05 21:44:21		Administrator	No results	NOVA SCOTIA FIRST CLASS		<input type="button" value="Edit"/> <input type="button" value="Delete"/> <input type="button" value="View"/>

To grant access the admin panel for an Admin/Tour Guide user, the user must be created from within the admin panel, and during the creation process, the “Default Role” should be selected to Administrator.

On the trips page, one can see all trips in the system that appears on the app. Creation/deletion is identical to the users page.

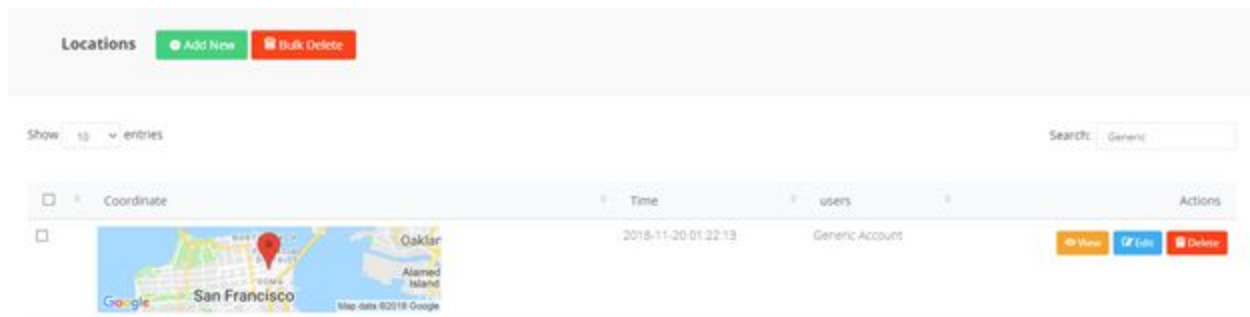
	id	Title	Image	Day Multiday	Url	Images	Start Date	End Date	Sold Out	Invite Code	users	Actions
<input type="checkbox"/>	28	NOVA SCOTIA FIRST CLASS		<input type="button" value="Multi Day"/>	https://www.champlaintours.com/nova-scotia-first-class		2019-09-26	2019-10-03	<input type="button" value="None"/>	l8ox186	Brendan's Generic Account...	<input type="button" value="Delete"/> <input type="button" value="Edit"/> <input type="button" value="View"/>

When creating a new trip, the Trips title, and an image is required. Additionally, the URL for the trip should be set corresponding to the page on champlaintours.com so additional information can be seen by users on the app. A benefit to linking to the website means that information already contained on the website is visible in the app; and heavy details of the trip do not need to be ‘duplicated’ or re-entered twice into the dashboard.

When a trip is created, an Invite code is automatically generated and allocated in the App. Users who have booked that trip should be given the invite code so they can register for that trip in the app. This makes it easier for management of the system, as users do not need to manually be assigned to any trips; they assign themselves using the code. Additionally, for security, a random user cannot just join any trip – as they need the invite code.

On the locations page, one can see locations for users in the app who have submitted locations.

Clicking on any map will bring up the map in Google Maps on the web on a desktop, or in the Google Maps app on Android/iOS.



b. App Demo

For Keith, the app team created a few videos (which are located on the USB>App Prototype>Video Demos) demonstrating how the current app prototype works and how to use the API dashboard (also outlined starting on page 14). The app team hopes that these videos will be of use to Keith and any future developer that might need a better understanding of how the app prototype works.

c. Code Release & Usage

As a part of our deliverables to Keith, we will be providing him with an Android executable that he will be able to install to his Android phone to show to another professional app team for continued development. This executable can be found on the USB drive that is attached to this report, inside the folder “Executables”, which can be found under the “App Prototype” folder. The App team has worked with Keith to transfer the code for the API/Dashboard, which is detailed above in subsection a.

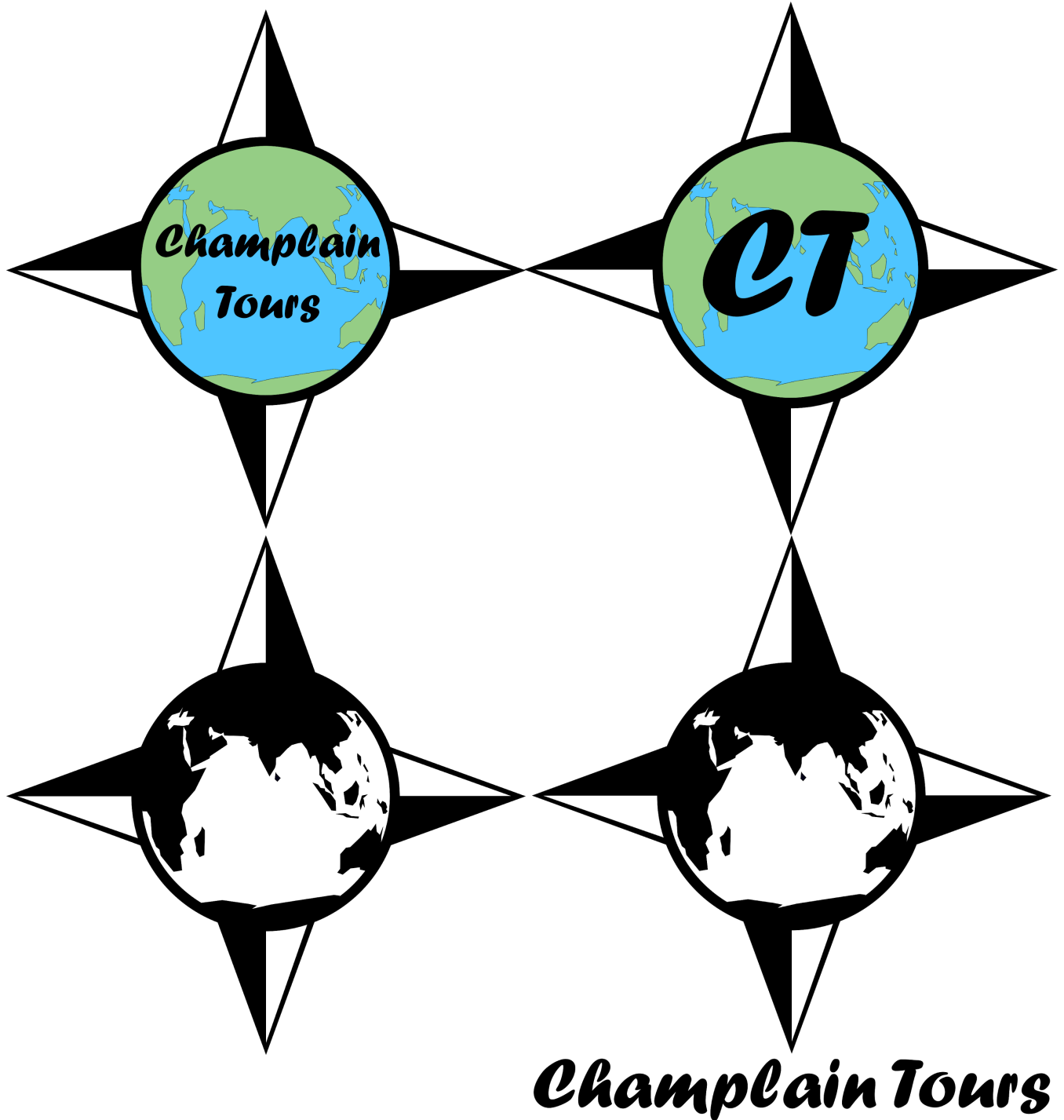
With regards to the source code of the above Android executable, this code will be released to Keith with the CC BY-NC-SA 4.0 license attached to it. The reasoning for this license of the code is to prevent the commercial use of the source code that was generated specifically for this project. This is because we believe as a team that Keith should only use the provided application as a prototype to show a professional app development company to develop a new solution based on ours from the ground up. To learn more about this license, please visit <https://creativecommons.org/licenses/by-nc-sa/4.0/> . The source code has been included on the attached USB, under the App Prototype > Source Code. The source code has been fully commented, and includes HTML formatted documentation.

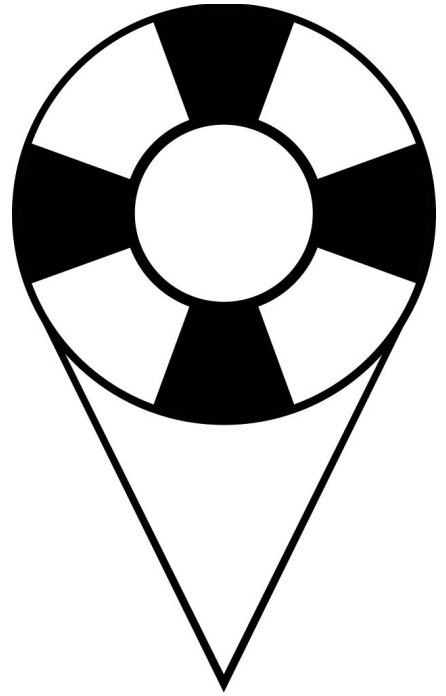
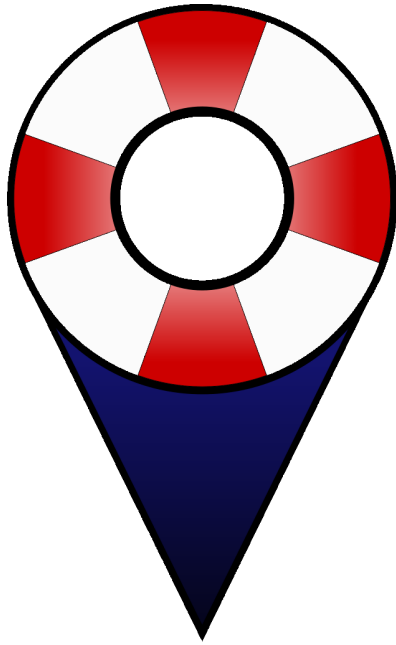
For usage of the android executable, the .apk file provided should be downloaded onto an android device. Then, it can be installed by accessing that file through the phone’s File Explorer/ My Files, etc. Pressing on the .apk file should prompt for it to install. If the phone does not allow installation, the phone must allow “Installation from 3rd party sources” in the phone’s settings.

D. SEO Documentation

a. Logos

- High-resolution copies can be found on the USB >SEO Folder > Logos







CHAMPLAIN



CHAMPLAIN
TOURS



TOURS



CHAMPLAIN
TOURS



b. Slogans

- Spin the globe. We'll get you there.
- Expanding your world.
- Tours made simple.
- Safe travel made easy.
- Safety and stress-free travel
- Travel made possible
- Just travel. No strings attached.
- Everything is simple with Champlain Tours.
- Discover new places.
- Guided tours that make travel safe and stress-free
- Navigate, Explore, Safety, Worry-free
- Safety, reliability, and relaxation all in one travel package.
- Let's travel together
- Travel every step of the way
- Leave the stress to us.
- Throw a dart. We'll handle the rest.
- Sit back. Leave the rest to us.
- Travel safe is the only way to go.
- Champlain Tours is your safe place in an unsafe world.
- Get out and explore.
- Breathe new air.
- Safety and guidance for stress free travel
- Make travel possible with guided tours

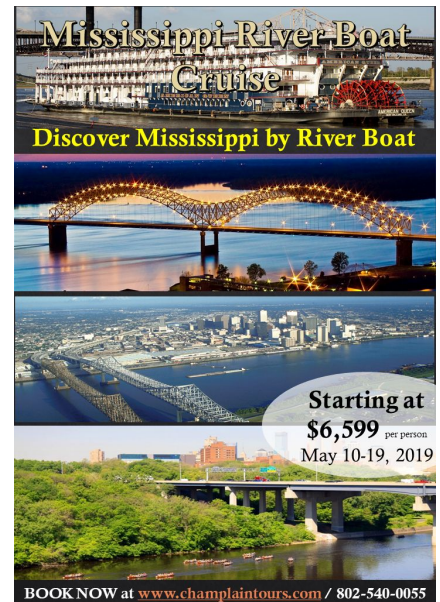
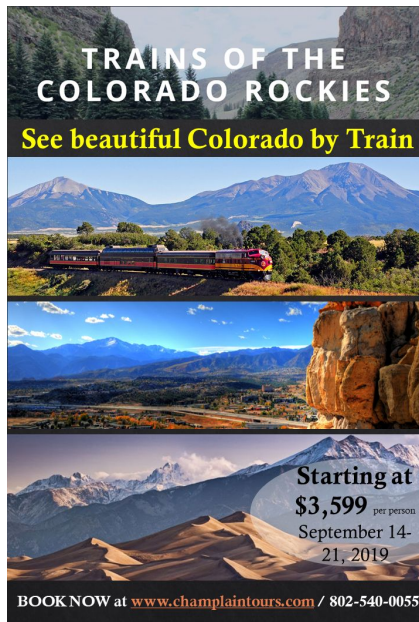
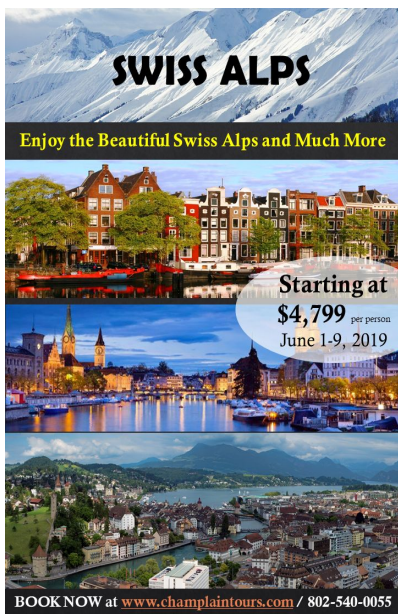
c. Advertisements

- All high resolution copies can be found on USB > SEO folder > Advertisements

Includes

- Swiss Alps Tour
- Trains of the Colorado Rockies Tour
- Mississippi River Boat Cruise Tour
- Targeted customers: Aimed at children and grandchildren of travelers
 - Includes holiday specials: Mother's Day, Father's Day, etc.
- General Champlain Tours
- App Promotions

Examples:



d. Business Cards

Champlain Tours



Keith Neil
Sherpa in Chief

P.O. Box 8585
Burlington, Vermont 05402
Phone: 802-540-0055
Email: Champlaintours@outlook.com

Visit www.champlaintours.com for more information

Leave us a review and follow us!

Facebook: @champlaintours

Twitter: @champlaintours

Instagram: @champlaintoursvt

YouTube: Champlain Tours

Champlain Tours

P.O. Box 8585
Burlington, Vermont 05402

Phone: 802-540-0055
Email:
Champlaintours@outlook.com



Keith Neil
Sherpa in Chief

Visit www.champlaintours.com for more information

Leave us a review and follow us!

Facebook: @champlaintours

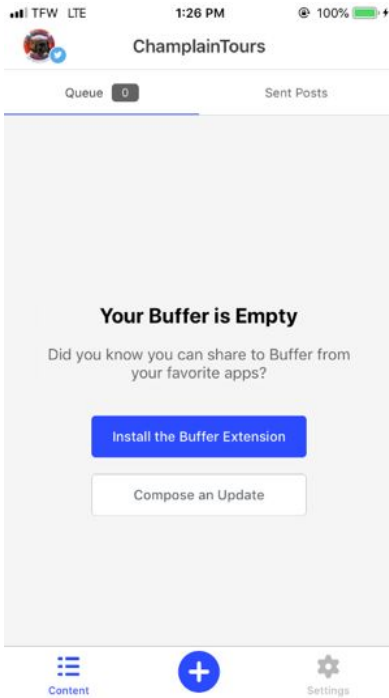
Twitter: @champlaintours

Instagram: @champlaintoursvt

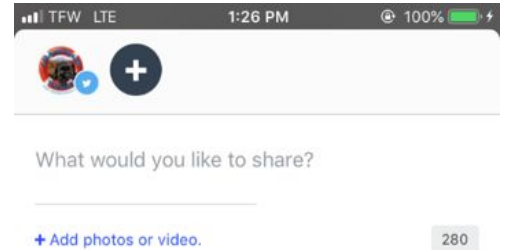
YouTube: Champlain Tours

e. Buffer with Example Posts

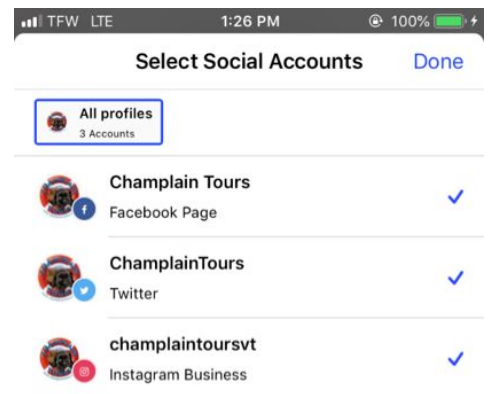
- Full document and additional explanation can be found on the USB > SEO folder > Buffer.com



Step 1: When you open the buffer app, it will look similar to the picture to the left. To make a post tap the plus sign at the bottom of the page view.

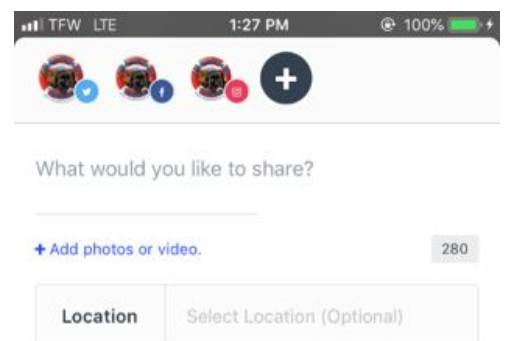


Step 2: That will bring you to the next view shown at the right. You will want to make sure that you are posting to Twitter, Facebook, and Instagram all at once so tap the plus sign icon.

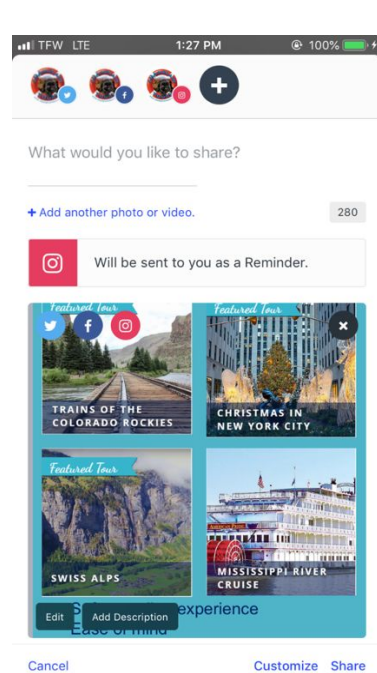


Step 3: That will show you the next view shown to the right where you will want to tap the “All profiles” icon and be sure that all the accounts have the checkmark next to them. After doing this tap “Done”.

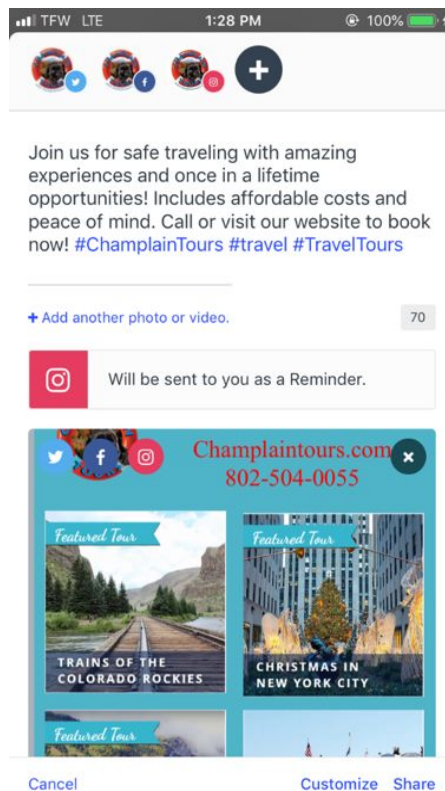
Step 4: The next page will look similar to the image shown to the right. Notice how it will show that it will be posting to all three social media pages. You will then tap the “+Add photo or video” for one of the advertisements or a photo.

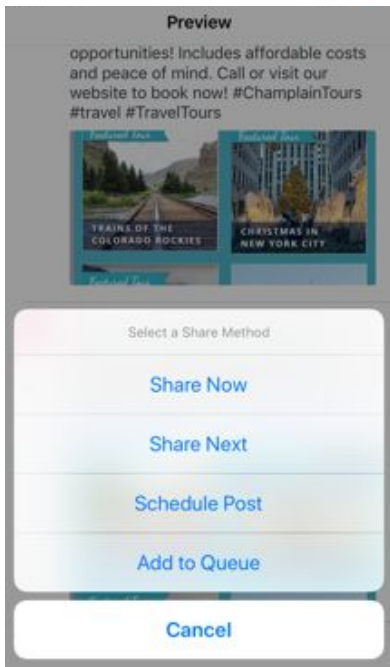


Step 5: For this example, the general ad is shown which are in the photos on your phone or computer device. The next page will look like the image to the right. You can edit the photo by cropping or resizing as well.



Step 6: You then tap to add the text where it says “What would you like to share?”. For the text, try to keep it minimal but with everything you would like to say, as shown in the image to the right. Be sure to include 2-5 hashtags related to the post. This will relate your post to posts with the same hashtag and thus get you more traffic and views on your post.





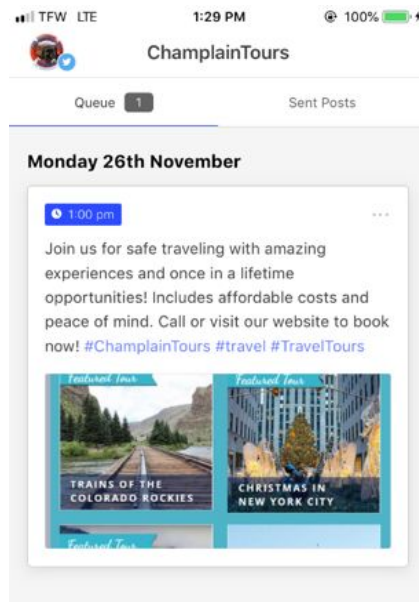
Step 7: When you tap the “share” link at the bottom of the page view, you will be asked when you would like to share the post as shown to the left. For this example, selected schedule post to set a specific time to schedule it, as seen to the left.



Step 8: When you tap “Schedule Post” you will be asked when you want buffer to post the photo. Scheduled this post for Monday at 11:00 a.m., a time when many will be on lunch break and thus checking their social media (based on the research we provided). Tap Done when you have picked the time you want, which is shown to the top right.

Your post(s) will be sent on **Nov 26, 2018** at **11:00 AM MST**

Step 9: As seen on the below the post will now appear in the queue.



f. Research Documents

-Full documents can be found on the USB > SEO folder > Social Media Research

Marketing Points of Improvement:

I. Champlain Tours' Logo

A. Problem: Without the company's name on the logo, it is difficult for people to identify it as the logo of a travel company. The unrelated images paired with artifacts around the logo give it a jumbled look, potentially people as to what your company is.

B. Solution: The SEO team proposes designing a cleaner logo for Champlain Tours that implicitly conveys cruise travel to viewers.

II. Copyrighted Material in Advertisements

A. Problem: Two major videos on Champlain Tours' YouTube channel (one of which is featured on their Facebook page) contain copyrighted material from *The Secret Life of Pets* and Avalon Waterways River Cruises. Seeing this, viewers may perceive Champlain Tours as illegitimate as they aren't confident in showing content of their own. Further, potential copyright strikes will bar Champlain Tours' videos from generating significant search traffic.

B. Solution: The SEO team suggests removing videos containing copyrighted material for the time being. Until Champlain Tours has video advertisements containing 100% original content, social media outlets such as the company Facebook page should stick to featuring images from the tours themselves.

III. Inactive Facebook Page and Community

- A. Problem: Champlain Tours' Facebook page lacks both consistent posts and active Facebook users reacting to them. This likely stems from a few people being able to find the page through their News Feed. The SEO team proposes 3 solutions to this problem, acknowledging how Facebook's algorithm prioritizes posts on a user's News Feed.
- B. Solution 1: Facebook's most recent algorithm prioritizes posts that create meaningful interaction between users. This means that it prioritizes posts with comments, shares, and reactions over posts with high amounts of clicks or views. Because of this, the SEO team proposes gearing Facebook posts to encourage former Champlain Tours customers to share their tour experiences in the comments.
- C. Solution 2: Facebook's 2018 algorithm also prioritizes posts that connect like-minded users. This means that if two users, who consistently interact with pages of similar content, comment and reply to one of Champlain Tours' posts, said post will gain higher priority on users' News Feed. The SEO team proposes centering Facebook posts around specific activities within the tours. Generating discussion related to specific interests will bring in "like-minded" users, boosting the priority of Champlain Tours' posts.
- D. Solution 3: Facebook's most recent algorithm also prioritizes posts that turn niche communities into Facebook Groups. Because Champlain Tours already appeals to a niche group (elderly travelers), the SEO team proposes creating public Facebook Groups out of each tour and inviting those who attended. This will not

only boost priority for Champlain Tours' posts but also create an enduring community that will continue to interact through the group long after the tour has ended. With a sustainable community, the Facebook page's search relevance will continue to grow on its own.

How Facebook 2018 Algorithm Prioritizes Posts:

At its core, Facebook's most recent posting-prioritization algorithm ranks posts that create "meaningful interaction" over all else. This presents a challenge for businesses using Facebook as a means of free ad space as the newest algorithm orders posts from family, *close* friends, and groups over posts from outside entities. Despite this, the following document outlines some major posting-prioritization factors within a business' control.

I. Facebook prioritizes posts from users with high "connectivity" rates

The algorithm prioritizes posts from users who connect with their friends. This counters the common belief that it is the number of friends that a user has which prioritizes their posts. Establishing a connection between users means that users send messages between each other. If one user sends a private message to another and they reply back, they make a connection.

Connecting with close to 100% of a user's friends is key. This is because the algorithm rewards users with high connectivity rates with higher prioritization on the news feed. Analysts recommend culling a user's friends list to only include users who've created a connection. "Disconnected" friends only bring a user's priority down. The goal for a user is to reach as a connectivity percentage as possible.

II. Facebook rewards users with high engagement

Facebook's algorithm prioritizes posts from users who *actively* engage with the system on a regular basis. Users who view and reply to others' stories, comment on others' posts, and (most importantly) talk to other users through the Messenger app receive a higher "engagement" value than those who don't. As an important caveat, the algorithm knows to detect automation or pseudo-automation (*i.e.*, users leaving generic comments under posts). Thus, users who take the time to comment and build a conversation receive higher prioritization from the algorithm. Facebook rewards users for as much as they put in.

III. Facebook prioritizes users with spaced posts with minimal words

The 2018 algorithm promotes regular posting everyday. Yet, there is a soft limit on how many posts a user can make before their priority on others' newsfeed drops. Analysts recommend posting up to 1-3 times to not have the algorithm interpret said user as a "spammer." Users should also space their posts with at least a 3 hour gap. This piece is key to ensure that a user's posts aren't competing with each other on another user's newsfeed.

IV. Facebook rewards posts that generate "meaningful interactions"

No longer is the time each user spends viewing a post the deciding factor of its prioritization. Generating "meaningful interactions" between users determines whether a post lives or dies. Facebook's algorithm interprets meaningful interactions as comments and shares instead of likes and clicks. High-priority posts invite users to comment and add reactions through interesting and relevant content. Replies to these comments, which thus form a conversation, work to boost a post's priority as well. One user sharing a post with another through the Messenger app also increase a post's priority. It indicates that said post was meaningful enough for one user to personally send to another. Authentic interactions between users is the intent

behind Facebook's updated algorithm. So, business-related posts must invite conversation if they are to succeed as they had in the past.

Though it may be tempting for companies to "bait" engagement out of users through provocative posts, the algorithm does lower these types of posts. They have a high propensity to generate chains of single replies rather than back-and-forth conversations (*i.e.*, meaningful interactions), deprioritizing them in the news feed. Users should refrain from posting messages like, "COMMENT if you wish you were on this trip!" and move towards writing conversation builders like, "What was your favorite activity on our trip?"

Businesses may also create meaningful interactions through creating Facebook groups. Out of all posts, the algorithm places the highest priority on those from family, close friends, and groups. If a business were to create a Facebook group and invite other users, then said business' posts would share extreme priority on group members' news feed.

V. Ads circumnavigate loosely-defined elements of the algorithm

The 2018 algorithm works to bring Facebook back to its roots: encouraging users to connect with one another. As a consequence, automated, "ad-like" posts will continue to lose news feed priority as Facebook continues this trend. But ads will continue to populate the news feed regardless of whether they generate meaningful interactions, acting now as the last surefire way of infiltrating what users see. If a user looking to increase their priority finds they lack the time to engage with Facebook's systems, then they should consider investing in advertisements on the site. Whether other users like it or not, they will always see ads.

Conclusion

Unlike prior versions of the news feed algorithm, the 2018 iteration demands what makes posts human. It rewards users who post often but don't spam, encourage comments but don't bait reactions. Above all, it aims to avoid the hollow news feeds of versions before. Users looking to automate posts will find their output receiving abysmal priority. The algorithm can find automated posts pretending to be human through more clever prioritization factors. As a result, businesses must dedicate time to engage with both Facebook and users curious about their service.

If human posters aren't a possibility because of time or money, automated posts must invite what is human. By its nature, Champlain Tours' service brings in like-minded individuals who will share a fantastic travel experience. Automated posts must encourage users to share those experiences, thus boosting each posts perceived humanity. Rather than pretending to look human, intelligent automation encourages other users to fulfill the factors above for them.

Best Times to Post on Social Media:

The one thing that was repeated throughout the research was that when posting you need to know your target audience. How old are they? Where do they live? What social networks do they mainly use? Do they use their phone or computer to scroll through feeds? On your next tour, we recommend that you ask these types of questions to figure out what is the best time to publish your post.

In conducting our research, we found out that in the United States about half of the country's population is in the Eastern Time Zone. This is great news for you since Vermont is in the Eastern Time Zone. However, whenever you are on your tour you should keep in mind to

post according to the Eastern Time Zone, instead of posting in the time zone you are currently visiting. We also found out that Facebook is the most popular social media platform but, users tend to see more post about friends and family instead of business pages. Twitter can be a good way to answer consumers comments or concern in real time, which will provide a much better brand experience. Instagram is on the verge to become the most popular social media platform and more than 80% of the users follow a business. This is a good thing to keep in mind depending on what you are posting, so you can hit your target audience. People also tend to use Facebook and Twitter throughout the day because they can log on to a computer during work hours. However, with Instagram more people are engaged with content when it is not during work hours, because Instagram is only offered through a phone app. Below is a comparison of the best time to post on social media according to three different websites. There is some difference in some of the times, but the takeaway we gained from this research is that the best time to post is weekdays during 12-3 p.m., because that is lunch hours people tend to look at social media during their down time. Also, weekends seem to be the worse time to post due to the fact that everyone is usually spending quality time doing something else. When narrowing it to a specific day it is hard to say for certain what is exactly the most popular day to post but looking at this research Thursday seems to be the most dominant.

Website 1:

- Facebook

The best time to post is on weekdays is between 1-4 p.m.

The best time to post is on weekends is between 12-1 p.m.

The least engagement is weekends before 8 a.m. and after 8 p.m.

The most effective day to post each day of the week is Sunday.

- Twitter

The best time to post is between 12-3 p.m. and after 5 p.m. when everyone is home from work.

Weekends tend to be more popular than weekdays, however not always the case.

Retweets and click throughs are at a high around noon, 3 p.m., or 5-6 p.m.

The most effective day to post is any day of the week.

- Instagram

The best time to post is Monday – Thursday is between 3-4 p.m.

Also, Monday at 8-9 a.m. is a popular time because people waking up and it is the start of the week.

The most effective day to post each day of the week is Thursday.

Website 2:

- Facebook

The best time to post is Wednesday is between 12-2 p.m. and Thursday is between 1-2 p.m.

In general, the best time to post is on weekends is between 10-3 p.m.

The least engagement is on Saturdays and evenings and early mornings.

The most effective day to post each day of the week is Thursday.

- Twitter

The best time to post is Friday between 9-10 a.m.

In general, the best time to post is every day between 10-12 a.m.

The least engagement is on Sunday.

The most effective day to post each day of the week is Friday.

- Instagram

The best time to post is Wednesday at 3 p.m., Thursday at 5 a.m., 11 a.m., and 3-4 a.m., and Friday at 5 a.m.

In general, the best time to post is on Tuesday-Friday between 9-6 a.m.

The least engagement is on Sunday.

The most effective day to post each day of the week is Thursday.

Website 3

- Facebook

The best time to post is between 1-4 p.m.

The least engagement is on Tuesday.

The most effective day to post each day of the week is Thursday, Friday, Saturday and Sunday.

- Twitter

The best time to post is between 12-1 p.m.

The least engagement is on weekends.

The most effective day to post each day of the week is week day around noon.

- Instagram

The best time to post is between 11-1 p.m. and 7-9 p.m.

The least engagement is on Sunday.

The most effective day to post each day of the week is Monday, Wednesday, Thursday.

g. How-To Guides

- Full guides and full explanations can be found on the USB > SEO folder

Creating Facebook Groups:

Groups provide a space to communicate about shared interests with certain people.

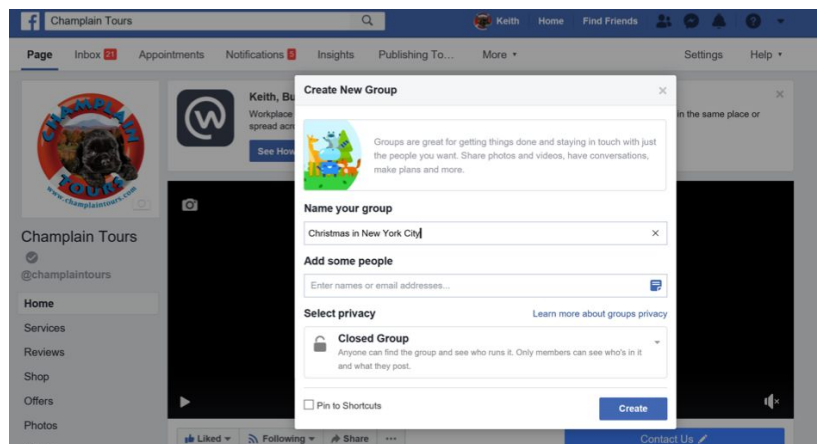
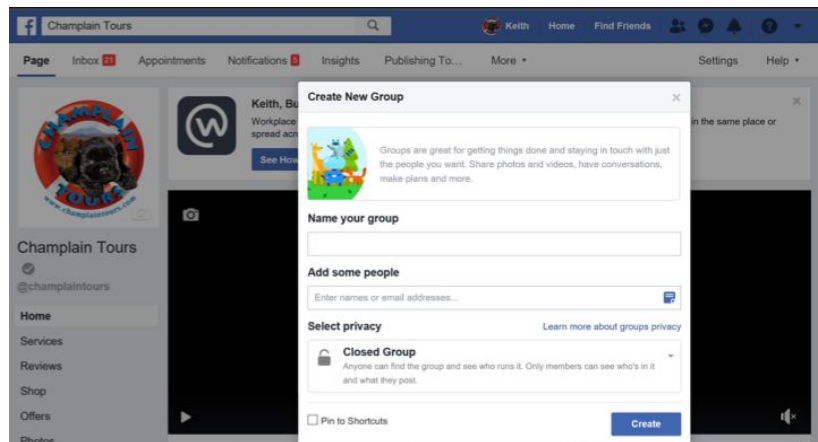
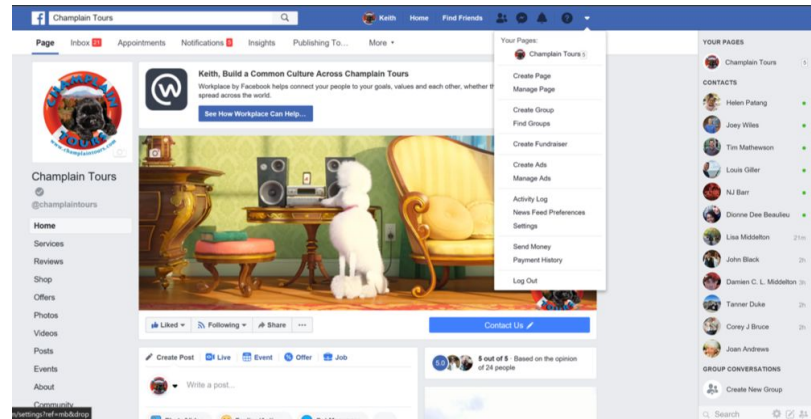
Step 1: At the top of your page, there will be a drop down arrow as shown below. From there, you will find a “Create Group” which you will click to create a group.

Step 2: After clicking the “Create Group” tab, you will be brought to the page shown below.

Step 3: In the name of the group, you would type the trip that you would like to create the group for. In the “add some people”, you will type the names of those who you would like to include in the group. At least one person has to be in the group for it to be created.

The following resource has some great explanations on how to manage the groups:

https://www.facebook.com/help/1686671141596230?helpref=about_content



Buffer.com Account:

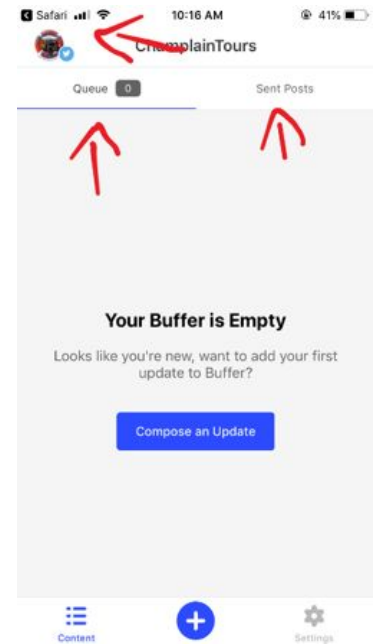
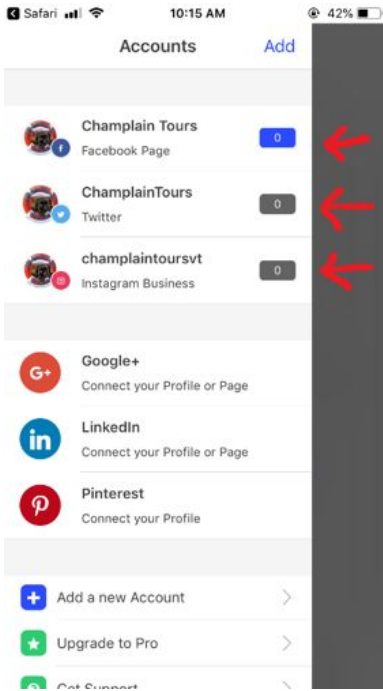
Step 1: Download the Buffer App on your phone and log into your account.

*Note Twitter, Instagram, and Facebook are all linked to your buffer account already

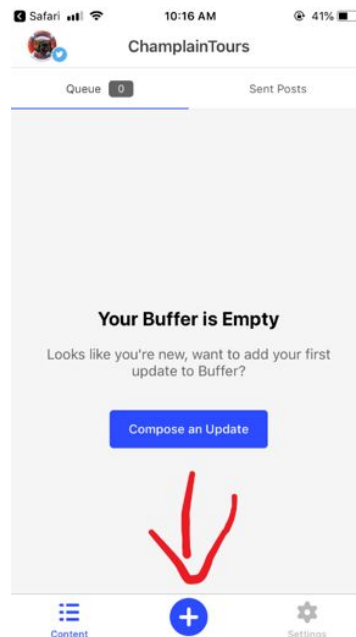
In the App:

Step 2: By tapping each Icon as shown to the right, you can easily switch between your social media accounts

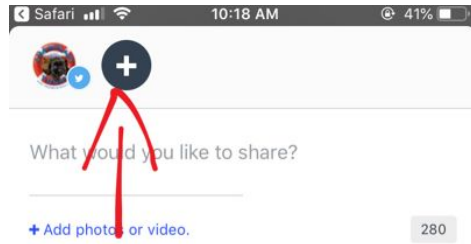
Step 3: As seen below the home screen, you will see which social media page you are posting to, the queue, and the posts that have been posted.



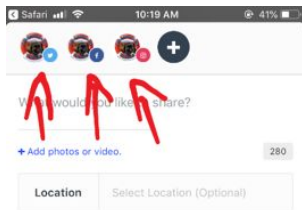
Step 4: As shown below when you tap the plus sign at the bottom of the screen, you can immediately share either a text post, a photo, or a video.



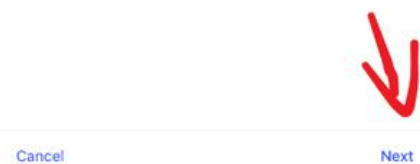
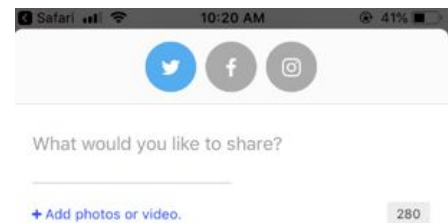
Step 5: Once you tap the plus sign, you will be brought to the following screen above, where you can add which profiles you would like to post on by tapping the plus sign icon at the top of the page.



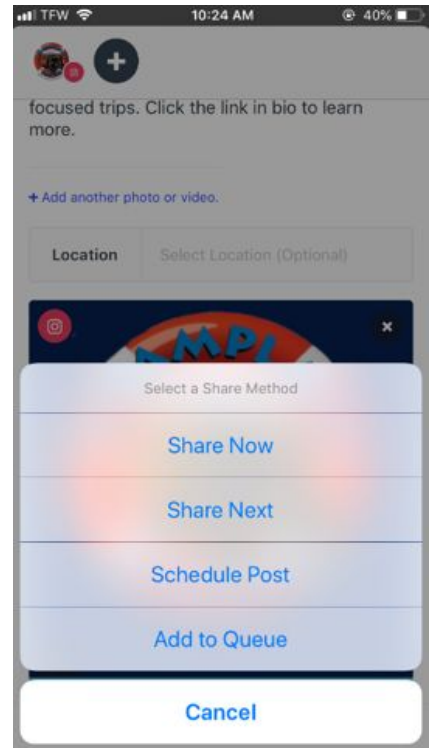
Step 6: If you select all three social media platforms, you can still customize those posts by posting different information on each one at one time by tapping the customize at the bottom of the screen.



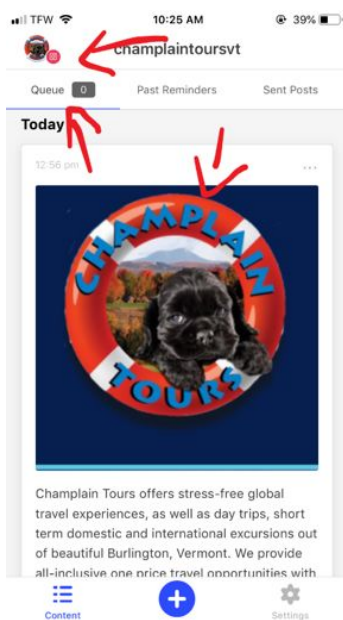
Step 7: This will bring you to another screen, shown to the right, that will ask you one at a time what you would like to post. Simply tap next at the bottom of the screen to access the next social media platform.



Step 8: When you tap to share a post, you can share now, share next, schedule a specific time to post, and add to queue.



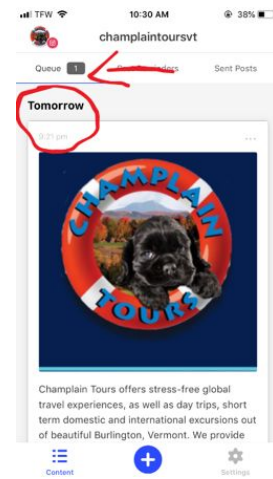
Step 9: If you add the post to the queue, you can see the post and edit the post under the social media platform you choose to post it to.



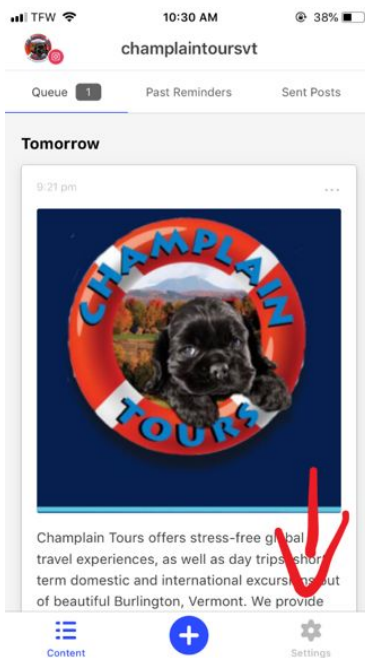
Step 10: If you select schedule the post, you will be brought to this page shown to the right to set up specifically when you buffer to post.

Step 11: By selecting share next, the post will appear in your queue as the next up.

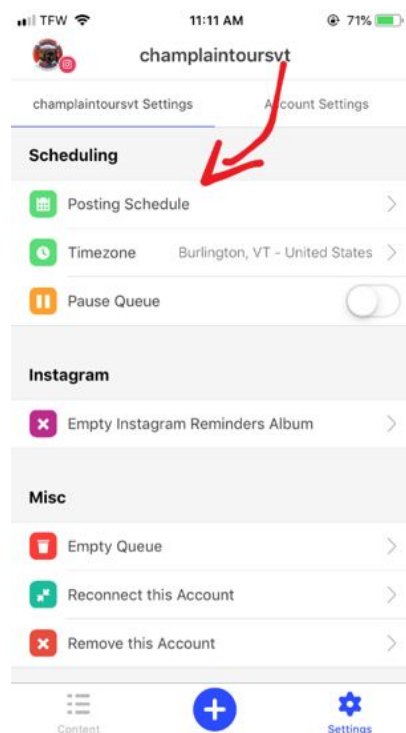
Adding posts to your queue will cause them to be posted based on your posting schedule which is shown at the top of the post.



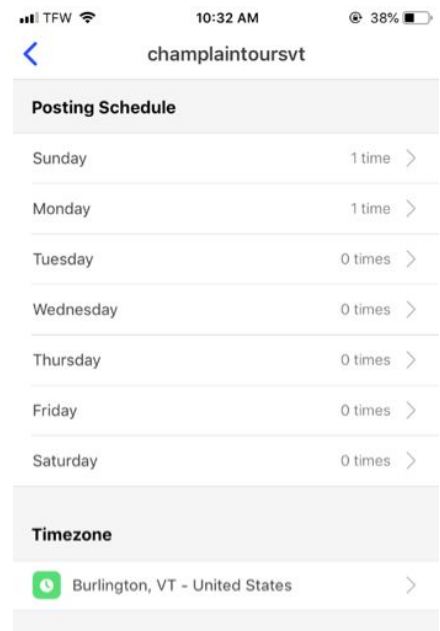
Step 12: To see and change the posting schedule, simply tap the settings icon, as shown to the left.



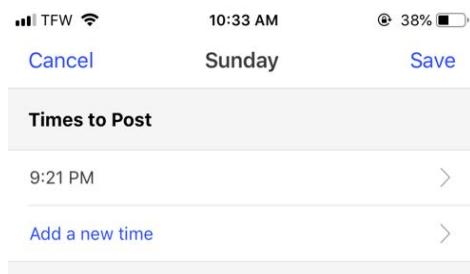
Step 13: Under the settings, you will see the posting schedule at the top of page, shown below.



Step 14: Tapping the posting schedule, you will see the days of the week set out, as seen to the right.



Step 15: When you tap the individual day, you will see that you can edit the time and set several different times throughout the day to post what is in your queue.



Note that you will have to set the schedule for each social media platform (Twitter, Facebook, Instagram)

h. Passwords

- Buffer Account
 - Username: champlaintours@outlook.com
 - Password: sheazar

- Yelp Account
 - Username: champlaintours@outlook.com
 - Password: Sheazar1!

- Digital Ocean
 - Username: champlaintours@outlook.com
 - Password: sheazar1

- Digital Ocean - BackendAPI Droplet (<http://206.189.70.144/>)
 - SSH/SFTP Access to Droplet
 - Data for App/Backend is being stored on the BackendAPI droplet. Within the droplet, to access such via FTP/SSH, the root user credentials were emailed to you for security reasons at champlaintours@outlook.com. If these credentials are missing, one can reset the root account credentials from within the DigitalOcean dashboard for the BackendAPI droplet using the above credentials
 - There is a non root account created that has sudoer permissions. Use hostname: 206.189.70.144 and port 22.
 - Username: developer
 - Password: developme

- MySQL (Application is using the APISStore Database)
 - Username: root
 - Password: 64c2c95ead08b4b08e7c56bd09f63413abe79521a09ba3fd

- Online Dashboard/App Admin (<http://206.189.70.144/admin>)
 - Username: letmein@email.com
 - Password: granted

Work Cited

- Brookes, Frazer. "Facebook Algorithm 2018." *YouTube*, YouTube, 10 Jan. 2018,
www.youtube.com/watch?v=PXSutrDXkJg.
- Ferreira, Martins. "The Best Time to Post on Social Media in 2018 [INFOGRAPHIC]." *Oberlo*, Oberlo Dropshipping App., 6 Nov. 2018,
www.oberlo.com/blog/best-time-post-social-media.
- Kolowich, Lindsay. "The Best Time to Post on Instagram, Facebook, Twitter, LinkedIn, Pinterest, and Google+ [Infographic]." *HubSpot Blog*,
blog.hubspot.com/marketing/best-times-post-pin-tweet-social-media-infographic.
- Shannon. "How the Facebook Algorithm Works in 2018 (And How to Work With It)." *Hootsuite Social Media Management*, 3 May 2018,
blog.hootsuite.com/facebook-algorithm/.
- Vranicar, David. "How to Adapt to Facebook Algorithm Changes." *Oberlo*, Oberlo Dropshipping App., 28 Aug. 2018,
www.oberlo.com/blog/facebook-algorithm-change.
- York, Alex. "Best Times to Post on Social Media: 2018 Industry Research." *Sprout Social*, Sprout Social, 11 June 2018,
sproutsocial.com/insights/best-times-to-post-on-social-media/.