TEAM MEMBER ROLES

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Social media is one of the most effective ways for people to communicate and keep in-touch. From the perspective of business’s or organizations, it is a global market tool, which can reach millions of users instantly. Having a social media presence these days has become more of a necessity than leisure for individuals and businesses. As our world evolves with technology and Internet based communication, major networks such as Facebook, Twitter and LinkedIn are now forms of communicating with friends, business partners, and family members.

The sole objective of ZONE is to provide a one-stop-shop location for all social media needs. Some examples of the most popular sites which have currently been implemented into the ZONE website include:

<table>
<thead>
<tr>
<th>Social Networking Sites</th>
<th>Email</th>
<th>Media</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook, LinkedIn, Twitter</td>
<td>HotMail, Gmail</td>
<td>Spotify, Flickr</td>
<td>Google +, Yelp</td>
</tr>
</tbody>
</table>

Social media sites are shown on a single dashboard in one page giving the user the ability to manage all these accounts through an administration page. The same concept is true for all email sites, having their own separate dashboard on a different tab. The user does not have to worry about different login credentials for all of their different social media sites. Zone will keep track of all usernames and passwords for each one of the user’s different sites.

Not only does ZONE save time for the user by collaborating all their social media needs into one easy to access location; but it also provides analytics such as

- Google Analytics,
- Facebook Insights
- Twitter Aggregator

These features are what grasp our user’s attentions, increases the number of users and essentially result in our website retaining these users.
System objectives

User Needs:

We are now in an era where technology surrounds us every day. Most people interact with one another using social media. They spend countless hours posting, chatting, looking, and searching for content on the web. Social media has become the ultimate way to stay connected with family, friends, strangers, and the world. Users of social media are constantly looking to obtain and post information faster, easier, and with less effort. ZONE has found a niche within the overall market by offering a service which collaborates all social media sites into one easy to access location.

High-level description of ZONE:

Zone merges different social media sites into one location. Imagine only having to log on to one site for all your social media needs. For example, a person who has a Facebook, twitter, linked-in and google + account can have real time access to each of those websites in one location/on one dashboard.

Having analytical reports available to them:

• Pointing out different chats they can get involved in based on their conversation history (twitter)
• Suggesting the user new restaurants based off their recent check-ins and their friends check-ins (Facebook)
• Filtering through jobs and recommending one that fits the description and requirement of the user based on their profile information and resume (LinkedIn)

High level description of functionalities:

Once the user logs on to Zone, they will automatically be logged on to each of their social media websites, which have been added to Zone. They can have real-time access to all their social media sites at once. Notifications and alerts will be displayed instantly for each social media site in real time. The user can multitask seamlessly from one social media tool to another without having to change tabs, webpages, or screens. Convenience for the user is everything that ZONE Strives for.
Market Landscape

Fortunately for ZONE, the market landscape stretches across many different large categories: general public, government agencies, academic institutions, and business/organizations. All of these major categories have a presence in social media. They could all use ZONE to their advantage by reducing time, simplifying their navigations, and receiving analytical insights based on their specific profiles.

Competitors:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Hootsuite</th>
<th>TweetDeck</th>
<th>Buffer</th>
<th>SocialOomph</th>
<th>ZONE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook Profile</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>LinkedIn Profile</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Twitter Profile</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Instagram</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>Secured Single Sign on</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Gmail</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Hotmail</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Flickr Search</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Spotify Music</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Analytic Reports – Profile Evaluation</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Recommendation – FB, Twitter, LinkedIn</td>
<td>x</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Sentiment Analysis</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
</tr>
<tr>
<td>RSS Feed</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Blog Option</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>Free Plan – (App Limitation)</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

HootSuite is the popular social media management tool for people and businesses to collaboratively execute campaigns across multiple social networks like Facebook and Twitter from one web-based dashboard.

Buffer is a smart and easy way to schedule content across social media. Think of Buffer like a virtual queue you can use to fill with content and then stagger posting times throughout the day.

SocialOomph is a web tool that provides a host of free and paid productivity enhancements for social media.

Tweetdeck is a web and desktop solution to monitor and manage your Twitter feeds with powerful filters to focus on what matters.
Unique Features

- All social media access on dashboard
- Easy navigation between each social media profile
- Analytics which includes profile evaluation, sentiment analysis and recommendation system for all major social media sites
- Along with Social Media, Zone integrates music and media as well to make sure users get everything at one place

System Design Architecture

A responsive and user-interactive front end was designed using HTML5 and CSS3. PHP was the programming language used. The website was hosted on Amazon EC2. The website was connected to MySQL database which stored all the data required for analytics.
APIs:

The following APIs were integrated into the system:

<table>
<thead>
<tr>
<th>Social Networking</th>
<th>Email client</th>
<th>News &amp; Entertainment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twitter</td>
<td>Hotmail</td>
<td>Spotify</td>
</tr>
<tr>
<td>LinkedIn</td>
<td>Gmail</td>
<td>RSS Feeds</td>
</tr>
<tr>
<td>Facebook</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flickr</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Google | Yelp | Streaming | High Chart |

Analytics:

The following analytics were performed using Facebook users:

1. Recommends restaurants from Yelp based on users’ recent check-ins considering the type of restaurant and location.
2. Recommends restaurants from Yelp combining users’ recent check-ins and their top friends’ recent check-ins considering the type of restaurant and location. These top friends are the ones who are recently tagged in the users’ photos and status messages.
3. Any overlaps between the two recommendations are eliminated to remove redundancy.
4. WEKA tool was used for recommendations. User preferences from yelp and similar websites were collected. Apriori algorithm was used in WEKA to arrive at association rules for the restaurants. Based on these association rules, recommendations are provided.
The following analytics were performed on Twitter profiles:

1. Performed text mining on users’ tweets and identified hashtags. Used these hashtags to collect over 60,000 tweets.
2. These tweets were used for various analytics –
   a. Word cloud of top keywords using Tableau
   b. Sentimental analysis of top two hashtag tweets using PHP Insight
   c. Geo-location analysis of the tweets using the location coordinates on Tableau
3. Evaluation of user’s Twitter profile based on the count of followers of the profiles followed by the user
1. Below is the profile page showing a dashboard of Facebook, Twitter and LinkedIn pages. Facebook has recent photos and statuses; LinkedIn shows connections and following companies. Recent tweets of the users are also show in the dashboard.
2. Below screenshot shows a visual representation of top friends in Facebook with number of photos and status messages tagged. Alongside, the recent check-ins are shown in a Google Map for better visualization.

3. Screenshot of Twitter profile, with the world cloud of top hashtags based on user’s tweets hashtags and then tweets for those hashtags.
4. Sentimental analysis of top two hashtags indicating the negative, neutral and positive tweets. The location coordinates of tweets were plotted on a geo-location map. The count of the followers of the user’s following profiles have been used to show the profile evaluation. All the analysis have been performed on Tableau.

5. LinkedIn profile page with recently added connections. The companies followed by the user are shown. Also provided are the companies that are recommended for the users to follow.
6. Flickr page with default images are displayed on the website. This page can be used for searching for various images.
Revenue/Business model

ZONE will generate revenue in two distinct ways. The first method is a freemium model and the second through an advertisement model which businesses and organizations will be involved in.

Freemium Model:
ZONE is not only a website which collaborates other social media sites into one easy to access location and provides time saving. It is also an analytical site which performs analytics on the users preferences, settings, and interests based on the users profile information, activity logs, and posts. The site is free to all users who only want to use the basic functionalities. However in order to obtain analytical data/information, the user must pay a fee.

For example: ZONE will allow users to collaborate their LinkedIn account on ZONE for easy/fast access alongside their other social media websites. However, the user must pay in-order for ZONE to analyze which jobs within the market are most suitable for the user.

Advertisement Model:
The greater number of users ZONE has, the greater number of companies and organizations will want to place advertisements with ZONE.

- Consumers are 71% more likely to make a purchase based on social media referrals (Hubspot)
- Out of 53% of consumers who said they use Twitter to recommend companies or products in their Tweets, 48% bought that product or service (SproutSocial)
- 49% of consumers use Facebook to search for restaurants (Mashable)
- 74% of consumers rely on social networks to guide purchase decisions (SproutSocial)
- 38,000,000 13 to 80 year olds in the U.S. said their purchasing decisions were influenced by social media (Knowledge Networks)

Based on the immense scale in which social media operates on with reaching millions of people instantly, there is no doubt that companies and organizations will pay good money to place their advertisements on these sites. ZONE has now become another one of these sites with one major difference, it has incorporated all social media sites into one easy to access location which would result in advertisement prices to skyrocket as more viewers will see the advertisement.

Future Directions

- Integrate more social media sites like YouTube, Instagram etc.
- Extend more functionalities to existing sites
- Incorporate additional Analytics based on user activities
- Advertise the site and reach out to larger customer base


