Project Report

Evently Friends - the fun socializing can bring

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1 Idea

We combine social media of Facebook and Twitter to see all the updates that each event would have given a certain area. This application would fetch all the events in that area and look for friends that are attending that event. Today, there does not seem to be an application which tells accurately if a person is present at an event. This would help socialize by letting friends know who is attending a particular event as well as keep a headcount for the administrator for how popular is a particular event.

2 Technical Details

A user login/signup with its user id for Twitter, and Facebook. All of the details are passed to the backend via RESTful API. A search bar is passed where a user can enter a location where they would like to look for events, in the backend all the events at that particular location is fetched and all the friends that are attending on Facebook and Twitter is reflected on the page. There is a heatmap which shows the popularity of different events in that area. There is a predictive analysis which would be based on how much time a person spends at a particular type of event. All the data is stored and based on the past data about a user, test data of how much time a person spends will be predicted. If a person posts about being at a different location, then that person's name would not be shown in the list of friends in that location. Different queries could be made if a person changes their location. The backend was done in Python using Facebook GraphAPI and Twitter Python api, all the information from the social media could be scraped. RESTful api is used to reflect all the findings to the front end. The front end is using bootstrap with jquery, html and css.

3 Challenges

While we were trying to integrate two different social media site, there were a lot of restriction in the acquiring information through API we faced which did not let us implement our goal to its full potential.

- Facebook APIs do not let us look at friends post unless and until we have registered an App with them. When we spoke to one of their developers as well as tried to create an app but it required all the friends to register for us to look into their post.
- We tried to submit the app for Instagram's approval but it was rejected because we of commercial reasons.
- Twitter API searches through all the posts with an OR statement so if we are searching for an event at a location, it would result in all the tweets that have this event name OR at this location, but not both.
- Different social media has different username that are connected to the same person, to recognize and connect these people requires a lot of data detection for all the people on social media.

- Taking information and posts from all the different social media required a big data analytics to store and predict when would the user leave a particular type of event. This required a lot of storage as well as fast computers to process

4 Accomplishments and Future Goals

Despite all the challenges we were able to accomplish how to fetch all the events containing a certain keyword that the user provided. Backend, written in Python, fetches all the events from Facebook along with its attendees. These event names are queried in Twitter API to fetch all the tweets about it. All the tweets are the most recent tweets from users followers list. The attendees and the users that are tweeting for these events are showed in the front end with their name, event name and predict its leaving time. The user would not be in the list if they posted to be somewhere else and then tweets would not show their name in the recent fetch of posts. So they would be deleted from the listings shown on the app. A heatmap is also generated showing which event has the highest attendees and most popular among people.