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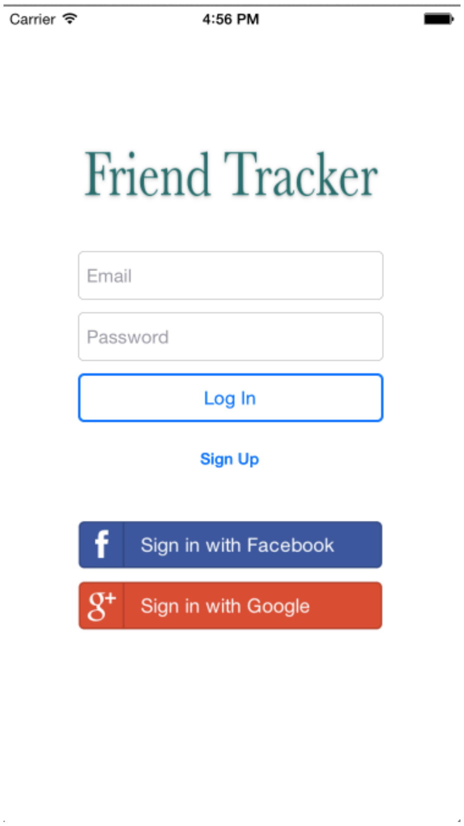
Friend Tracker

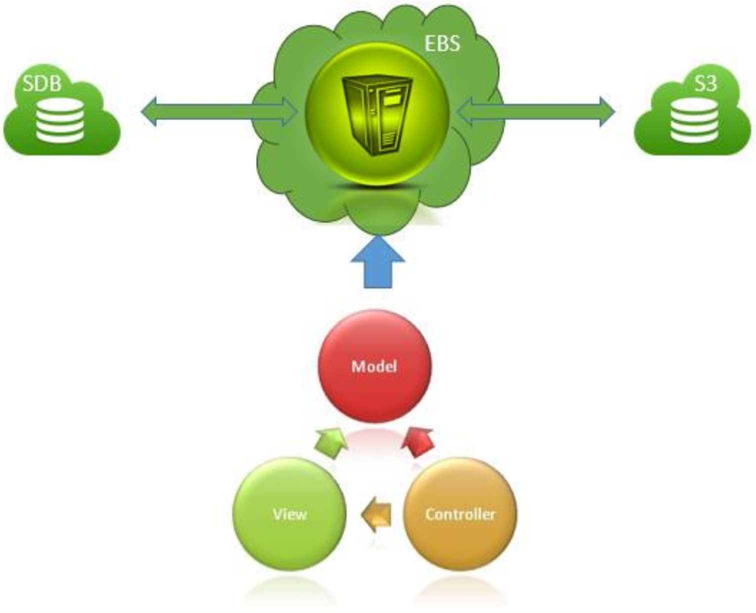
FriendTracker is a new social media iOS app that will allow for new openness amongst trusted friends. FriendTracker is laying the foundation in making it easier to see where your friends are, who they're with, and what they're thinking about. Users are welcomed to join FriendTracker and start keeping a tight inner circle close to them by downloading the app, signing up, and searching for friends. Once an account is registered, users can immediately begin posting stories about their day. In addition to reading posts in a traditional twitter-like style, you can also view your friend's activities in a familiar map interface showing their posts along with location in an intuitive color coded environment.



SimpleDB allowed FriendTracker to quickly grow into its current first iteration. SimpleDB has a low footprint, freeing up time to focus on the application by automatically taking care of replication across geographically distributed datacenters and indexing of user data in a cost efficient manner. We acknowledge that other database solutions may have lended themselves better to more massive scaling however, for the purposes of demonstrating our app in the initial stages. Amazon S3 was used to easily store users photos and allow for future scalability.

FriendTracker was hosted on Elastic Beanstalk which allows for full integration with SimpleDB and S3. EBS additionally allow us to take advantage of its auto-scaling and cloudwatch features for further development.

As can be seen in our architecture diagram, we rely on the MVC model for the user interface of our iOS app. The model connects to our nodejs server deployed on Elasic Beanstalk through a RESTful API interface. Beanstalk was then configured for stability and scalability. Using our server's API endpoints we were then able perform CRUD operations on our SimpleDB and S3 databases. The API allows for the following endpoints:



Login: Accepts a GET request with the email and password as parameters. This connects to our SimpleDB database which then checks for an existing email, password combination as a simple authorization.

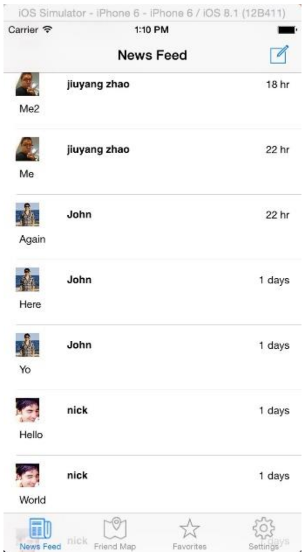
User: Accepts POST and PUT requests. This endpoint requires email, password and name as parameters and is used for creating (POST) and updating (PUT) user information credentials.

Checkin: Accepts GET and POST requests. GET requires email as a parameter and gets posts from a particular user. POST requires email, GPS coordinates, and text body to make user created posts on our app.

Follow: Accepts GET, POST and DELETE requests. GET only requires the email and retrieves all posts by that email address. POST and DELETE requires two email address, the first email is from the user who wishes to follow or unfollow the second email's post.

GetuserPic: Accepts GET and POST. GET and POST retrieves and uploads the user profile picture from our S3 bucket for the email address provided.

Views



iOS Simulator - iPhone 6 - iPhone 6 / iOS 8.1 (12B411)

Carrier 1:10 PM

News Feed

jiuyang zhao 18 hr
Me2

jiuyang zhao 22 hr
Me

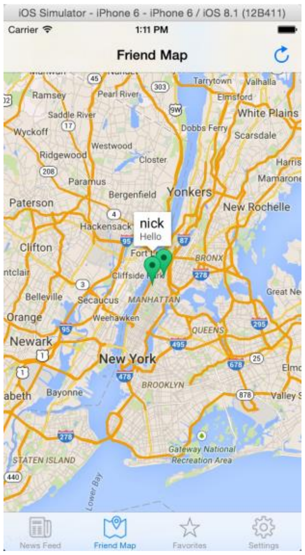
John 22 hr
Again

John 1 days
Here

John 1 days
Yo

nick 1 days
Hello

nick 1 days
World



iOS Simulator - iPhone 6 - iPhone 6 / iOS 8.1 (12B411)

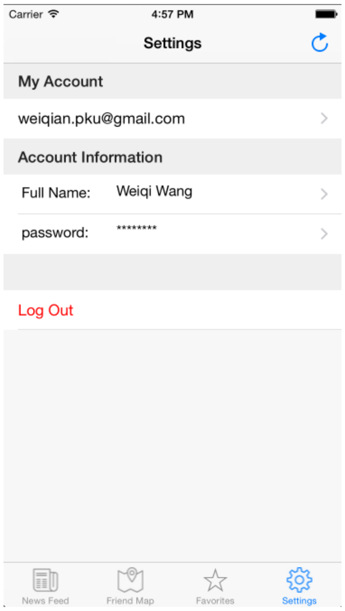
Carrier 1:11 PM

Friend Map

nick
Hello

The images above shows the main features of our app. In the left photo the user can view the post made by people he or she is following. Each post has GPS coordinates attached to it. This can be viewed in the Friend Map seen in the right photo. This view uses Google Maps API to plot each post from the news feed. Different friends will be displayed using different set of markers.

In the final two views we have the setting and the friends tab. In the setting tab, seen on the left, you can change your name and password. In the friends tab, the user can see the people they are currently following, adding or unfollowing other users at their digression.



Carrier 4:57 PM

Settings

My Account

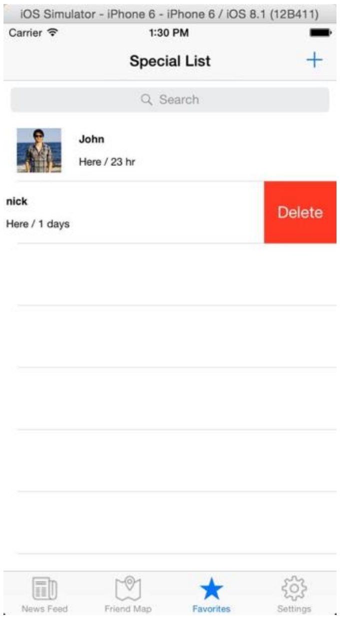
weiqian.pku@gmail.com

Account Information

Full Name: Weiqi Wang

password: ********

Log Out



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Carrier 1:30 PM

Special List

Search

John
Here / 23 hr

nick
Here / 1 days