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CS5590BD - SG3

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**Lab 2 Report SG3**

The purpose of this lab was to familiarize ourselves with RESTful APIs in the Apple Xcode environment. Our lab requirement was to integrate an additional REST API into the application that we could use for our robot project in the future. We chose to integrate the Twitter REST API via the STTwitter framework for xCode. Our interesting idea was to use the results from the NLP API, concatenate the individual tokens, and post it as a tweet to Twitter using its REST API. We ran into a lot of problems getting this to work because it turns out Twitter requires both the OAuth Secret Key and Secret along with the API Key and Secret. We spent several hours trying to get it working and finally figured out this was the cause. We also had to verify the credentials before proceeding using *verifyCredentialsWithSuccessBlock.*  The app posts the tweet to our @UMKC\_SG3 twitter account. We are going to use this for our project to send tweets from our robot to the user to send them notifications, but also allow the user to tweet to the robot to give it commands and have the robot repeat the tweets using text to speech to the user! The following is our new function for calling our Twitter API:

/\*

\* This is our new function that calls into the Twitter API to tweet the NLP Commands.

\*/

- (void) tweetCommands {

NSMutableString \* result = [[NSMutableString alloc] init];

for (NSObject \* obj in \_tokens)

{

[result appendString:[obj description]];

[result appendString:@" "];

}

NSLog(@"The concatenated string is %@", result);

NSString \*apiKey = @"K5irO3T6OnBimYiLwKI1aDPv0";

NSString \*apiSecret = @"sswoK3Dgjpr17AAUaWlQyfLdFpA0ENEs11wDoCQ2ahghcAaZvu";

NSString \*oauthToken = @"3248175864-yiPSna2GQo0b3WHUSHPWeFl0kHjmb4zBPy648A4";

NSString \*oathSecret = @"ZAVqYA8UTavzk0gg9I1ksthmq404LZtsoXvpbFuLBHJwr";

STTwitterAPI \*twitter = [STTwitterAPI twitterAPIWithOAuthConsumerKey:apiKey consumerSecret:apiSecret oauthToken:oauthToken oauthTokenSecret:oathSecret];

[twitter verifyCredentialsWithSuccessBlock:^(NSString \*bearerToken) {

NSLog(@"Access granted with %@", bearerToken);

[twitter postStatusUpdate:result

inReplyToStatusID:nil

latitude:nil

longitude:nil

placeID:nil

displayCoordinates:nil

trimUser:nil

successBlock:^(NSDictionary \*status) {

NSLog(@"Success: %@", status);

} errorBlock:^(NSError \*error) {

NSLog(@"Error: %@", error);

}];

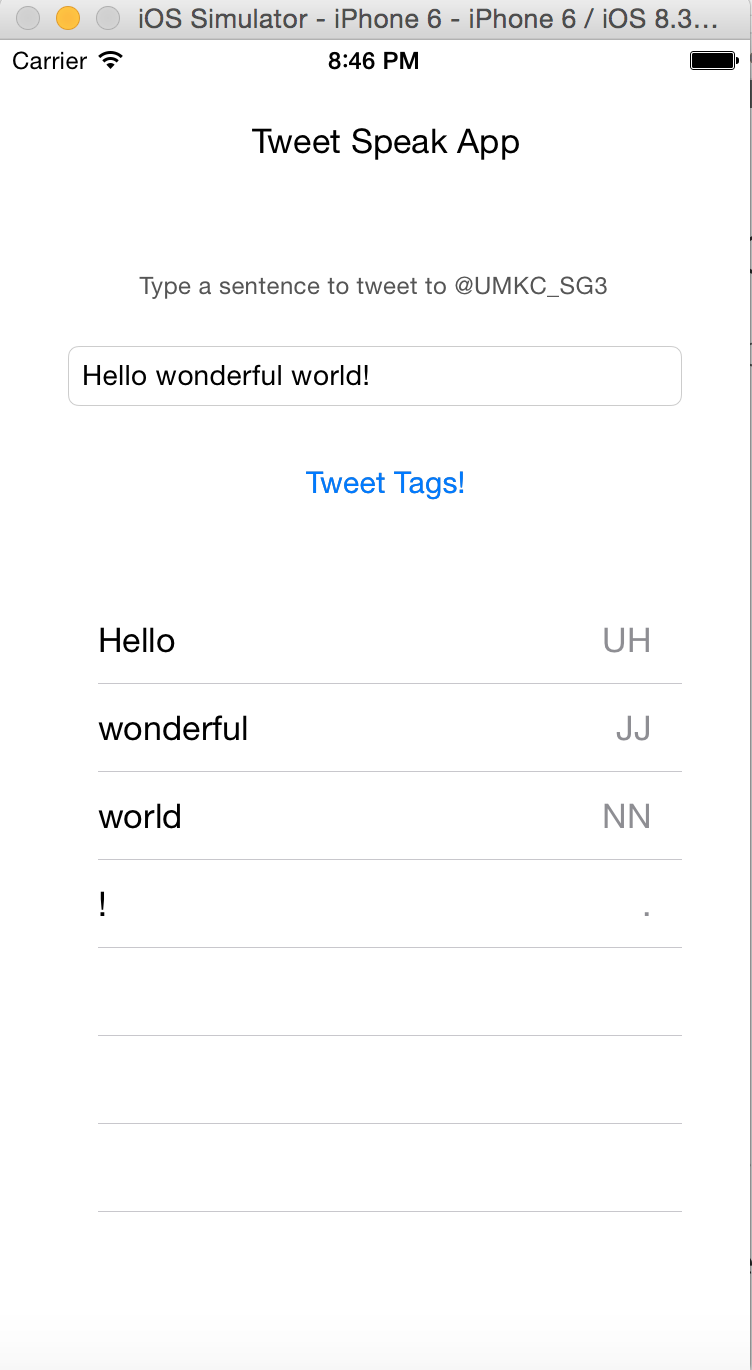
} errorBlock:^(NSError \*error) {

NSLog(@"-- error %@", error);

}];

}

Whenever the user clicks the Tweet Tags! button, we call into the NLP service, get the tokens, concatenate them, and tweet them to our twitter account @UMKC\_SG3



Here we see the results are automatically posted on our twitter account:

