

Twitter

Functional Specification

Christopher Berube

Katy Boggs

Steven Tenaglia

Robert Sims

Last Updated: April 3, 2013

Overview

Twitter is a social networking application which allows for brief messages by users to their audience.

This spec is not complete and will be updated constantly as the project develops and expands. Specifically, new functionality will likely be readily evolving.

Scenarios

1. An individual desires to share thoughts, activities, and/or media with family and friends.
2. An individual desires to view thoughts, activities, and/or media shared by family and friends.
3. An individual wants to see the most popular topics being discussed on Twitter.
4. A business wants to promote their company.

Scenario 1

Chris is a college student at UMass Amherst. His Twitter account has about twenty followers, friends and family who are interested in his updates about his day, activities, and events he's interested in. In the morning something interesting happens to him - his breakfast was free! Feeling like his friends might be interested in this, and may want to ask him later how it happened, he posts it as a tweet - a Twitter message.

Later in the day, he reads a news story about a coming blizzard. Wanting to share this with his friends, he posts a link to it on another tweet. Now his friends and family that follow him can

read it and also be informed.

Scenario 2

Rob loves gossip and is always the first to hear about what everybody else is doing. In order to keep himself up to date, he follows all of his family and friends and keeps tabs on their activities hourly. One day he is studying his feed as usual and finds out something that disgusts even him. Mortified, Rob quits the internet for a week.

Scenario 3

Steven works in a sales job with a high commission for each product he sells. In order to boost sales, Steven peruses Twitter's trending topics so he can use funny quips in his pitches and finds current events that relate to the products he sells. He's currently marketing the FoilCap, a hat made of aluminum foil. Steven finds that #StruckByLightning is a trending topic on Twitter and advises his customers how his hat can protect against lightning strikes. He has not verified the authenticity of his claim.

Scenario 4

Katy is the executive of a large business. Also being technically capable, she decides she wants to be able to communicate updates about the business to anyone interested. She sets up a Twitter account for it and begins to amass followers. Soon, 3,000 people are following the twitter. Katy's business is about to have a sale on some of its products, and she decides to advertise it to everyone. So she posts a link to her business's website listing the sale on Twitter. Now, everybody who decided to follow Katy's company sees the link and is able to find out about the sale.

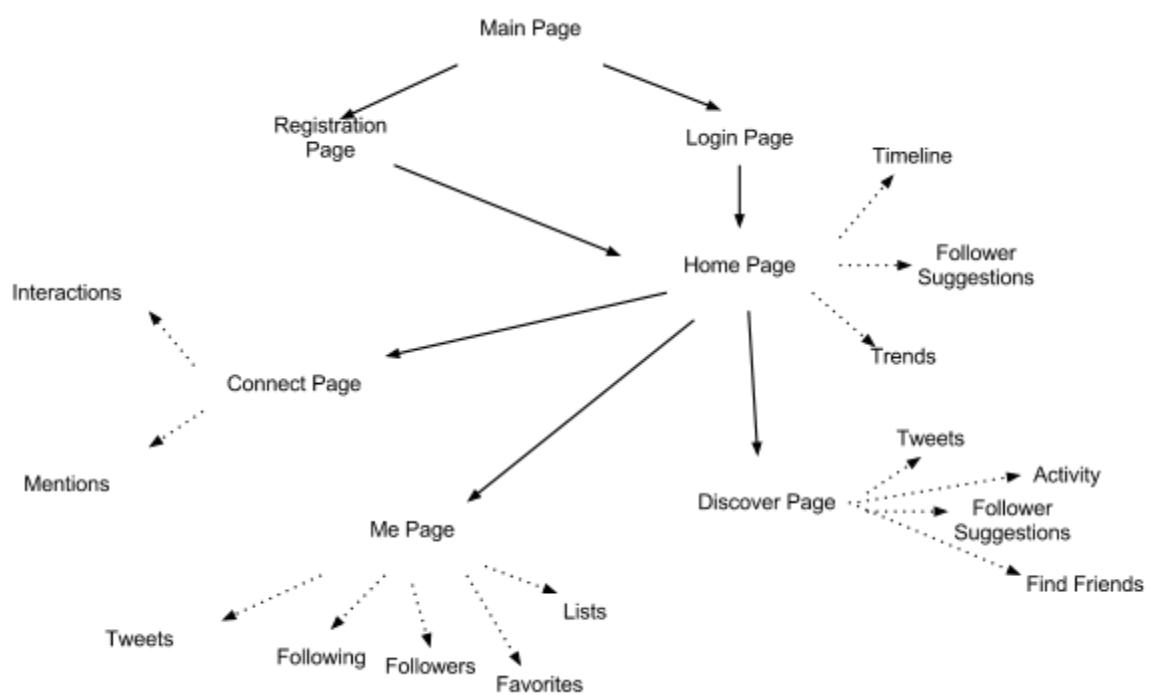
Non-Goals

This app is in its first stages now and lacks a lot of support, which may or may not be added in the future:

- Automatic updating of a user's timeline of tweets. In order to see the most recent ones, the user will need to reload the page.

- The use of an internal link-shortening program allowing long URLs to take up less space in the Tweets.
- Cookie support: A user will need to login each time they visit Twitter. This will be a top priority to include after the application is in stable condition because it's kind of important. (Also, Cookie Monster is one of our biggest investors!)
- Promoted tweets. Money does not equal speech!
- Inviting friends. Ain't nobody got time for that!
- Categories. This seems to go far beyond the basics.
- Support for languages other than English

Overview



Main Page: On this page, along with an introduction the site, there'll be a selection to log in if you already have an account or to create an account.

Registration Page: Here you'll sign up for an account by giving information such as your e-mail address, password, social security number, credit card, name of first born son, etc.

Login Page: If you've already given us that information before, you'll be able to simply enter your e-mail address and password. Either of these two options will then bring you to the Home Page.

Home Page

- *Timeline:* Tweets from your followers will be presented in reverse chronological order.
- *Follower Suggestions:* There will be a small section on this page giving you suggestions for people to follow. There is an expanded section on the *Discover Page*.
- *Trends:* This lists currently *trending* topics, which are currently popular hashtags included in many posts.

Connect Page

- *Interactions:* This tab lists, as the name implies, all interactions with you or your posts on Twitter. It lists the people following you, tweets that others have reposted (known as retweeting), and people that have replied to or mentioned you in a tweet.
- *Mentions:* This is kind of a subgroup of the *Interactions* tab. It only lists people that have either mentioned you or replied to a tweet you posted.

Discover Page

- *Tweets:* View tweets from trending topics in addition to tweets from those you follow.
- *Activity:* Activities of your followers will be visible here. Activities include when followers favorite tweets, retweet others, follow people, are replied to, as well as other actions.
- *Follower Suggestions:* This page will use information about your account to recommend people and businesses who you will likely want to keep tabs on.
- *Find Friends:* This page will allow searching for specific people on twitter. Their username or full name will be searchable.

Me Page

- *Tweets*: This page, along with what you can now see is standard on all pages, basically shows your “public profile” on Twitter. It lists all the tweets you’ve made, your following/followers statistics, has a button to send a message to you, and shows what you’ve typed about yourself along with your picture.

- *Following*: This page lists everybody that you (or whoever you’re looking at) is following, along with buttons to follow that person (if you were looking at someone else’s page). Under each user, it also shows their description of themselves.

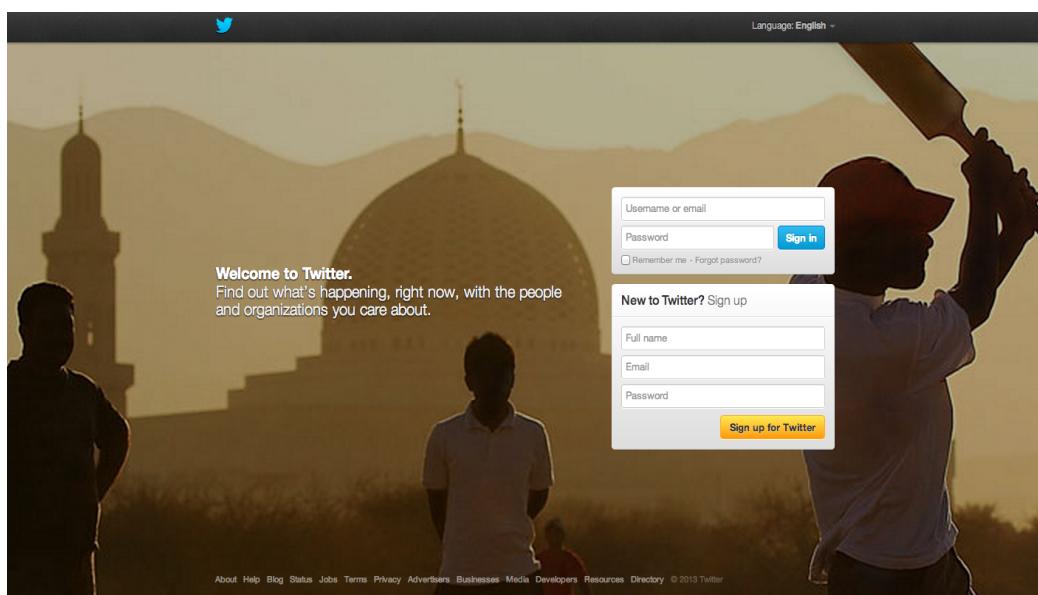
- *Followers*: This page is exactly the same as the *Following* page, except as expected it instead shows the people currently following you.

- *Favorites*: This page lists the tweets you “favorited” in the same timeline format the rest of the application uses.

- *Lists*: This page displays lists that you are subscribed to or a member of. Lists are groups of twitter users and by choosing one list, you can view a stream of tweets from that specific group of users.

Screen-by-Screen

Main Page



Note the two options - Logging in or signing up.

The bar across the top has a copy of the favicon, which, when clicked, redirects back to the main page. This will exist on every page and have the same design and functionality.

The “login” section has two fields: “Username or email” and “Password”.

- Both titles are written initially in the appropriate form boxes.
- The cursor focus upon loading the main site is on the “Username or email” box.
- Text entered into the “Password” box will be censored.
- There will initially not be a checkbox for remembering a username and password to bypass the main page, because that functionality is being added at a later time.
- A blue “Sign in” submit button is also present. Clicking “Sign in” without any information redirects to the Login Page.

The “signup” section has three fields, each with the following text in the boxes in descending order: “Full name”, “Email”, “Password”. A yellow “Sign up for Twitter” submit button is also present. Clicking the “Sign up for Twitter” button with no text leads to the Registration Page. Text entered into the “Password” box will be censored.

Registration Page

The screenshot shows the Twitter registration page. At the top, there's a dark header bar with the Twitter logo and a "Sign in" link. Below it is a white form area with the heading "Join Twitter today." It contains four input fields: "Full name", "Email address", "Create a password", and "Choose your username". Each field has a placeholder text to its right. Below these fields are two checkboxes: "Keep me signed-in on this computer." and "Tailor Twitter based on my recent website visits. [Learn more.](#)". At the bottom left of the form, there's a note about agreeing to terms and conditions, followed by a link to "Printable versions: Terms of Service · Privacy Policy". A large yellow "Create my account" button is at the bottom center. A small note at the very bottom states: "Note: Others will be able to find you by name, username or email. Your email will not be shown publicly. You can change your privacy settings at any time."

Once the required info is given, clicking “Create my account” will lead to the home page as a logged in user.

Bar across the top has an option “Have an account? Sign in”. This presents a drop-down to a mini login page; ours might just be a redirect to the Login Page initially.

- Focus is on the “Full name” box initially.
- “Create a password” text is censored.
- Email addresses are checked for valid email addresses.
- Passwords are checked to be at least 6 characters long.
- Username will be checked to make sure it is available.
- We will create our own Terms and Conditions. It will be marvelous.

The following text appears to the right of the form boxes once focus is on the box, and the text remains even after focus is moved away from the box:

Full name: “Enter your first and last name.”

Email address: “What’s your email address?”

Create a password: “6 characters or more! Be tricky.”

Choose a username: “Don’t worry, you can change it later.”

Login Page

 Language: English

Sign in to Twitter

Username or email [Forgot your username?](#)

Password [Forgot your password?](#)

Type the two words:

reCAPTCHA™
stop spam.
read books.

Remember me

Already using Twitter via text message? [Activate your account »](#)

Again, once the required info is given to us (captcha not included), the user will be directed to the home page.

Password is censored.

Home Page

Compose new Tweet...

Who to follow · Refresh · View all

-  **AAM** @KeepitMadeinUSA Promoted · Follow
-  **Paper.li** @SmallRivers Follow
-  **SusanDC** @Susan_DC Follow Followed by Bon Jovi

Browse categories · Find friends

Trends · Change

- #TakeCenterStage Promoted
- Halle Berry
- Pope
- #BETHonors
- #askBeau
- #MajorTurnOffs
- SOS Band
- #CheerleadingHasTaughtMe
- #TedNugentGOPSlogans
- SOTU

© 2013 Twitter About Help Terms Privacy
Blog Status Apps Resources Jobs
Advertisers Businesses Media Developers

Tweets

-  **UMass Transit** @umasstransit Mon 2/11: Routes 34 & 35 are now bypassing Admissions (please catch buses at Sig-Ep). Orchard Hill/Upper Central is still closed. #PVTA 4h Expand
-  **UMass Transit** @umasstransit Mon 2/11: Route 31 has resumed servicing The Boulders and South Point. It's still bypassing Sugarloaf Estates. #PVTA 4h Expand
-  **Bon Jovi** @BonJovi Our new album **#WhatAboutNow** becomes available for pre-order on [@itunesmusic](#) at 12AM EST. That's less than 7 hours from now! #excited 5h Expand
-  **Walk off the Earth** @WalkOffTheEarth We are doing a LIVE internet show!! Watch the video for details: [bit.ly/Xwii7j](#) #WOTELIVE RT Please! 7h View media
-  **Mohegan Sun** @MoheganSun They're taking the internet by storm! [@WalkOffTheEarth](#) comes to the [#WolfDen](#) on 2/16 for a free show at 8pm: [bit.ly/WdsUco](#) 8h Retweeted by Walk off the Earth Expand
-  **Walk off the Earth** @WalkOffTheEarth Thanks you to [@KGSR](#) fro spinning RED HANDS in Austin! @kristenkurtis you rock girl! #redhands 8h Expand
-  **Bon Jovi** @BonJovi Photos from our show last night in Washington DC are up on our website here: [bit.ly/U6Gu43](#) #becausewecan 8h Expand
-  **sigur rós** @sigurros see you on april 19th, santa barbara, california! [bit.ly/UZhGg3](#) #sigurroslive 9h View summary
-  **Gov. Gary Johnson** @GovGaryJohnson Pls join me on [#reddit](#) tomorrow at 3PM PT/6PM ET for a pre-#SOTU "Ask Me Anything". Want to hear from you! [facebook.com/events/2932986...](#) #tlot #tcot 9h Expand

Note that on the Home Page, all the features are displayed at once. The *Timeline* is displayed at the right, the brief *Follower Suggestions* window at the right. There is also an option to create a new tweet here as well as the current *Trends*.

Connect Page

Interactions

The screenshot shows the Twitter interface with the 'Interactions' tab selected. On the left, there's a sidebar with 'Interactions' and 'Mentions' sections. The main area displays a notification from 'Rhone' and four others who followed the user on January 11th. Below this, there are suggestions for people to follow, including 'The Hub', 'Justin Amash', and 'Rolling Stone'. A 'Trends' section lists hashtags like '#TakeCenterStage', 'Halle Berry', 'Pope', and 'SOS Band'. At the bottom, links for Twitter terms like About, Help, and Privacy are visible.

As I am apparently not a social person, my interactions page shows little interaction with me. However, it does show that not only would this page display replies and mentions of my tweets, but also people who have recently followed me. Also note this page displays follower suggestions as well.

Mentions

Mentions

Josh Mendez @La_Basik 28 Nov
@robsims if you're a fan of post rock, check out this new band!
loraine.bandcamp.com

Lorraine @LorraineMusic 11 Nov
@robsims Hey, if you like post rock, you should check out our EP,
it's free loraine.bandcamp.com

Who to follow · Refresh · View all

Koravie @Koralex Followed by Bon Jovi
Follow

rodrigo mogue medina @Tatash07 Followed by sigur rós
Follow

Kelly Clarkson @kelly_clarkson Follow

Browse categories · Find friends

Trends · Change

#TakeCenterStage Promoted
Halle Berry
Pope
#BETHonors
#askBeau
#MajorTurnOffs
Jeff Jarrett
#CheerleadingHasTaughtMe
#TedNugentGOPSlogans
SOTU

© 2013 Twitter About Help Terms Privacy
Blog Status Apps Resources Jobs
Advertisers Businesses Media Developers

Again in keeping up with my anti-social image, the last mentions or replies to my tweets are from 3 months ago. However, in order to not display a blank page, Twitter decides to at least display those. Note that on this page the activity of gaining followers and such is not included - simply the replies and mentions.

Discover Page:

Tweets

The screenshot shows the Twitter Discover page with three tweets displayed. The sidebar on the left includes links for Tweets, Activity, Who to follow, Find friends, and Browse categories. It also lists Who to follow (Ron Paul, Jon Huntsman, UMass Dynamics) and Trends (#TakeCenterStage, #HalleBerry, #BETHonors, #askBeau, #MajorTurnOffs, Jeff Jarrett, #CheerleadingHasTaughtMe, #TedNugentGOPslogans, SOTU). The footer contains copyright information and links for Help, Terms, Privacy, Blog, Status, Apps, Resources, Jobs, Advertisers, Businesses, Media, and Developers.

Tweet 1: Pete Cashmore (@mashable) posted a video of a cat watching hockey. The tweet includes a thumbnail image of the cat and a link to the video on Mashable's website. It has 14m since posted, 11 retweets, and 7 favorites.

Tweet 2: Walk off the Earth (@WalkOffTheEarth) posted a photo from the Billboard Grammy's after-party. The photo shows four people posing together. The tweet includes a thumbnail of the photo and a link to the photo on Twitter. It has 19h since posted, 30 retweets, and 32 favorites.

Tweet 3: 102.1 the Edge (@the_edge) posted a news item about a potential NHL team in Markham. The tweet includes a thumbnail of a news article and a link to the article on tinyurl.com/bger75b. It has 9h since posted, 1 retweet, and 1 favorite.

The *Tweets* page includes updates from topics that appeal to a large audience of Twitter users, as well as Tweets from topics that you specifically follow.

Activity

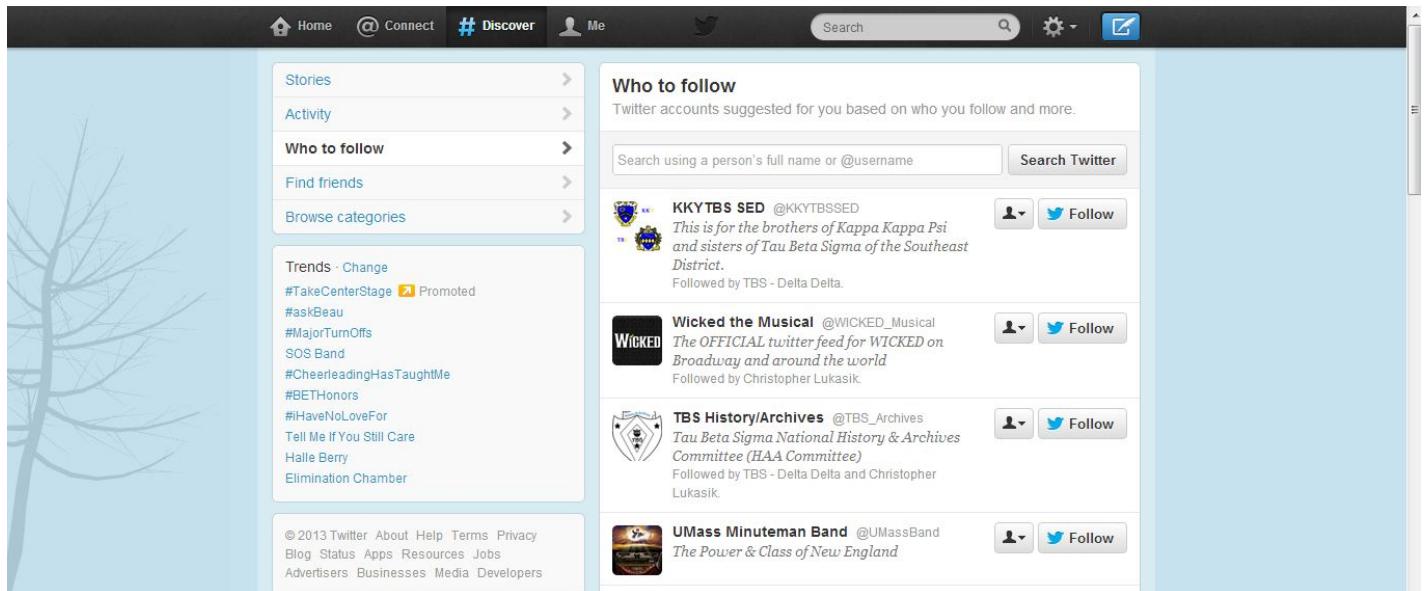
The screenshot shows the Twitter Activity page. At the top, there are navigation links: Home, Connect, Discover, Me, Search, and settings. The main area is titled "Activity". It displays a list of recent actions taken by followers:

- Christopher Lukasik favorited Fat Amy. (Fat Amy @FatAmyPost, 9 Feb)
- Antonio's Pizza favorited Dan G. (Dan G. @DANEGANZ, 8 Feb)
- Christopher Lukasik followed: (List includes Sam Plummer, Michael Cortina, and others)

On the left sidebar, there are links for "Tweets", "Activity", "Who to follow", "Find friends", and "Browse categories". Below these are sections for "Who to follow" (listing Michael Cortina, Kimmy Tran, Andrew Kain), "Trends" (listing #TakeCenterStage, #askBeau, #MajorTurnOffs, SOS Band, #CheerleadingHasTaughtMe, #BETHonors), and "Find friends".

Note that the *Activity* page displays actions from from followers and pages the user is following, not the user herself.

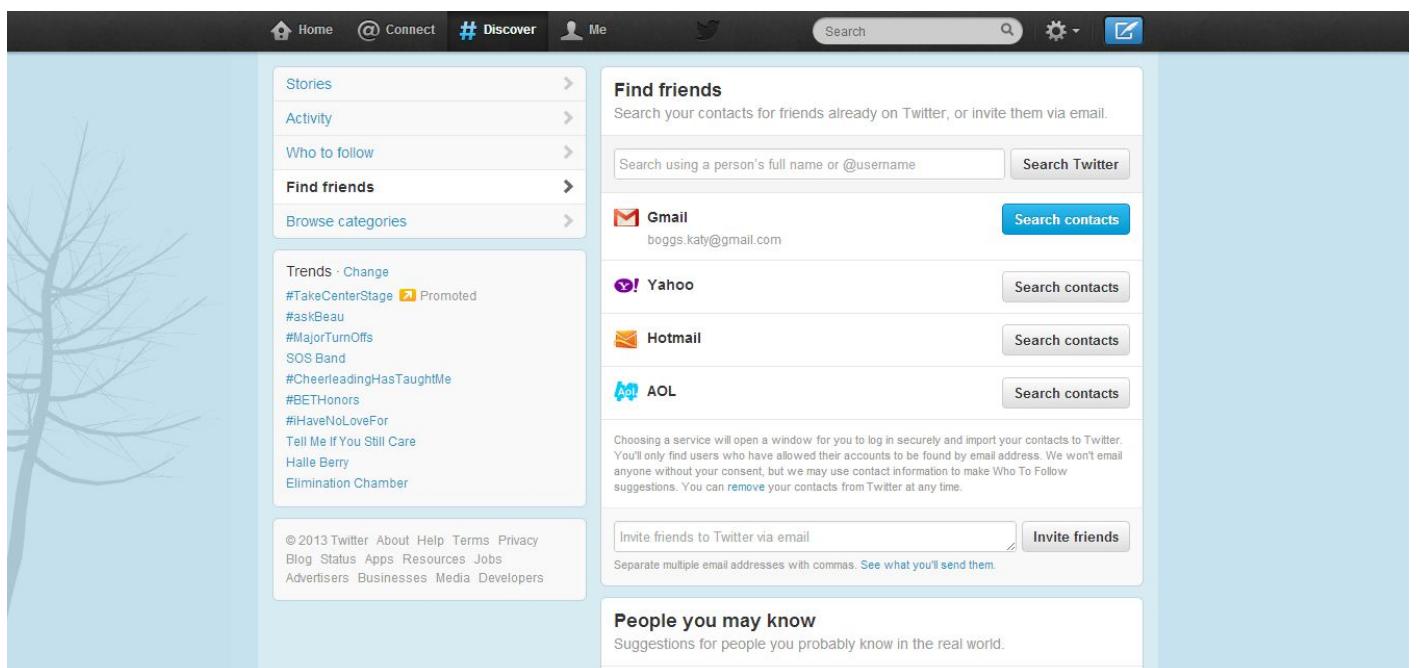
Follower Suggestions



The screenshot shows the Twitter 'Who to follow' page. At the top, there's a navigation bar with links for Home, Connect, Discover, Me, and a search bar. Below the navigation is a sidebar with links for Stories, Activity, Who to follow, Find friends, and Browse categories. Under 'Who to follow', there's a section titled 'Trends - Change' listing hashtags like #TakeCenterStage, #askBeau, #MajorTurnOffs, SOS Band, #CheerleadingHasTaughtMe, #BETHonors, #IHavenoLoveFor, Tell Me If You Still Care, Halle Berry, and Elimination Chamber. To the right, there's a 'Who to follow' section with a heading 'Who to follow' and a sub-section 'Twitter accounts suggested for you based on who you follow and more.' It includes a search bar, a 'Search Twitter' button, and four profile cards: 'KKY TBS SED @KKYTBSSED' (Follow), 'Wicked the Musical @WICKED_Musical' (Follow), 'TBS History/Archives @TBS_Archives' (Follow), and 'UMass Minuteman Band @UMassBand' (Follow).

Based on the many things described, Twitter figures people you may be interested in following and displays them on this page with an easy to click button to start following them.

Find Friends



The screenshot shows the Twitter 'Find friends' page. At the top, there's a navigation bar with links for Home, Connect, Discover, Me, and a search bar. Below the navigation is a sidebar with links for Stories, Activity, Who to follow, Find friends, and Browse categories. Under 'Find friends', there's a section titled 'Find friends' with a sub-section 'Search your contacts for friends already on Twitter, or invite them via email.' It includes a search bar, a 'Search contacts' button, and four service icons: Gmail, Yahoo, Hotmail, and AOL, each with a 'Search contacts' button. Below these, there's a note about choosing a service to import contacts, an 'Invite friends to Twitter via email' input field, and an 'Invite friends' button. At the bottom, there's a section titled 'People you may know' with a sub-section 'Suggestions for people you probably know in the real world.'

We are given the options to search for friends based on contacts here. See that we can use any of our e-mail address books, search for users by name, or invite people you know to join Twitter.

Me Page:

Tweets

The screenshot shows a Twitter interface with a dark header bar. The top navigation includes 'Home', 'Connect', 'Discover', 'Me', a search bar, and settings. On the left, there's a sidebar with 'Tweets' and links for 'Following', 'Followers', 'Favorites', 'Requests', and 'Lists'. Below this is a section titled 'Who to follow' with three profiles: Jason Danahy-Sheldon (@Jdana...), Belinda- SED VPSP (@TBSSEDV...), and NICOLE POLIZZI (@snooki). There are also 'Browse categories' and 'Find friends' links. At the bottom of this sidebar is a 'Trends' section with hashtags like #TakeCenterStage, #MajorTurnOffs, etc. The main content area features a profile for 'Katy Boggs' (@katymboggs) with a picture, 1 tweet, 5 following, and 1 follower. A single tweet from 'Antonio's Pizza' (@AntoniosPizza3) is displayed, retweeted by Katy Boggs on January 28. The tweet encourages retweeting for a pizza giveaway.

You can see on this page all the tweets that I've posted. In this case, the only one posted is a retweet from a local pizza shop.

Following

Katy Boggs @katymboggs

1 TWEET 5 FOLLOWING 1 FOLLOWER

Following

- The C2 Pit @C2Pit The Official Twitter Account for the Cadets 2 Front Ensemble
- Antonio's Pizza @AntoniosPizza3 Official Twitter account of Antonio's Pizza By The Slice!
- The Cadets2 @cadets2

All pages the user you're viewing is following are displayed here. In this case, I am the user because I'm viewing it from the *Me Page* so the option to follow has been changed in every case to a "Following" notice.

Followers

Katy Boggs @katymboggs

1 TWEET 5 FOLLOWING 1 FOLLOWER

Followers

- Christopher Lukasik @chrislukasik UMass Amherst Undergrad. Legal Studies & Public Health Sciences major. Sister of Tau Beta Sigma. Personnel Manager of the UMass Minuteman Marching Band.

This page, like the rest, displays the users following the page of the person you're viewing.

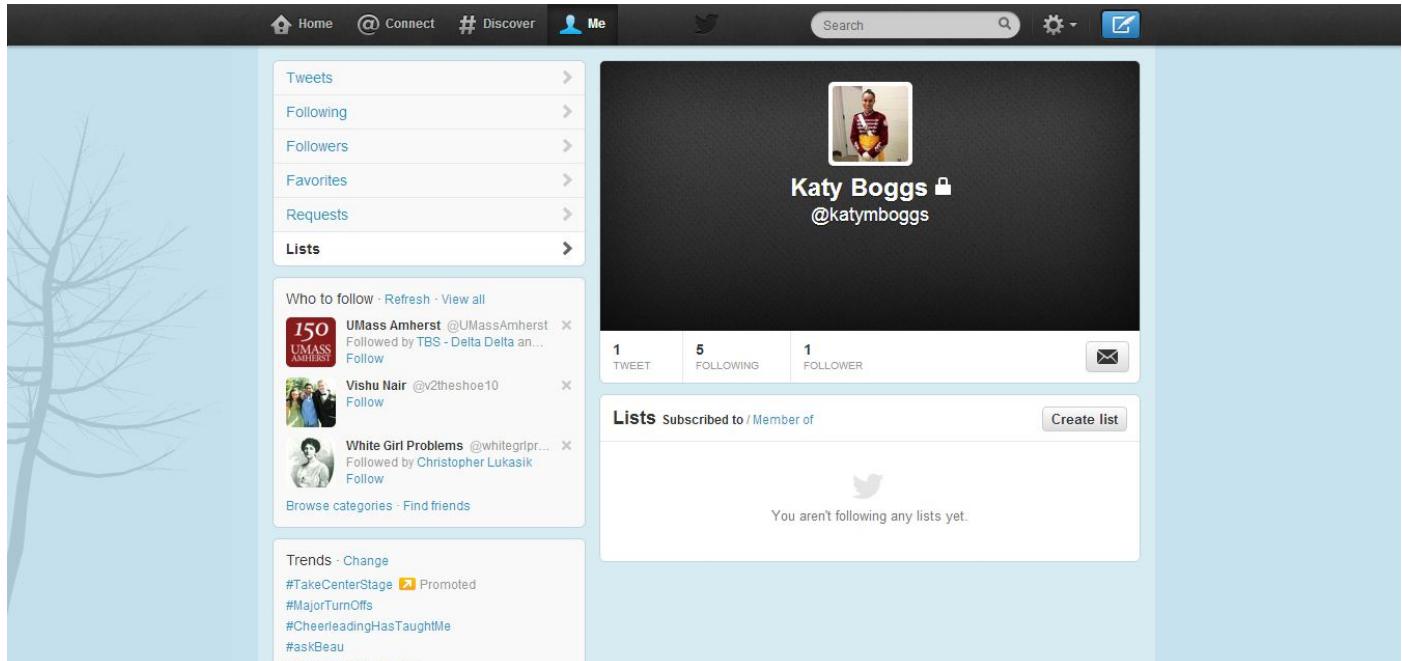
Favorites



A screenshot of a Twitter profile page for a user named Katy Boggs (@katymboggs). The profile picture shows a person in a maroon shirt. The bio is blank. Below the bio, it says "1 TWEET", "5 FOLLOWING", and "1 FOLLOWER". There is a link to "Create list". The sidebar on the left includes links for "Tweets", "Following", "Followers", "Favorites", "Requests", and "Lists". It also displays a "Who to follow" section with three recommended accounts: UMass Amherst (@UMassAmherst), Vishu Nair (@v2theshoe10), and White Girl Problems (@whitegrlpr...). A "Trends" section at the bottom lists hashtags like #TakeCenterStage, #MajorTurnOffs, #CheerleadingHasTaughtMe, #askBeau, and #MirandaSingsforPone.

Clearly I'm an active Twitter user... for a more active user, this page would display all the favorited tweets - Tweets which a user decides are important in some way or another and wants to save for future viewing, either for themselves or for others.

Lists



A screenshot of a Twitter profile page for a user named Katy Boggs (@katymboggs). The profile picture shows a person in a maroon shirt. The bio is blank. Below the bio, it says "1 TWEET", "5 FOLLOWING", and "1 FOLLOWER". There is a link to "Create list". The sidebar on the left includes links for "Tweets", "Following", "Followers", "Favorites", "Requests", and "Lists". It also displays a "Who to follow" section with three recommended accounts: UMass Amherst (@UMassAmherst), Vishu Nair (@v2theshoe10), and White Girl Problems (@whitegrlpr...). A "Trends" section at the bottom lists hashtags like #TakeCenterStage, #MajorTurnOffs, #CheerleadingHasTaughtMe, #askBeau, and #MirandaSingsforPone. The "Lists" section in the sidebar is currently empty, displaying the message "You aren't following any lists yet."

Further proof of my commitment to all things Twitter... likewise, this page would display any of the lists the user uses or is part of.

New Feature - List of all previously used #hashtags

This feature will be similar to the option to see all previous Chirps. It is also similar to the “Trends” page, however, it is user specific, where “Trends” is for all users on Chirper. This feature would be found on the “Me” and “Home” pages. This feature will display all of the hashtags a user has previously used. Hashtags will be displayed in order of frequency of use (i.e. the hashtag found in the greatest number of Chirps will be listed first, etc.). By clicking on a specific hashtag, a user can see a list of all Chirps the user made that contain that hashtag. This will be helpful when trying to display all of the activity related to a specific event.

Scenario

Katy's friend Dave is really interested in politics. During the 2012 presidential election Dave posted numerous Chirps about his views and opinions on the candidates and election issues using the hashtag #election2012. Dave also posts a lot of other Chirps about his favorite movies, sports he likes to play, and other daily happenings in his life. Katy is interested in learning about Dave's views on politics. Instead of going through every Chirp Dave has ever posted, she uses the hashtag sorting feature to only view Dave's Chirps that use the hashtag #election2012.