

Twitter

Functional Specification

BLACK MOUNTAIN:

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Overview

Twitter is an online social networking service and microblogging service that enables its users to send and read text-based messages of up to 140 characters, known as "**tweets**". Tweets can contain images and links to websites as well as plain text.

This spec is not complete by any stretch of the imagination. All of the wording will need to be revised several times before it is finalized. The graphics and layout of the screens shown here merely illustrate the underlying functionality. The actual look and feel will be developed over time with the input of graphics designers and iterative user feedback.

This spec does not discuss the algorithms used by the time calculation engine; these will be detailed elsewhere. It simply serves to be an overview of what the user will see when they interact with **Twitter**.

Extra Feature

A group feature will be added to the Twitter app. This will allow you to send a direct message or tweet to a group of people at the same time.

Scenarios

Let's look at the following six scenarios in order to get a sense of how people will use the product.

Scenario: Mike is a student. He is looking for a way to let his friends know what he's doing, as he's doing it. Further, as a busy student, he needs a convenient way to know what his friends - and his friends' friends - are doing. Enter Twitter. Mike signed up an account and followed his friends as well as his favorite actor. Whenever one of the people he follows posts an update, it appears in his timeline. He can also post his status and mention any of his friends who might be interested in the post. Whenever any of his friends reply to the tweet, it also shows up in his timeline. This makes it easy for Mike to know what his friends are up to.

Scenario: Larry and his friends Moe, Curly, and Shemp all have Twitter accounts and all follow each other. Larry is going to a party, and wants to bring his friends along. He tweets “Going to a Hollywood party! @Moe @Curly @Shemp” and because Moe and Curly have enabled email notifications for mentions, their smartphones all buzz and see that they’ve been invited, so they attend. Shemp does not have email notifications enabled and has no idea what is going on, so he misses out.

Scenario: Benedict has decided that he’s getting too old and that it’s time to retire from his position at the top of the corporate ladder. He tweets about his decision. Turkson, Ouellet, and Arinze are all high-level employees and all follow him. They see that he’s leaving his position, and all immediately begin to make plans for to best position themselves as his successor.

Scenario: Amy is a musical star of some note who tends to make rather poor life decisions. One night under the influence of some mind-altering substance that will remain unnamed, she visits Twitter and posts some compromising photos of herself in a series of tweets. Though her PR team quickly finds and deletes these tweets, the paparazzi has gotten ahold of one of the pictures and uploads it themselves. Thousands of people follow the paparazzo and retweet the photo in question, allowing their followers to see the image as well. Amy’s record sales increase as a result of the publicity, though her public image is permanently tarnished.

Scenario: A natural disaster occurs in Japan, and several thousand people are either dead or missing. The relatives of one of the missing people tweet that they have been unable to contact or locate their loved ones, and ask the community in general for help. These tweets are discovered by a major news agency, who writes a story on the tale and airs it on their international TV news station. People in Japan with smartphones pick up on the story and are able to help put families in touch with one another.

Scenario: A security flaw is discovered in Minitech’s major desktop operating system. A patch is released immediately, but hundreds of systems have already been compromised. Minitech’s customer support operates its own Twitter account, and users who follow the account receive on their timeline a link to download software which can be installed on a USB thumb drive and run during a computer’s boot process to cleanse the computer of its infection. The link is a long one - several hundred characters - but when the support representative pastes it into his tweet, Twitter automatically creates a shortened redirect which only takes up 20 characters.

Scenario: Chris is working in a group for a project in his class, and he needs to get a message to everyone in the group telling them the part of the assignment that he is working. Chris uses the group direct message function in order to tell everyone in his group all at once, and thus opening up a place where the group can discuss their work.

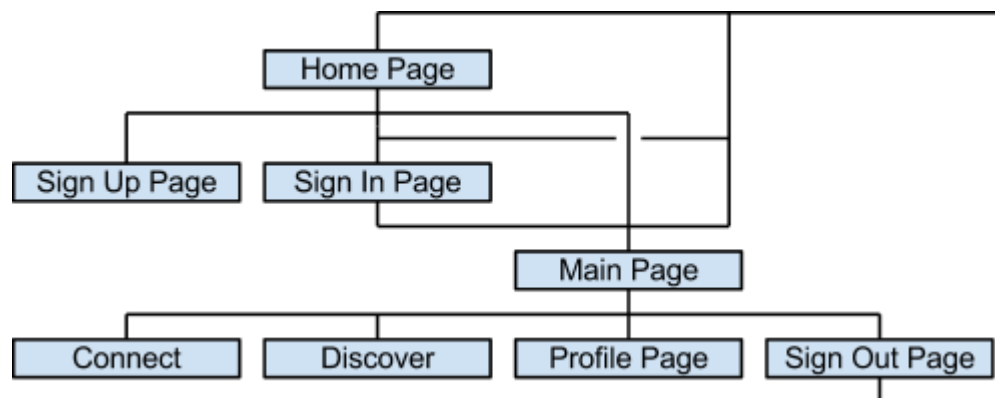
Non-Goals

This version will *not* support the following features:

1. Sorting tweets in main page using other than latest time.
2. Unlimited number of words in a tweet.
3. Unlimited private message per day.
4. Interaction with dedicated applications such as Tweetdeck or Echofon.

Twitter Flowchart

We'll have time later to go into further detail, but for now let's look at a quick flowchart of the service so you get the big picture. This flowchart is not complete, but it does give you the right idea for the "storyboard" of using **Twitter**:



Screen-by-Screen Specification

Twitter consists of quite a few different screens. Most screens will follow a standard format, with a look and feel to be designed in the future by a graphic designer. This document is more concerned with the functionality and the interaction design, not the exact look and layout.

All screens are created in HTML.

Each screen in **Twitter** is known by a canonical name which will always appear, in this document, with an underline, so you know we're referring to a screen by name, for example, Home Page.

Home Page

The Home Page serves these purpose:

1. Change Language
2. Log in an existing account
3. Sign Up a new account

The Home Page looks like this:

Twitter Logo

Language: (popup menu)

Welcome to Twitter.
Find out what's happening, right now, with the people and organizations you care about.

Textbox: Username or email
Textbox: Password | Button: Log in
Checkbox: (link)Remember me·(link)Forgot password?

New To Twitter? Sign up
Textbox: Full name
Textbox: Email
Textbox: Password
Button: Sign up

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When user clicks Log in, the following checks are performed on the server:

1. If no username or email was provided, with or without password, the server returns another page that looks just like Log In Form, only this time, a message is shown on the top of page: "**We gotta check... are you human?**" with a cross next to that message.
2. If the username or email address was provided, with or without password, but it does not correspond to a registered member, the server returns another page that looks just like Log In Form, only this time, a message is shown on the top of page: "**We gotta check... are you human?**" with a cross next to that message.
3. If the username or email address was provided, without password, it does correspond to a registered member, the server returns another page that looks just like Log In Form, only this time, a message is shown on the top of page: "**Wrong Username/Email and password combination.**" with a cross next to that message. The username or email address that the user originally typed will now be pre-populated in the Username textbox.
4. If the username or email address was provided, with a wrong password, it does correspond to a registered member, the server returns another page that looks just like Log In Form, only this time, a message is shown on the top of page: "**Wrong Username/Email and password combination.**" with a cross next to that message. The username or email address that the user originally typed will now be pre-populated in the Username textbox. Password textbox clear.
5. If the email address was provided, with a right password, it does correspond to a registered member, jump straight to Main Page, Log in successful.

Log In Form

The Log In Form serves these purposes:

1. Log in
2. Find username
3. Find password

The Log In Form looks like this:

Sign in to Twitter

Textbox: Username of email | [Forgot your \(link\) username?](#)

Textbox: Password | [Forgot your \(link\) password?](#)

Antispam

Botton: Sign in | Checkbox: Remember me

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

The Twitter Logo will direct browser to go to **Home Page**.

When user clicks Log in, the following checks are performed on the server:

1. If no username or email was provided, with or without password, with or without anti-spam string, the server returns this page, only this time, a message is shown on the top of page: "**We gotta check... are you human?**" with a cross next to that message.
2. If the username or email address was provided, with or without password, with or without anti-spam string, but it does not correspond to a registered member, the server returns this page, only this time, a message is shown on the top of page: "**We gotta check... are you human?**" with a cross next to that message.
3. If the username or email address was provided, without password or with a wrong password, with or without anti-spam string, it does correspond to a registered member, the server returns this page, only this time, a message is shown on the top of page: "**Wrong Username/Email and password combination.**" with a cross next to that message. The username or email address that the user originally typed will now be pre-populated in the Username textbox. The anti-spam box will disappear.
4. If the email address was provided, with a right password, with or without anti-spam string, it does correspond to a registered member, jump straight to **Main Page**, Log in successful.

Main Page

The Main Page presents the user with the following features:

1. View profile
2. Compose new tweet
3. Following Suggestion
4. Trend
5. Tips
6. Tweets from following people

The Home in the left hand corner will direct browser to Main Page. The Connect will direct browser to Connect Page. The Discover will direct browser to Discover Page. The Me will direct browser to Profile Page.

Home	Connect	Discover	Me	Textbox: Search	[Setting]	New
<div>(link) Name (link) View my profile page [Tweet][Following][Follower] Textbox: Compose new tweet</div>				<div>Tweets</div>		
<div>Who to follow</div>						
<div>Trend</div>						
<div>© 2013 Twitter About Help Terms Privacy Blog Status Apps Resources Jobs Advertisers Businesses Media Developers</div>						

On this, clicking on the **Home** logo in the top left corner goes back to [Main Page](#). Clicking on Setting pops up a menu with option including Sign out, which goes to [Sign Out Page](#). The other options and buttons in this page are beyond the scope of this specification.