Krowdit

Master Design Document
iOS
Internal Tools

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Introduction

Krowdit is a smartphone OS (iOS & Android) application that allows event attendees (Sports fans, concert goers, Convention participants, Etc.) to have relevant discussions that are location-based and event centric. Simultaneously, we provide advertisers, and retail companies a capable target audience to engage with promotional material. The program provides tremendous value through entertainment, and related content for event goers. Related content ranges from player stats to restaurant promotions within a short proximity to the event. Sporting events generate passionate fans. We provide these fans with a real-time venue for multimedia expression.

Design Goal

The goal of the application is to provide an entertaining social experience to the user. We do this by integrating location based services and context sensitive information, providing appropriate tools and transparently gathering statistics that allow us to gameify the user experience.

(Sample User Experiences)

(Architecture Overview)

Internal Tools

In order to serve the developers of The Application an internal toolset will need to be available. This toolset will provide access to the Krowdit backend for the entering of team or location data as required. This will probably be web based and provide the following functions;

- Locations
  - Defining of boundaries
  - Naming
  - Description
  - Images
  - Stadium map with key
  - Parking details
  - Location tips?
  - Contact information
- Event Types
  - Name
  - Public
  - Architecture
  - Team lists
- Team Lists

Application Overview

Title Bar

The Title Bar displays the name of the page as well as buttons that can be used to filter data or for application functions not otherwise represented in the page area.

Page Area

The Page Area is where data is displayed and manipulated. Application functions not represented by buttons in the title bar are accessible here.

Page Bar

The buttons here are used to switch the view of the page area. Important notifications are also displayed in this area.

User Paths

Feature Areas

Below is a list of the distinct feature areas of the Krowdit application.

Splash Screen

The screen displayed when the application is started. May include a sound or animation.

Login Screen

Screen used to login to the application. Offers the options to create a new account or login via Facebook.

Join Krowd Screen

A screen that lists all the active krowds at your current location, allowing you to choose one to join.

Create Krowd Screen

This screen provides options to start a new krowd. It is highly context sensitive.

Select Location Screen

On this screen a map is displayed making it graphically easy for a user to select a nearby location. Additionally a user can select any location worldwide and be able to view the Krowds at that location. The user will be unable to participate in those Krowds though. This screen is also where the option to create a new location exists.

Create New Location Screen

Creating a new location in the database is easy. Just enter a name and type and using your devices current geographical location the location is created for others to view, create Krowds for and view.

Welcome Screen

This screen is displayed directly after joining or creating a Krowd, giving the user the ability to share this information on several social networking sites and invite friends to view or join the Krowd.

Krowd Page

The first of the true "Pages" this page is the meat of the application. Displaying all the comments and photos generated by members of the krowd. Through this page the user can post her own comments or photos as well as access a few other krowd related options.

Event Page

Displays relevant and interesting information about the current event the krowd is a part of. Such as the names of the teams playing, statistics, logos and any other information we can get our hands on. Access to the Location Page can also be found here.

Profile Page

The profile page is where the user can view information about their use of the application. The profile picture can be edited here and awards are displayed her. Additionally there are three subgroups of information. These are treated as their own features.

Profile Statistics Page

All statistics gathered by the application about the user are displayed here.

Profile Photos Page

All the photos posted by the user can be seen here. This provides the option for the user to repost them to the krowd, email the pictures, save to the camera roll, or post them to popular social networking sites.

Profile Achievements Page

A critical aspect of gameifying the application is the achievements. The history of received achievements can be found here.

Profile Events Page

Blah

Settings Page

This page is where the user can edit his display name as well as other functions of the application.

Deals Page

Access to the geolocation specific deals is granted through this page.

More Page

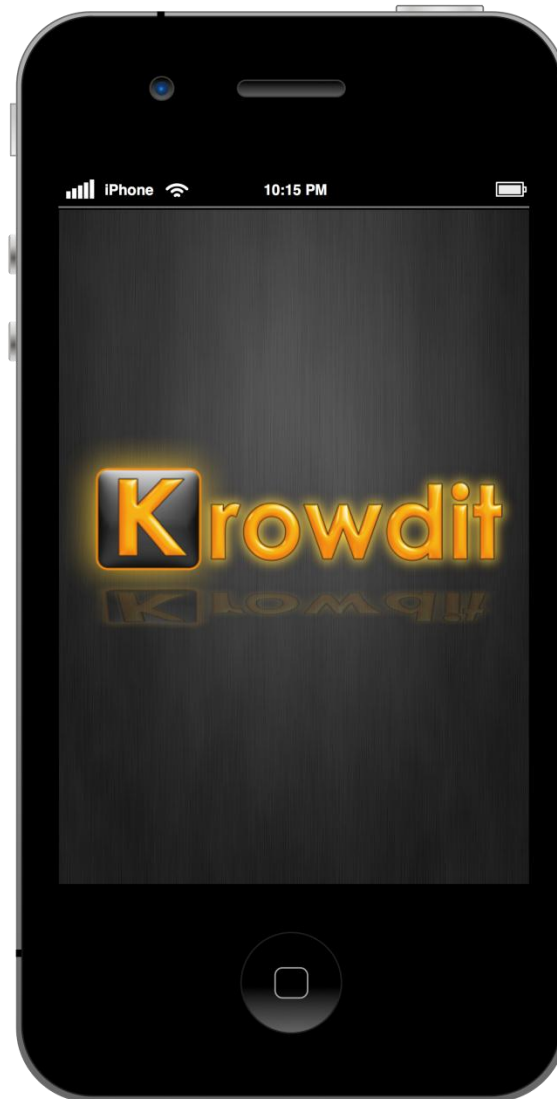This page lists all available pages, giving the user access to pages that are not normally displayed in the Page Bar.

Extras Page

This is where the "toys" are kept. Little features that may also be accessed through other areas of the application are grouped here for easy access.
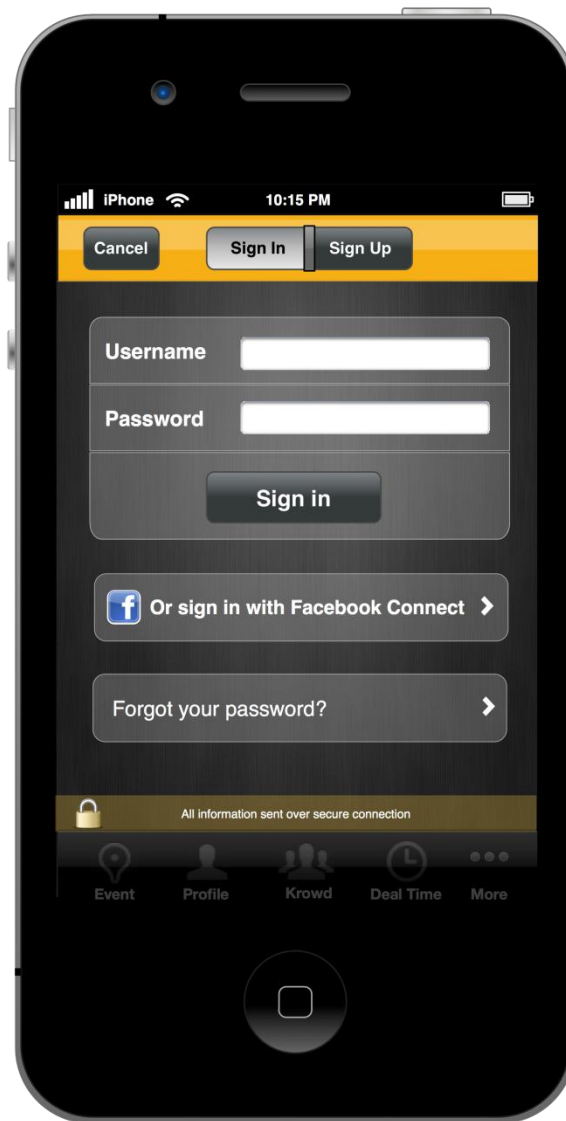
Detailed Feature Designs

Splash Screen

The splash screen is the first part of the program viewed by the users after pressing the application icon on the iPhone/Android. This can be (and probably will be in the first releasable build) a simple static image, or an animated screen with sound and video to act as an introduction to the application.

Login Screen

        The login screen is only displayed the very first time the application is launched or if the user manually logs out. Provisions for login using different services such as Facebook or Twitter are provided here as options to using a Krowdit email/password combo. Pressing those will activate the appropriate Safari page (while still within the Krowdit application) to allow login to such third party sites. If a Krowdit email/password combo is entered those credentials will be saved in the application to make it unnecessary to log in again the next time the application is launched. The ability to do this with third party logins needs to be explored.

        Of course if this is the first time a user has launched the Krowdit application and would like to create a Krowdit email/pass combo a link to the Create Account page is provided.

        Forgotten password functionality is also present on this screen.

Join Krowd Screen

After launching the application and viewing the Splash Screen the user is brought directly to this Join Krowd screen. This is where the user will be asked for permission to use their current location. If given the closest official "Location" will be selected as their current location and displayed at the top of the screen. If permission is not given or location is unable to be determined current location with be either the last one used or "Unknown". The location itself will be a button that will allow the user to change the currently selected location. Below the most likely events are displayed in descending order within a window that can be scrolled with a finger swipe.

The order events are displayed in will fit the tree view below:

- Events Located at Closest Location
    - Krowdit created events with start times +/- 2 hours from current time

├ User created events with start times +/- 2 hours from current time
├ Krowdit created events with start times > +/- 2 but < +/- 6 hours
├ User created events with start times > +/- 2 but < +/- 6 hours
- Events Located at Next Closest Location
  ├ Krowdit created events with start times +/- 2 hours from current time
  ├ User created events with start times +/- 2 hours from current time
- Events Located at 3rd Closest Location
  ├ Krowdit created events with start times +/- 2 hours from current time
  ├ User created events with start times +/- 2 hours from current time
- Continue until list = 25 events

Because at this point the user is not a member of a krowd several items in the page bar will be greyed out and non-functional. Event, Krowd and Deals cannot be used without being in a krowd or knowing the users location. Profile will still provide access to the profile of the logged in user. Access to settings will still be available through the profile or the More page.

Of course, if the user does not find the Krowd they would like to join access to the Create/Start Krowd screen will be provided here.

Create Krowd Screen

The Create Krowd screen is a highly modal and context sensitive screen. In the example above many fields are shown, but in use only the currently entered and the next available fields will be visible. To start, the nearest official location will be displayed and set as the location the new krowd will be created at. This location can be edited and for that purpose a link to the Select Location Screen is provided.

Krowd Type

The Krowd Type is a very important field and will determine the layout and information of many later screens within the Krowdit application. This is where the structure of an event is determined, such as team1-vs-team2 (NFL Football) or single-team-non-competitive (Music Concert) or many-teams-vs-all (NASCAR Race) or no-team-social (Bill's Party). Even though there are only a few possible structures for an event, there will still be many Krowd Types that share structures. This is for ease of use and sanctioned data entry reasons explained below.

Some Krowd Types will not be available for users to create Krowds with. For example, the Krowd Type 'NFL Football' would not be a possible choice in the Create Krowd screen if all NFL games and locations

are being entered by Krowdit staff. This is to avoid duplicates to sanctioned events and to keep 'trash' events at a minimum. Below is a list of the initial Krowd Types and their availability to users.

Krowd Type	Public?
NFL Football	No
NBA Basketball	No
MLB Baseball	No
NHL Hockey	No
NCAA Football	Yes
NCAA Basketball	Yes
MLS Soccer	Yes
MLL Lacrosse	Yes
CFL Football	Yes
WNBA Basketball	Yes
AFL Football	Yes
Football	Yes
Basketball	Yes
Baseball	Yes
Hockey	Yes
Soccer	Yes
Lacrosse	Yes
Custom Sports	Yes
Custom Event	Yes

As has been said the Krowd Type chosen will determine what fields will be required when creating a new Krowd. Some of these fields will be freeform text entry, but most will be limited selection fields, such as a team name or the start time. Details of the fields for each Krowd Type and their style can be found in the table below. Non-public Krowd Types are included here.

	Event Name	Team 1	Team 2	Start Time	End Time	Event Structure
NFL Football		List Select	List Select	Time Wheel	Time Wheel	t1-vs-t2
NBA Basketball		List Select	List Select	Time Wheel	Time Wheel	t1-vs-t2
MLB Baseball		List Select	List Select	Time Wheel	Time Wheel	t1-vs-t2
NHL Hockey		List Select	List Select	Time Wheel	Time Wheel	t1-vs-t2
NCAA Football		List Select	List Select	Time Wheel	Time Wheel	t1-vs-t2
NCAA Basketball		List Select	List Select	Time Wheel	Time Wheel	t1-vs-t2
MLS Soccer		List Select	List Select	Time Wheel	Time Wheel	t1-vs-t2
MLL Lacrosse		List Select	List Select	Time Wheel	Time Wheel	t1-vs-t2
CFL Football		List Select	List Select	Time Wheel	Time Wheel	t1-vs-t2
WNBA Basketball		List Select	List Select	Time Wheel	Time Wheel	t1-vs-t2

	Event Name	Team 1	Team 2	Start Time	End Time	Event Structure
AFL Football		List Select	List Select	Time Wheel	Time Wheel	t1-vs-t2
Football		Text Entry	Text Entry	Time Wheel	Time Wheel	t1-vs-t2
Basketball		Text Entry	Text Entry	Time Wheel	Time Wheel	t1-vs-t2
Baseball		Text Entry	Text Entry	Time Wheel	Time Wheel	t1-vs-t2
Hockey		Text Entry	Text Entry	Time Wheel	Time Wheel	t1-vs-t2
Soccer		Text Entry	Text Entry	Time Wheel	Time Wheel	t1-vs-t2
Lacrosse		Text Entry	Text Entry	Time Wheel	Time Wheel	t1-vs-t2
Custom Sport		Text Entry	Text Entry	Time Wheel	Time Wheel	t1-vs-t2
Custom Event	Text Entry			Time Wheel w/ Date	Time Wheel w/ Date	no-team-social
Non-Standard Event Types can be added endlessly, though in the initial release these will all be copies of the Custom Sport or Custom Event Event Type. All inclusive lists should be avoided though for ease of use.						

Event Name

In the table above the event name is empty for most Krowd Types. This means that most event names will be generated by the program as a combination of Krowd Type and team names. For example; "MLS: Rapids vs. Galaxy", "NCAA: Albany vs. Maine", "Soccer: Spuds vs. Unicorns", "Boulder HS vs. Fairview", Etc. The only exception in the initial release is the custom event.

Team 1 & Team 2

Team names can be a list Select field, freeform text entry or not present depending on Krowd Type. List Select fields are used for specific sports leagues of which the names of all possible teams are known and entered into the application by Krowdit staff. Text Fields are used for the more freeform sports where team names are unknown. Peewee league football or little league baseball games would be a good example. There are thousands of teams and names come and go daily in such sports.

Start Time & End Time

These are the standard Time Wheel entry fields found in many standard smartphone applications. Validation is required on these fields for standard conflicts such as an end time before the start time. There will be limits for each Krowd Type for how long and event is allowed to run. Logical limits based on how long a double header can last plus generous buffer time, or possibly a blanket 24 hour limit. Some events can cross the midnight rollover so allowances for this will need to be made. Custom Events could possibly last days and will need date entry in addition to time entry fields.

Event Structure

Event Structure is a hidden field not editable by the user and is in the table above for illustrative purposes. This field is what the Krowdit application will use to structure itself to fit the currently joined krowd correctly.

*Any text entry such as event name or team name must be checked against the banned word list. Manually entered and Auto-generated Event Names must be verified to be unique compared to other events currently running or to start within a pre-defined timeframe at the same location.

Select Location Screen

The Select Location screen is used to alter the default location set by the application using location data, to select a location when no data is available, or to select a distant location to be able to observe Krowds without actually being at the location. On this screen a map with markers for locations is displayed with an overlay showing a circle centered on your current location. This circle is the area a location needs to be within in order for the user to join and participate in Krowds. Any location outside this circle can only be viewed and not participated in. If not location data is available no circle is displayed and the user cannot participate in Krowds, only view them.

Statistics about your current location can be displayed, such as the number of locations within your participation area for example. The name of the currently highlighted location is displayed with some function to choose/select that location and go back to the screen that sent you here.

Icons or pointers are displayed on the map denoting a location that a krowd can be created at. A filter is provided with default settings so the user can limit the number of pointers displayed on his map to avoid clutter. The map can be pinched to zoom in and out as well as scrolled anywhere in the world.

As areas are brought into view pointers matching the current filter will be loaded. Tapping a pointer will display that location's name and make it the currently selected location.

A Back button is provided to return to the previous screen and cancel any selections made.

The functionality to define a new location at the user's current coordinates is linked here as well if she is unable to find the location desired on the map.

Create New Location Screen

This screen allows a user to enter a new location for creating krowds at into the Krowdit database. The device's current GPS or otherwise derived location is used. A name is entered as a free form text field. A location type is selected. The location type is to facilitate filtering of locations whenever a map is displayed.

When the Save function is used the location name is checked for banned words and validated to be unique in the database. That location is then set as the device's current location and the user is returned to whatever screen sent them to the Select Location Screen.

Welcome Screen
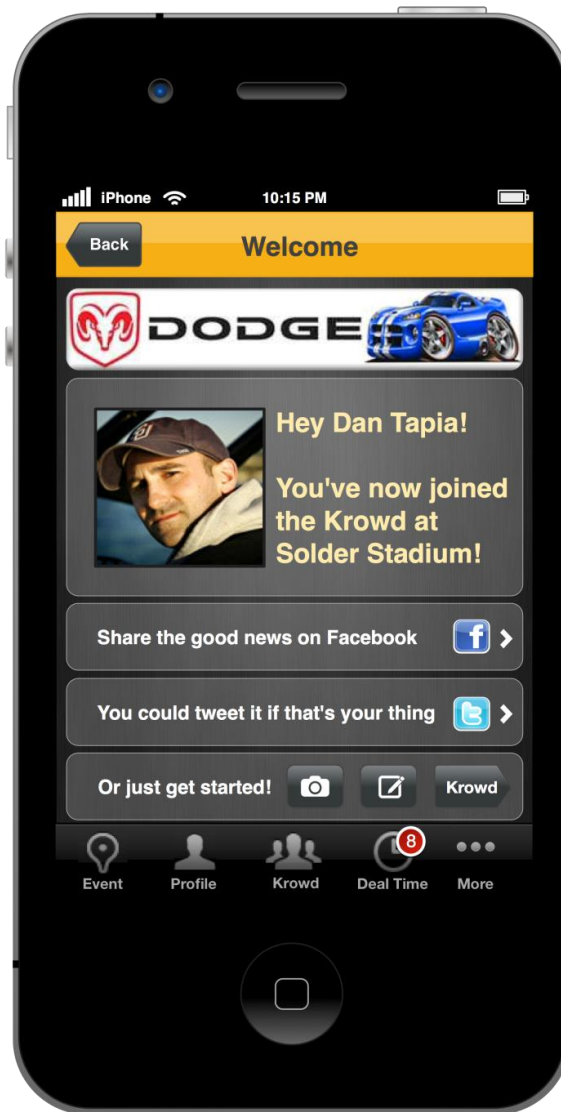
Blah blah blah

Krowd Page
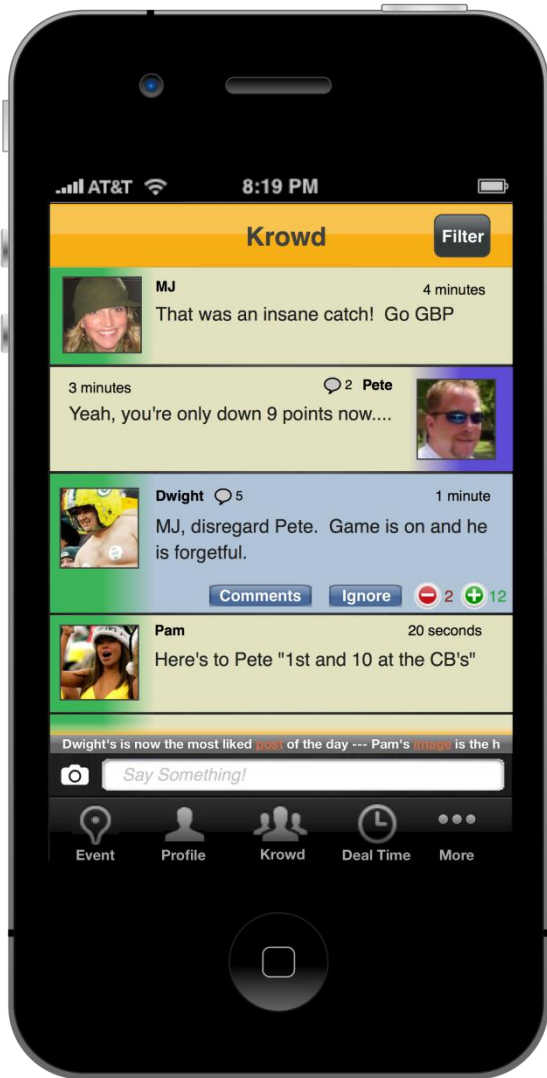
Blah blah blah

Event Page
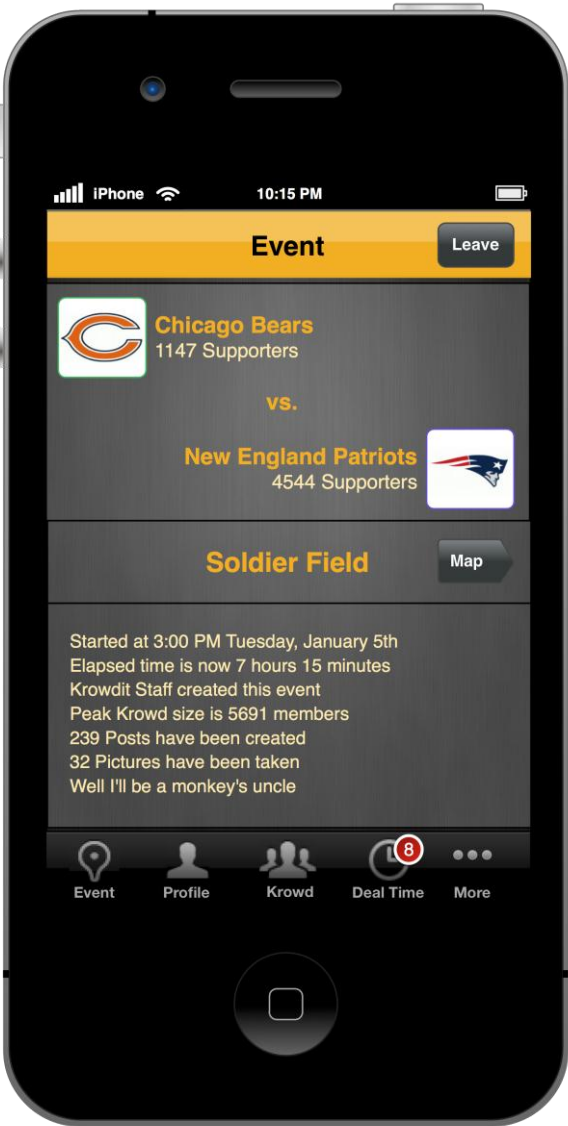
Blah blah blah

Profile Page
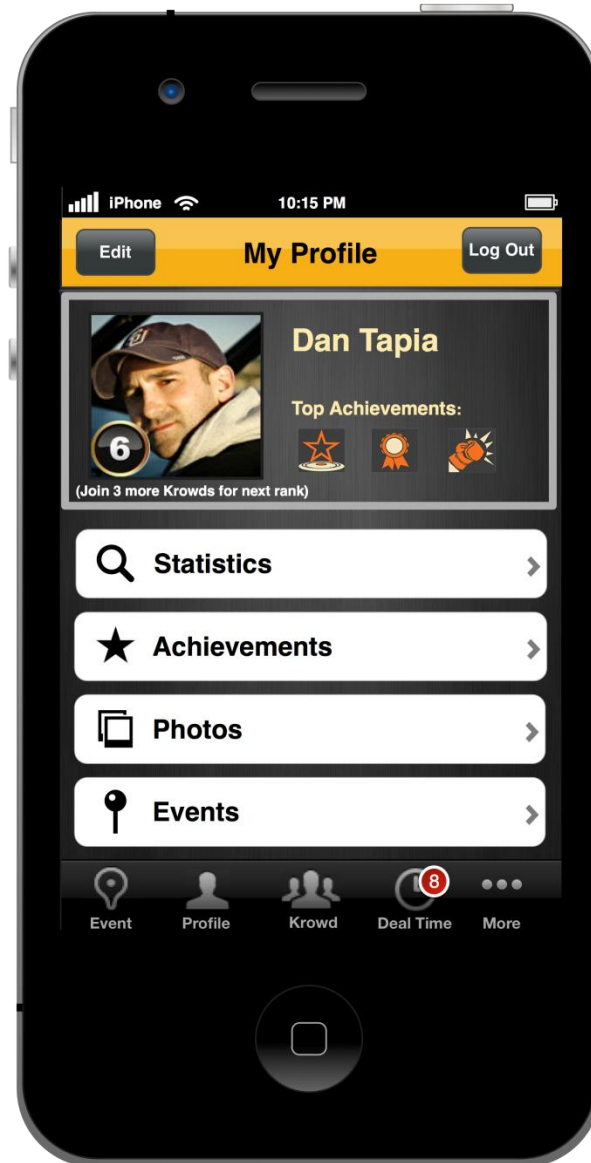
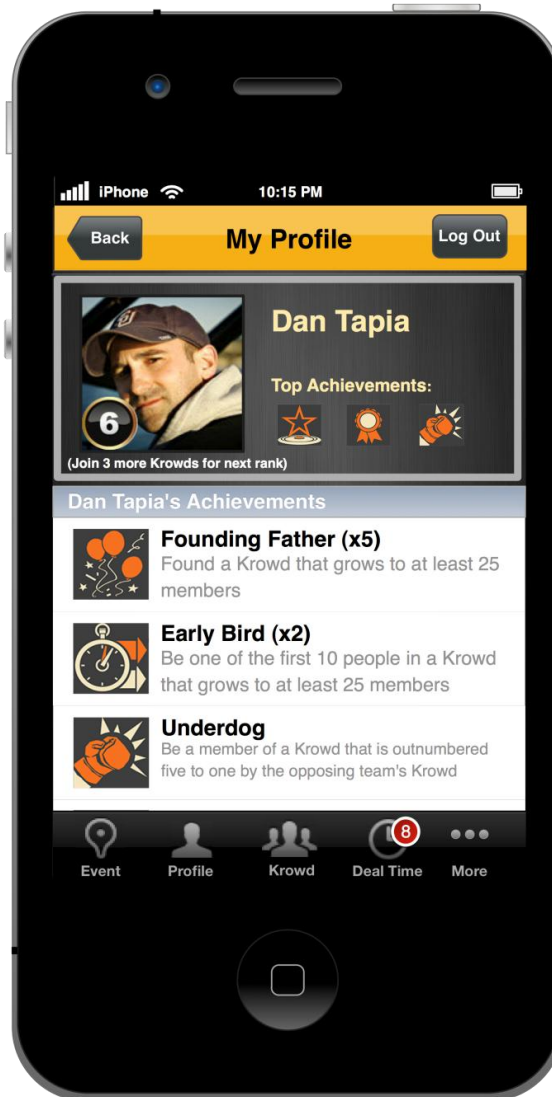Blah blah blah

Profile Statistics Page
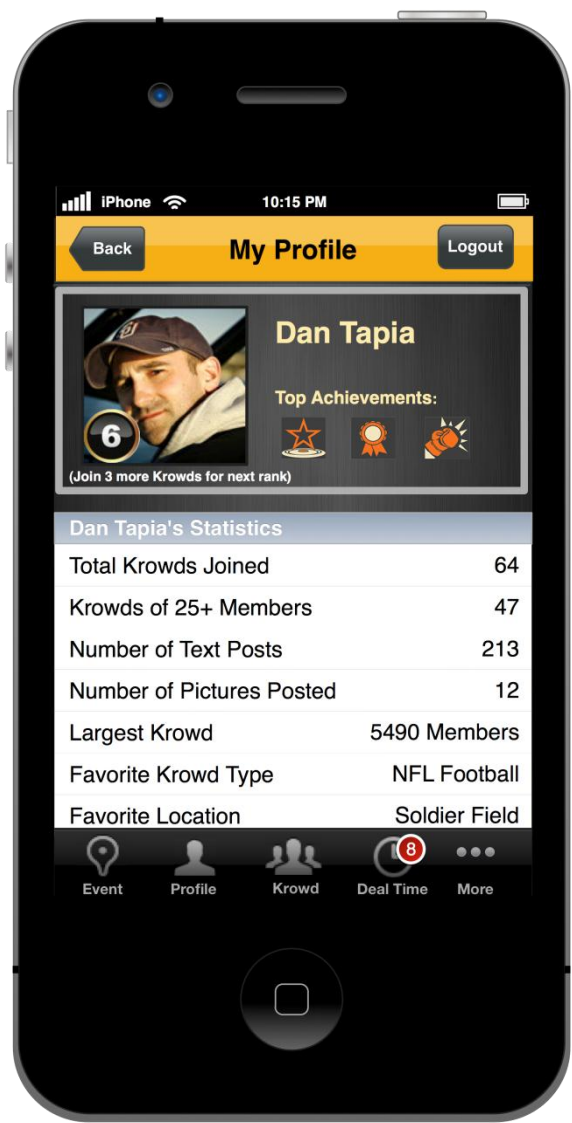
Blah blah blah
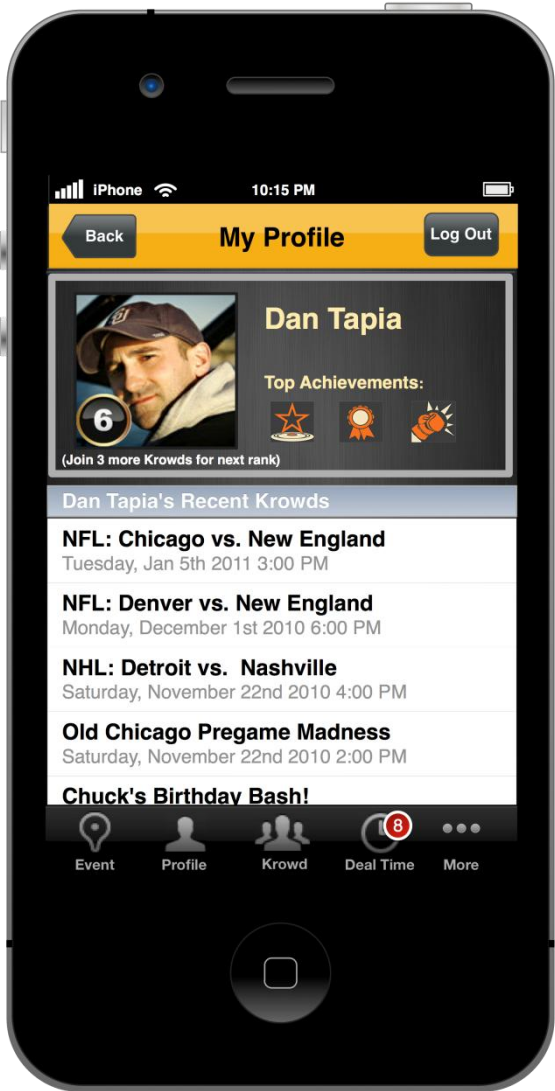
Profile Photos Page
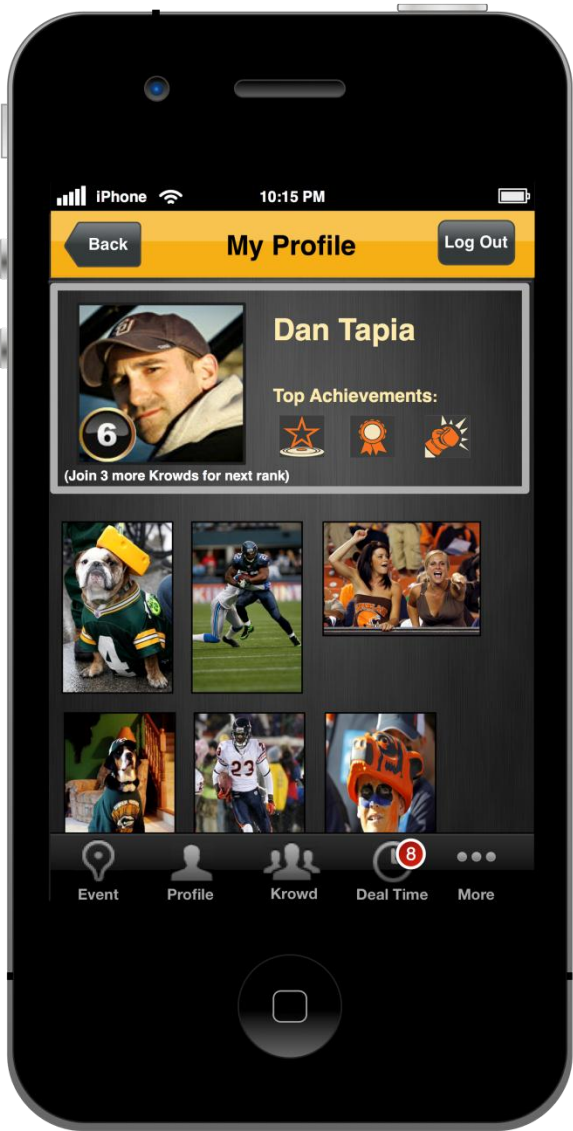
Blah blah blah

Profile Achievements Page

Blah blah blah
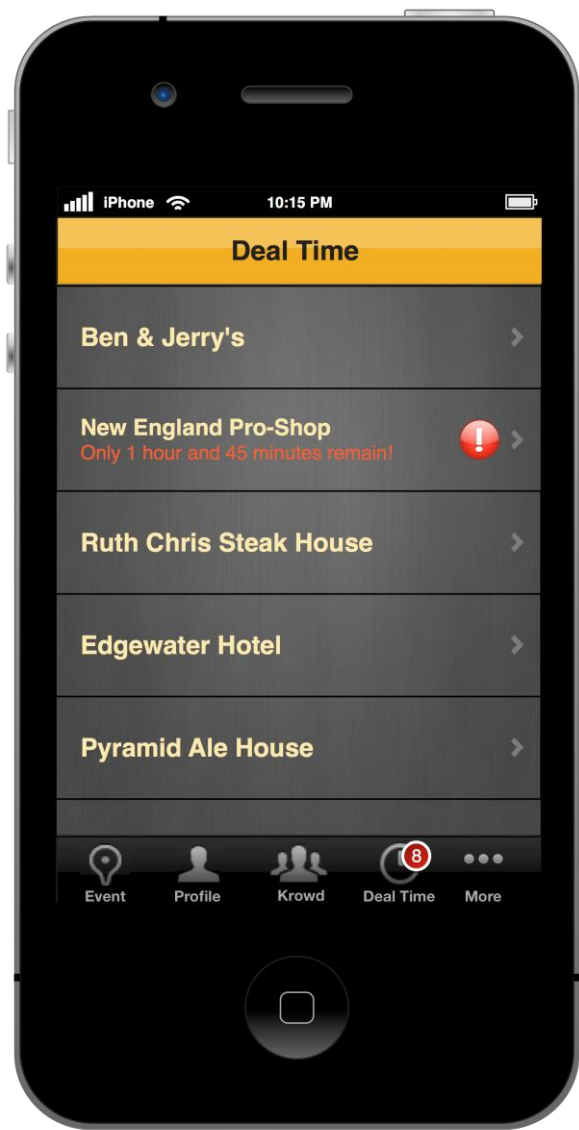
Profile Events Page

Blah blah blah

Settings Page
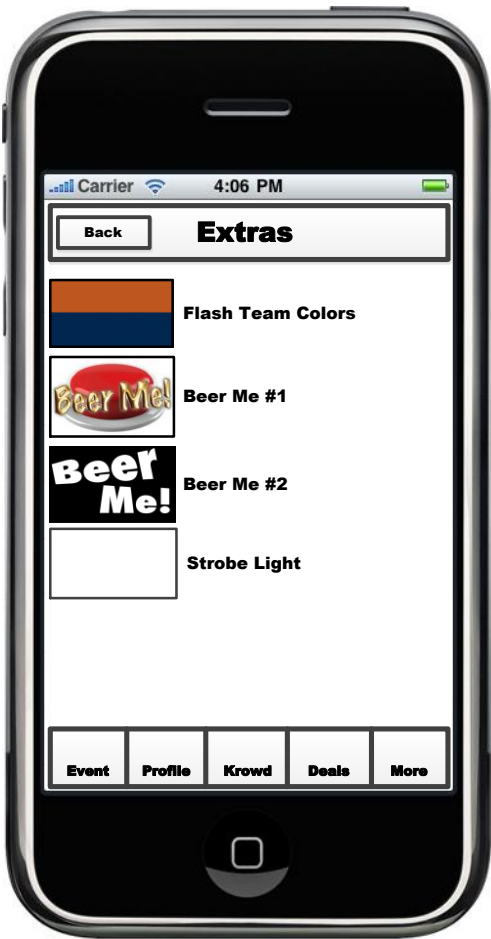

Blah blah blah

Deals Page

Blah blah blah

More Page

Blah blah blah

Extras Page

Blah blah blah

Internal Tools Design

User Stories

Future Features