

Submitted by:

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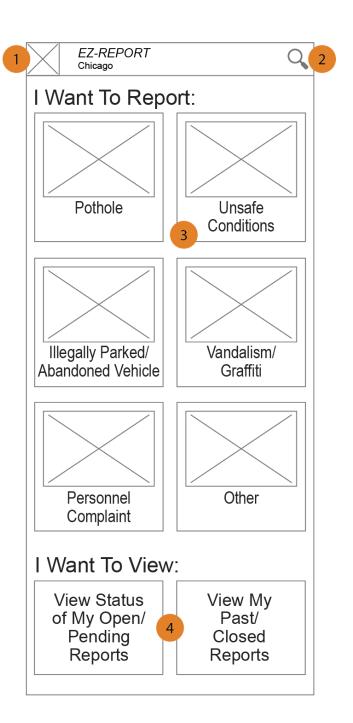
App Overview

The task addressed in this report is the development of a mobile app that offers a streamlined experience of the functionality currently provided by CityOfChicago.org. Given the overwhelming amount of information provided by the current desktop site, I've chosen to focus on a subset of its content. The proposed app gives users a means of easily reporting things they believe to be worth reporting to city officials. These could include unsafe conditions, employee-behavior concerns, vandalism, etc.

The installation of this app presupposes that the user is a concerned citizen inclined to report such things—a subscriber to the "If you see something, say something" mentality. This admittedly small subset of the city's population can be a valuable source of assistance as the city attempts to maintain a safe and pleasant environment, and this app aims to remove the perceived difficulty of reporting for these citizens.

While the app would provide a number of functions as seen on its home screen, this report will focus on two "paths" through the app, providing detailed layouts and explanations of the features a user would encounter in these two scenarios. The first scenario details the hypothetical reporting of an "unsafe condition," in this case a missing manhole cover. The second scenario details the reporting of a personnel complaint, in this case the reckless driving of a cab. Android and iOS mobile designs are detailed separately, with slight variations on the paths to explore alternate functionality. Variations in button and text layout were also explored between Android and iOS versions—in these cases the preferred design could be applied to both platforms.

The situations addressed by this app are ones which many people observe on a regular basis, but perhaps don't know who to call or how to report. The app could help concerned citizens while improving the city government's responsiveness.



SCENARIO 1: Reporting Unsafe Conditions

ANDROID

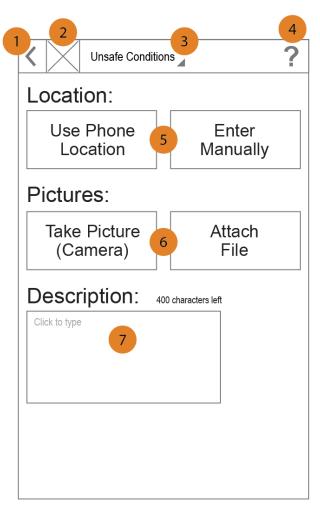
Design Approach

Throughout the app, large, well-spaced buttons and text fields are used to provide clear calls to action, and inform users quickly of choices. Buttons in the homepage's springboard menu include space for images (these could be either photo images or line drawings) to provide a visually engaging home screen and reinforce text offerings. Successive screens switch to text-only buttons, allowing users to focus on the chosen task with minimal clutter. The city of Chicago's seal appears in the upper left corner of all screens to establish identity (and visual unity with the desktop website).

Annotations

Please note that this app never covers/removes the status bar its presence is assumed and is thus not depicted in wireframes.

- 1. City of Chicago seal (not tappable)
- 2. Tapping magnifying glass reveals Search text box in action bar (with Back caret at left) and deploys keyboard
- 3. Images and text within these six buttons should re-size in fluid containers as needed. Button marked with #3 is button that would launch Scenario 1
- 4. These buttons take user to a separate login screen, which offers user name and password fields for existing users, as well as the option to create a login for new users. Login is not offered on the home screen, both to minimize clutter and welcome new users, and because the app may be used fully without creating a login. Therefore, users are only prompted to log in at logical points within the app (noted throughout annotations)



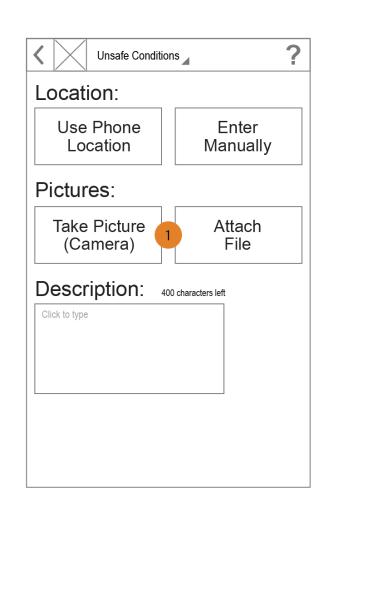
Full screen

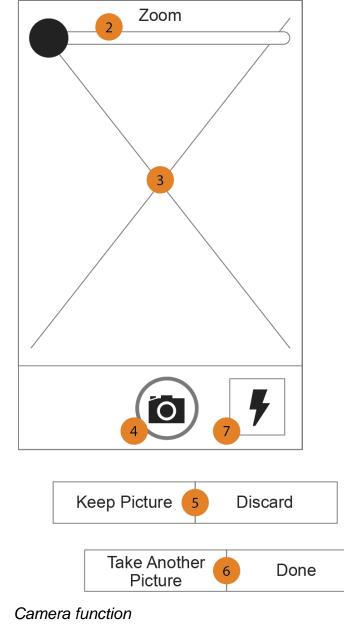
Location Popup

Reporting Unsafe Conditions (Android) – Step 2, Information screen

Phone's GPS locator is disabled. Please enable to use phone location. Enable Cancel

- 1. Back caret appears at left end of action bar on screens after home screen
- 2. City seal remains, to right of caret (still not tappable provides buffer between caret and dropdown menu)
- 3. This section replaces app title in action bar, and names the chosen task (Unsafe Conditions) on this and successive pages in this task flow. Dropdown offers means of jumping to another type of report offered on the home screen (Vandalism, etc.). If dropdown is used to navigate away, app should remember current status of report in progress, and return to same point when this type of report is selected again
- 4. Help button replaces search button, now that user is inside a chosen task flow and is more likely to need help with specific functionality on a page
- 5. These two buttons allow users to enter a location for the reported condition. Unless phone's GPS is already active, "Use Phone Location" button should activate a popup offering to enable GPS (#8). "Enter Manually" button opens a separate screen of text boxes for address, city, state, and zip (similar example illustrated in iOS wireframes)
- 6. These buttons discussed on next page
- Tapping anywhere in this box deploys keyboard (and scrolls screen down such that text box is above the keyboard). Keyboard's Enter/Go button (or touching anywhere outside the text box) hides the keyboard
- 8. Detail of popup for enabling phone's GPS function



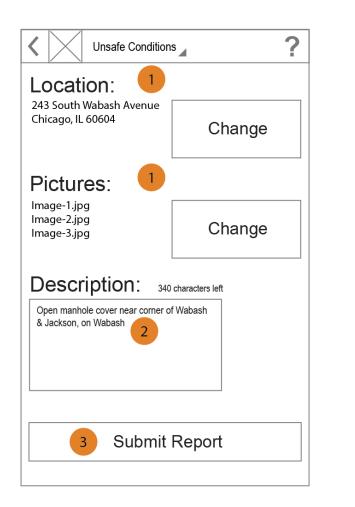


Annotations

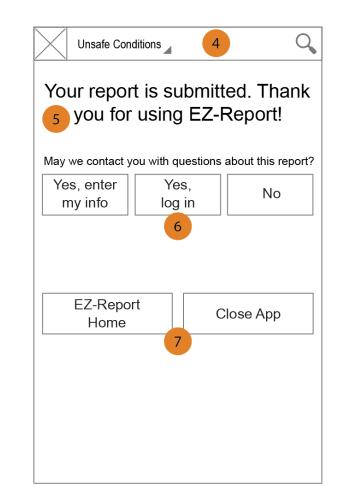
- 1. These two buttons allow users to add one or more pictures of an unsafe condition to the report. "Take Picture" button opens a separate screen (detailed here on right) offering a simplified camera interface. "Attach File" button opens phone's standard gallery image picker
- 2. Zoom slider at top of screen—bar is opaque and "Zoom" title is black—otherwise underlying picture shows through/around this control
- 3. This area shows real-time image seen by camera's lens. Once shutter is tapped, switches to still image of shot just taken
- 4. Shutter button takes picture
- 5. Immediately after picture is taken, bottom bar slides left to be replaced by these buttons, offering choice of keeping or discarding the picture just taken. If discarded, shutter and flash controls return. If kept, additional controls (#6) appear
- 6. These controls appear when a picture is kept, to allow user to choose whether to take an additional picture. If "Take Another Picture" is chosen, shutter and flash controls return; if "Done" is chosen, camera closes and user is returned to Information screen
- 7. Flash button deploys popup menu with three choices: On, Off, and Auto

Full screen

Reporting Unsafe Conditions (Android) – Step 2, Information screen (continued)



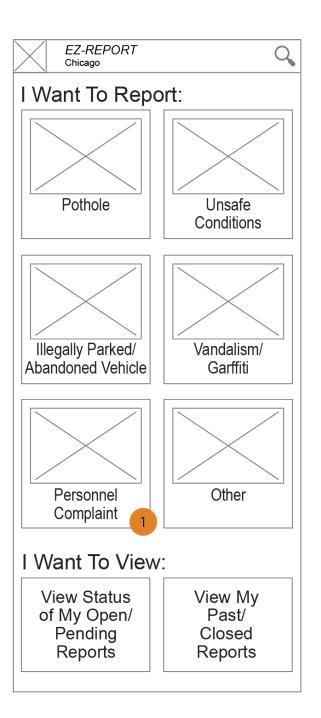
Reporting Unsafe Conditions (Android) – Steps 3 & 4, Information confirmation & Submission confirmation



Annotations – Step 3

- 1. After entry of location and pictures as described above, these two areas now display information entered and picture files attached, each with a single button to allow for changes. Pressing the "Change" button in either of these areas restores the two buttons previously visible in that area ("Use Phone Location," "Enter Manually," etc.)
- 2. Text box shows any text entered. Tapping the box still deploys the keyboard for edits (and scrolls screen down such that text box is above the keyboard). Keyboard's Enter/Go button (or touching anywhere outside the text box) hides the keyboard
- 3. Submit button uploads report. If internet connection is unavailable, popup offers to upload report once internet connection is restored

- 4. Back caret and help function are removed from action bar on final screen, now that report is complete. Seal and dropdown with title remain, and search functionality is restored
- 5. Large-typeface message confirms that report is submitted
- 6. These buttons offer users the option to enter personal information (in case followup is desired by city officials). "Enter My Info" button takes users to a screen of text fields for Name, Telephone, and Email, and all are optional (users may choose to fill in only one or two). "Log in" button takes users to a separate login screen, which offers user name and password fields for existing users, as well as the option to create a login for new users. The "No" button simply makes this row of buttons fade out, leaving the two options below (#7). Even though the "No" button's functionality is limited, its presence reassures users that they do not need to provide personal information
- 7. These buttons return users to the home screen, or close the app



Personnel Complaint (Android) – Step 1, Home screen

SCENARIO 2: Reporting Personnel Complaint

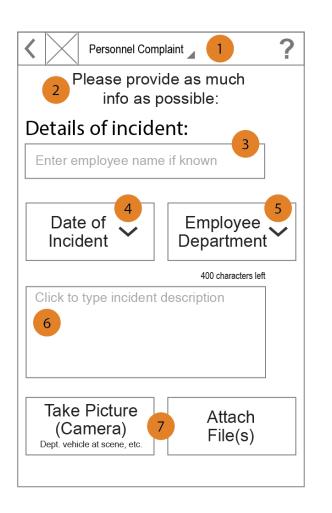
ANDROID

Design Approach

For this scenario, whose situations are more likely to demand details about the time and person as opposed to the location, focus is on easy entry of text data. Text boxes are employed, but are replaced where possible with pickers and dropdowns to ease the input of information. After the home screen, text-only buttons are again employed throughout, minimizing clutter. Camera functionality is once again offered in case relevant for a given user.

Annotations

1. Button marked with #1 would launch this scenario (Android Home screen identical/as discussed above in Scenario 1 included again here for reference)



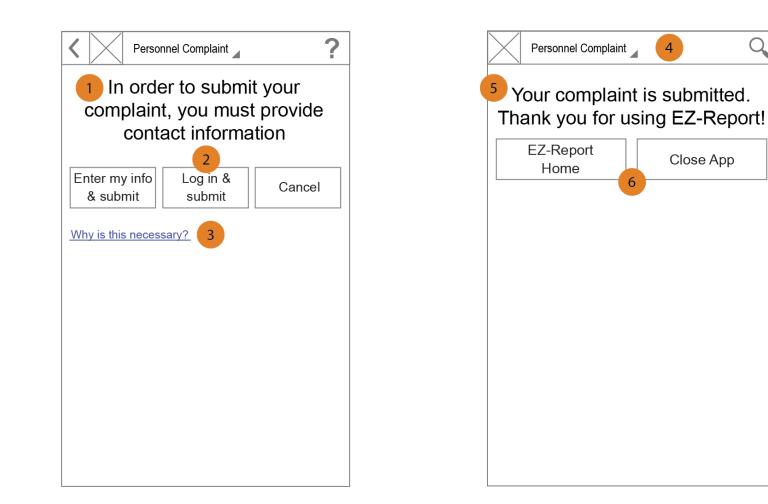
Personnel Complaint	?
Please provide as much info as possible:	
Details of incident:	
I don't know 8	
8/12/2014 🗸 🦻 Taxi	
276 characters lef	t
Reckless driver speeding and ran red light at corner of State and Jackson. Unable to read plate but snapped pictures of cab.	
Image-1.jpg Image-2.jpg Image-3.jpg Image-3.jpg 11	hed
12 Submit Report	

Personnel Complaint (Android) – Steps 2 & 3, Information input & Information confirmation

Annotations – Step 2

- 1. Action bar undergoes same changes seen in Scenario 1 (on all but Home and final screens)
- 2. Plain-text call to action at top of screen
- 3. Tapping text box deploys the keyboard. Keyboard's Enter/Go button (or touching anywhere outside the text box) hides the keyboard
- 4. "Date" button deploys calendar picker
- 5. "Employee Department" button deploys dropdown menu of available departments. Dropdown's final option is one which says "Not Listed"
- 6. Text box behaves same as #3, but this one scrolls screen down such that text box is above the keyboard
- 7. These controls behave as described in Scenario 1, except the "Attach Files" button now offers choice of picture gallery OR file picker for phone's file hierarchy. Small subtext on "Take Picture" button clarifies why a picture could be relevant to this scenario's user

- 8. Text box shows any text entered, and can still be edited, still behaving like #3 when tapped
- 9. Buttons now show values chosen, but still work as before if tapped (displaying calendar picker/department dropdown)
- 10. Text box shows any text entered, and can still be edited, still behaving like #6 when tapped
- 11. This area now displays any files attached, with a single button to allow for changes. Pressing the "Change" button in this area restores the two buttons previously visible here ("Take Picture" and "Attach Files")
- 12. Submit button advances to next screen but does not yet upload report, since personal info on next screen is required in this scenario



Personnel Complaint (Android) – Steps 4 & 5, Contact information & Submission confirmation

Annotations – Step 4

4

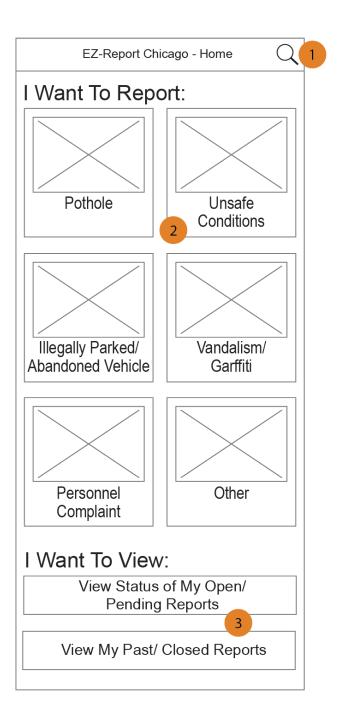
Close App

- 1. Plain-text call to action at top of screen
- 2. These buttons offer users options for entering personal information (mandatory in this scenario-personal info is required for personnel complaints). "Enter My Info" button takes users to a screen of text fields for Name, Telephone, and Email, with a "Submit" and "Cancel" button at the bottom. "Log in" button takes users to a separate login screen, which offers user name and password fields for existing users, as well as the option to create a login for new users. Upon successful login, users see this screen again, but with only "Submit" and "Cancel" buttons offered. This screen's "Cancel" button brings a pop-up telling users that their data will be discarded and asking if they are sure-in that popup, "Yes" returns users to Home screen; "No" returns users to this screen
- 3. "Why is this necessary?" link takes users to separate page with text description of reason for mandatory personal info. That screen has a Back button at the bottom of the textboth the Back button and the action bar's Back caret return users to this screen

Annotations – Step 5

Users arrive at this screen upon submission of report with contact information, as described in #2 above.

- 4. Back caret and help function are again removed from action bar on final screen, now that report is complete. Seal and dropdown with title remain, and search functionality is restored
- Plain-text confirmation of status at top of screen 5.
- 6. These buttons return user to the home screen, or close the app (as in Scenario 1)



SCENARIO 1: Reporting Unsafe Conditions

iOS

Design Approach

As with the Android app, large, well-spaced buttons and text fields are used to provide clear calls to action, and inform users quickly of choices. Buttons in the homepage's springboard menu include space for images (these could be either photo images or line drawings) to provide a visually engaging home screen and reinforce text offerings. Successive screens switch to text-only buttons, allowing users to focus on the chosen task with minimal clutter.

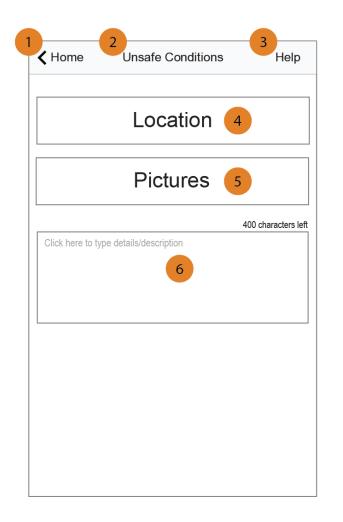
Full-width, lower-height buttons were explored in the iOS app as an alternative, possibly helping users to more easily tap them from both sides of the screen. The city of Chicago's seal does not appear at the top of the iOS app, as this is less common practice in iOS navigation bars.

Annotations

As with Android, please note that this app never covers/removes the status bar—its presence is assumed and is thus not depicted in wireframes.

- 1. Tapping magnifying glass reveals Search text box in navigation bar (with Back caret at left) and deploys keyboard
- 2. Images and text within these six buttons should re-size in fluid containers as needed. Button marked with #2 is button that would launch Scenario 1
- 3. These buttons take user to a separate login screen, which offers user name and password fields for existing users, as well as the option to create a login for new users. Login is not offered on the home screen, both to minimize clutter and welcome new users, and because the app may be used fully without creating a login. Therefore, users are only prompted to log in at logical points within the app (highlighted throughout annotations).

This is the first instance of the alternative full-width buttons (as compared to the Android app)



Reporting Unsafe Conditions (iOS) – Step 2, Information screen

- 1. Back caret appears at left end of navigation bar on screens after home screen, and includes name of previous screen per iOS 7 protocol
- 2. This section shows title of current screen, per iOS 7 protocol
- 3. Help button replaces search button, now that user is inside a chosen task flow and is more likely to need help with specific functionality on a page
- 4. This button allows users to enter a location for the reported condition. Tapping activates sequence of popups discussed in greater detail below
- 5. This button allows users to add pictures of the reported condition. Tapping activates sequence of popups discussed in greater detail below
- Tapping anywhere in this box deploys keyboard (and scrolls screen down such that text box is above the keyboard). Keyboard's Enter/Go button (or touching anywhere outside the text box) hides the keyboard



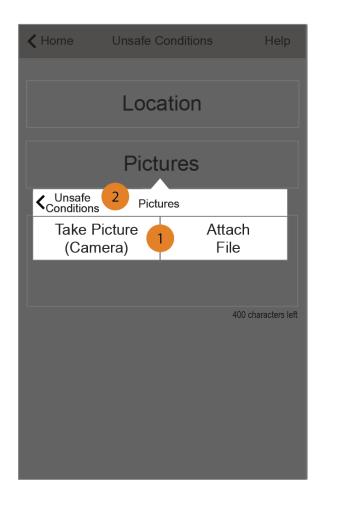
< Home	Unsafe Conditions	Help	
Location			
Address			
City	3		
State	Zip/Postal C	Code	
	Save <u>4</u> Cancel		
QWE	RTYUI	ΟΡ	
AS	DFGHJK	L	
ΦZ	XCVBNN		
123 🖳	space @ .	return	

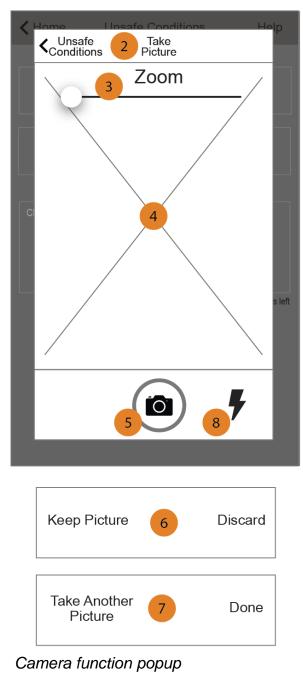
Location input selection

"Enter Manually" popup

Reporting Unsafe Conditions (iOS) – Step 2, Information screen (continued)

- 1. This two-button popup presents buttons allowing users to enter a location for the reported condition. Unless phone's GPS is already active, "Use Phone Location" button should activate a popup offering to enable GPS. "Enter Manually" button activates a separate popup of text inputs (#3). Main screen is still visible, but greyed out, behind popups
- 2. Popup features navigation bar with title of popup in center. Back caret at left returns user to previous page, and includes that page's title
- 3. Upon tapping the "Enter Manually" button, this popup provides fields for manually entering location, and deploys the keyboard
- 4. "Save" button closes popup and returns user to main "Unsafe Conditions" screen. "Cancel" button brings a popup telling user that their data will be discarded and asking if they are sure. If they say Yes, they are returned to the "Location" popup (#1)

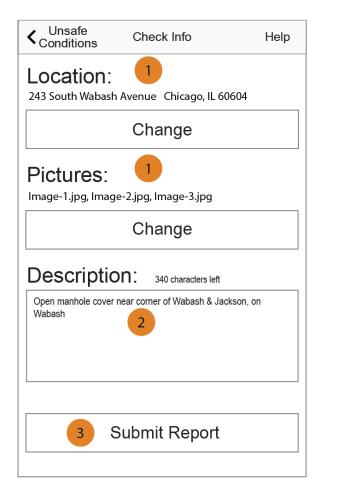




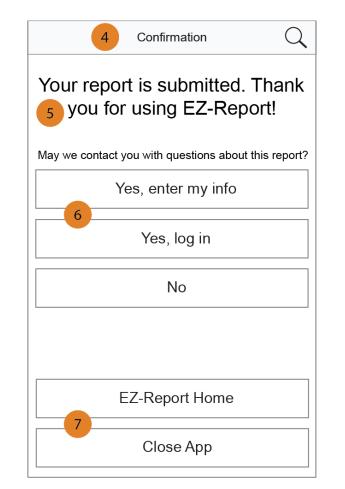
Picture attachment selection

Reporting Unsafe Conditions (iOS) – Step 2, Information screen (continued)

- 1. This two-button popup presents buttons allowing users to add a picture for the reported condition. "Take Picture" button activates a separate popup offering a simplified camera interface (detailed here). "Attach File" button opens phone's standard gallery image picker
- 2. Popups again feature navigation bars with title of popup in center. Back carets at left return users to previous page, and include that page's title. Main screen is still visible, but greyed out, behind popups
- 3. Zoom slider at top of screen—bar is opaque and "Zoom" title is black—otherwise underlying picture shows through/around this control
- 4. This area shows real-time image seen by camera's lens. Once shutter is tapped, switches to still image of shot just taken
- 5. Shutter button takes picture
- 6. Immediately after picture is taken, bottom bar is replaced by these buttons, offering choice of keeping or discarding the picture just taken. If discarded, shutter and flash controls return. If kept, additional controls (#7) appear
- 7. These controls appear when a picture is kept, to allow user to choose whether to take an additional picture. If "Take Another Picture" is chosen, shutter and flash controls return; if "Done" is chosen, camera closes and user is returned to Information screen
- 8. Flash button deploys popup menu with three choices: On, Off, and Auto



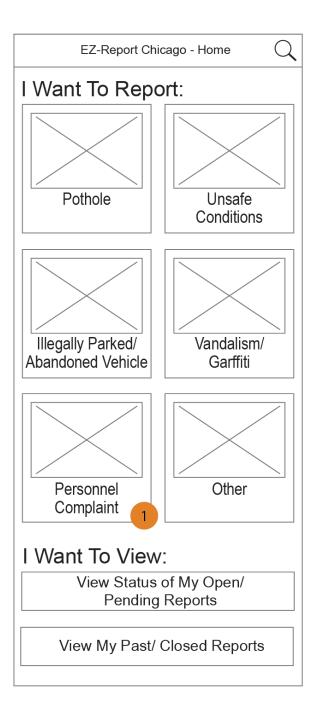
Reporting Unsafe Conditions (Android) – Steps 3 & 4, Information confirmation & Submission confirmation



Annotations – Step 3

- After entry of location and pictures as described above, these two areas now display titles, information entered and files attached, each with a single button to allow for changes. Pressing the "Change" button in either of these areas restores the button previously visible in that area ("Location" or "Pictures")
- 2. Text box shows any text entered. Tapping the box deploys the keyboard (and scrolls screen down such that text box is above the keyboard). Keyboard's Enter/Go button (or touching anywhere outside the text box) hides the keyboard
- 3. Submit button uploads report. If internet connection is unavailable, popup offers to upload report once internet connection is restored

- 4. Back caret and help function are removed on final screen, now that report is complete. Screen title remains, and search functionality is restored
- 5. Large-typeface message confirms that report is submitted
- 6. These buttons give users the option to enter personal information (in case followup is desired by city officials). "Enter My Info" button takes users to a popup with text fields for Name, Telephone, and Email, and all are optional (users may choose to fill in only one or two). "Log in" button takes users to a separate login screen, which offers user name and password fields for existing users, as well as the option to create a login for new users. The "No" button simply makes these buttons fade out, leaving the two options below (#7). Even though the "No" button's functionality is limited, its presence reassures the user that they do not need to provide personal information
- 7. These buttons return user to the home screen, or close the app. They should responsively float to the bottom of the visible screen area



Personnel Complaint (iOS) – Step 1, Home screen

SCENARIO 2: Reporting Personnel Complaint

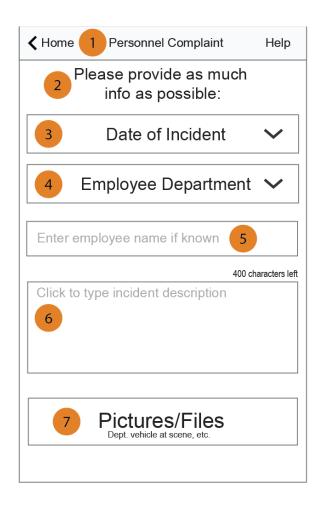
iOS

Design Approach

As with Scenario 1, the iOS app closely mirrors the design of the Android app, but variations to the configuration are offered to explore alternative layout options.

Annotations

1. Button marked with #1 would launch this scenario (iOS Home screen identical/as discussed above in Scenario 1 included again here for reference)



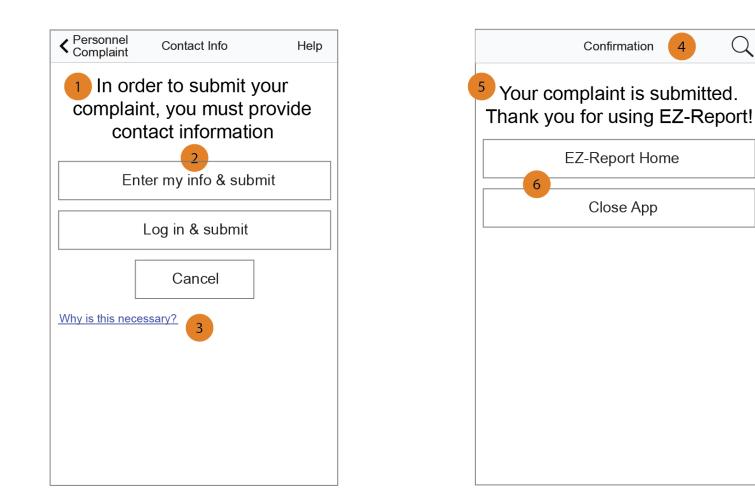
〈 Home	Personnel Complaint	Help		
Pl	ease provide as much info as possible:	١		
	8/12/2014	\checkmark		
	Taxi	\checkmark		
l don't kn	ow 9			
	270	6 characters left		
Reckless driver speeding and ran red light at corner of State and Jackson. Unable to read plate but snapped pictures of cab.				
Image-1.jpg, Image-2.jpg, Image-3.jpg				
Change attached pictures				
12	Submit Report			

Personnel Complaint (iOS) – Steps 2 & 3, Information input & Information confirmation

Annotations – Step 2

- 1. Navigation bar undergoes same changes seen in Scenario 1 (on all but Home and final screens)
- 2. Plain-text call to action at top of screen
- 3. "Date" button deploys calendar picker
- 4. "Employee Department" button deploys dropdown menu of available departments. Dropdown's final option is one which says "Not Listed"
- Tapping text box deploys the keyboard. Keyboard's Enter/Go button (or touching anywhere outside the text box) hides the keyboard. Employee Name text box has been moved to be next to Incident Description text box (#6)
- 6. Text box behaves same as #5, but this one scrolls screen down such that text box is above the keyboard
- 7. This button behaves same as "Pictures" button described in Scenario 1 Step 2, except that the popup's "Attach Files" button now offers choice of picture gallery OR file picker for phone's file hierarchy. Small subtext on button clarifies why a picture or file could be relevant to this scenario's user

- 8. Buttons now show values chosen, but still work as before if tapped (displaying calendar picker/department dropdown)
- 9. Text box shows any text entered, and can still be edited, still behaving like #5 when tapped
- 10. Text box shows any text entered, and can still be edited, still behaving like #6 when tapped
- 11. This area now displays any files attached, with a single button to allow for changes. "Change" button behaves exactly like #7
- 12. Submit button advances to next screen but does not yet upload report, since personal info on next screen is required in this scenario



Personnel Complaint (iOS) – Steps 4 & 5, Contact information & Submission confirmation

Annotations – Step 4

Q

4

Close App

- 1. Plain-text call to action at top of screen
- 2. These buttons offer users options for entering personal information (mandatory in this scenario-personal info is required for personnel complaints). "Enter My Info" button takes users to a popup with text fields for Name, Telephone, and Email, with a "Submit" and "Cancel" button at the bottom. "Log in" button takes users to a separate login screen, which offers user name and password fields for existing users, as well as the option to create a login for new users. Upon successful login, users see this screen again, but with only "Submit" and "Cancel" buttons offered. This screen's "Cancel" button is of reduced with to lessen the risk of tapping it accidentally. "Cancel" brings a pop-up telling users that their data will be discarded and asking if they are sure—in that popup, "Yes" returns user to Home screen: "No" returns user to this screen
- 3. "Why is this necessary?" link takes user to separate page with text description of reason for mandatory personal info. That screen has a Back button at the bottom of the textboth the Back button and the navigation bar's Back caret return users to this screen

Annotations – Step 5

Users arrive at this screen upon submission of report with contact information, as described in #2 above

- 4. Back caret and help function are again removed on final screen, now that report is complete. Screen title remains, and search functionality is restored
- 5. Plain-text confirmation of status at top of screen
- 6. These buttons return user to the home screen, or close the app