

A photograph of a wooden desk with a ruler, a pen, and a small orange notebook. The notebook has a circular logo on the cover. The ruler is black with white markings. The pen is silver. The desk is light-colored wood. An orange chair is visible in the background.

# MOBILE STYLE GUIDE

User experience guidelines  
for native mobile applications

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### WHO SHOULD USE THIS DOCUMENT

While some of this information can apply to John Deere mobile apps universally (such as color schemes, tone of voice, fonts, etc.), these guidelines are intended for native apps that will augment the customer's product experience.

The testing we have done to develop these guidelines is very focused on customers using devices and applications in the environment of being in and around a vehicle or implement.

### WHO SHOULD NOT USE THIS

Although some of the principles are still valuable to align with, this document is not intended for **web-based applications**, **reference-only** native apps (such as price comparisons, financial information, etc.) or native apps that are **not meant to be used with our products** / vehicles.

### APPROVAL PROCESS

These guidelines have been defined in collaboration with User Experience teams and deployment teams at John Deere.

Approval for mobile application designs (and any subsequent alterations and/or additions) sits with the User Experience Team, and they should be made aware of mobile projects before they go live.

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# BRAND IDENTITY



Make sure that **crafting a better User Experience** is the driving force behind every decision that you make.

## DELIVER PERFORMANCE



Any customer-facing mobile solution should deliver a clear value toward productivity, uptime, and/or cost of ownership. The answer should always be **YES** to the following questions:

- Does the app improve end-user's decision making (makes better or faster decisions)?
- Does the app reduce the cognitive and/or physical demands of interaction with our vehicles?
- Does app reduce the knowledge/skill requirements to effectively use our technology?

## WALK-UP EASY



App solutions should enable an experience such that the user can begin using it without any meaningful amount of training or support. The basic features of the app should be intuitive without the need for “exploration” or “explanation.” The answer should always be **YES** to the following questions:

- Can the key app functions be used with no instructions?
- Can setup within the app (login, vehicle info, etc) be completed in less than 30 seconds?

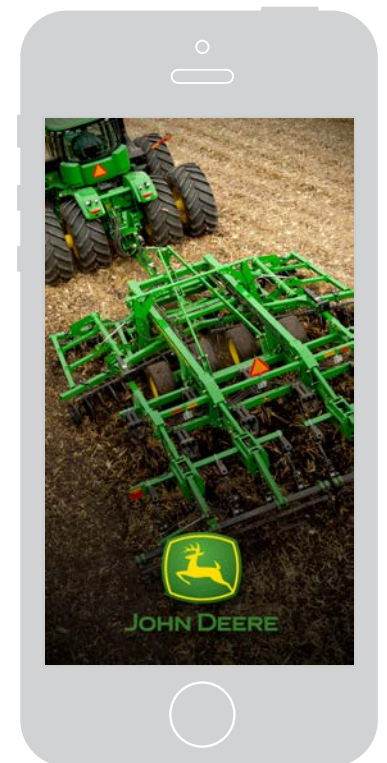
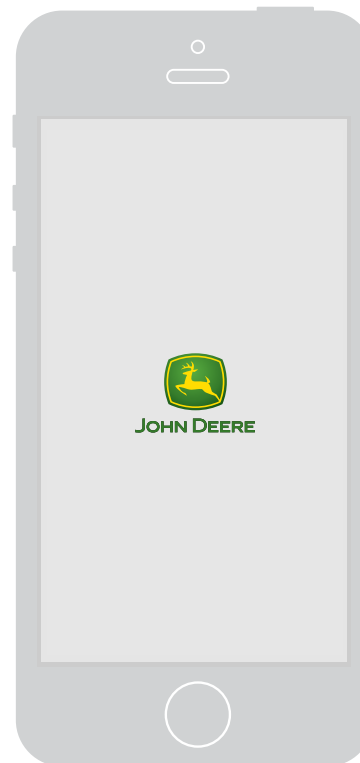
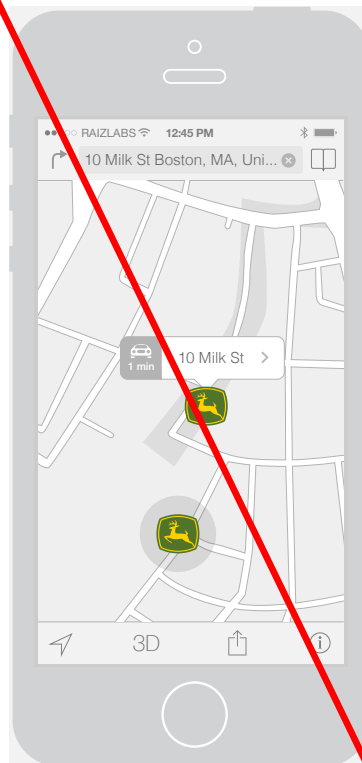
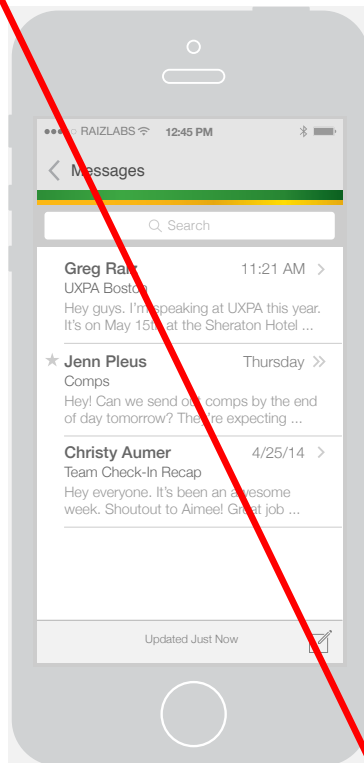
## USING THE TRADEMARK

Put simply, leave the John Deere trademark out of the UI. It should not appear in the mobile application anywhere other than a splash screen. Do not use the trademark or John Deere trademark color bars as:

- a button
- a header or footer
- decoration of any kind
- status or location of equipment or users

## REFERENCE

To learn more about the John Deere brand, visit the Brand website at [www.brand.deere.com](http://www.brand.deere.com)



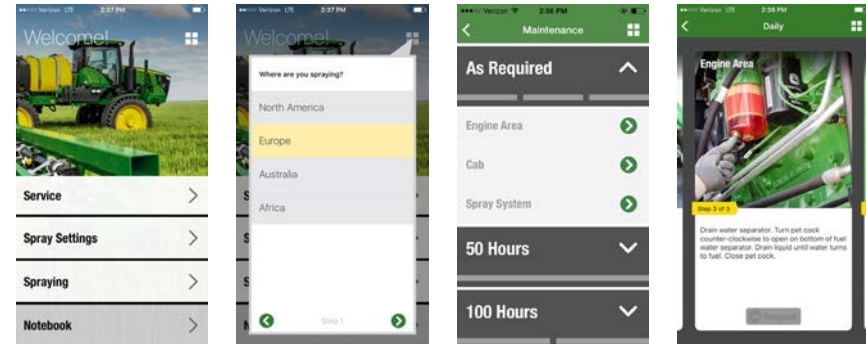
# APP CATEGORIES

## BRAND IDENTITY

In general, John Deere develops three main types of apps:

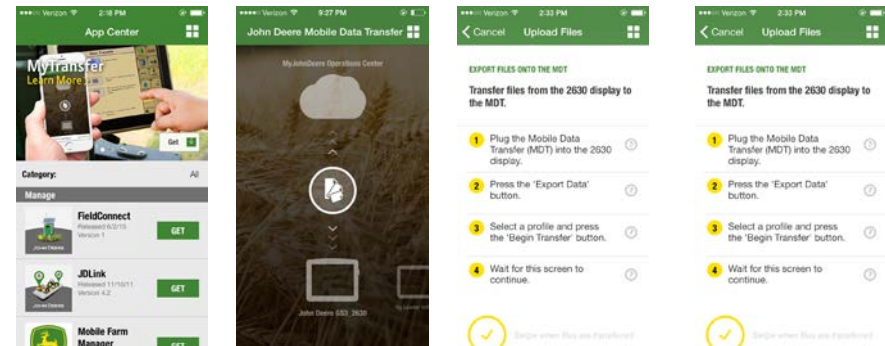
### “GO” APPS (STANDARD APP)

Also known as “GoApps” or the “Plus” series of apps, these are apps that show things like setup information in a card-deck style. Instructions are grouped by chapters, and steps within instructions are sequential. Setup apps are used in and around equipment, but not while driving.



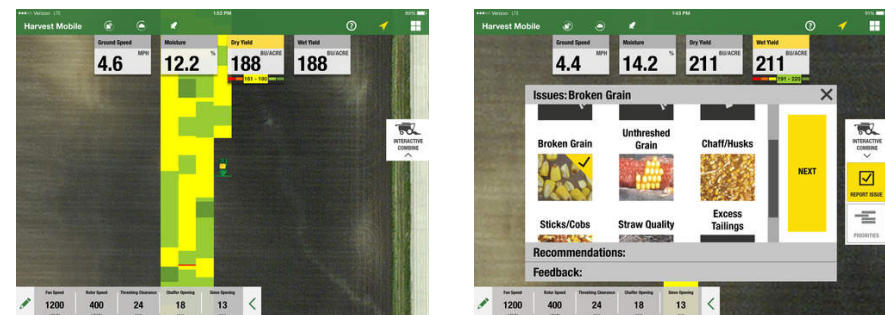
### UTILITY APPS (STANDARD APP)

These apps typically have a very focused scope, like transferring files, checking the status of a hardware connection, or measuring settings on a vehicle. The designs may vary from app to app, but overall maintain a very John Deere aesthetic.



### IN-CAB (ON-BOARD) APPS

The main focus of an In-Cab App is to be a secondary display. Whether it is showing mapping, adjusting settings, or viewing previously-made progress on a field, the goal is that an app is mounted on the right-hand side of a user. In most cases, a user could be driving while using this app, watching it at arms-length.



# DESIGN LANGUAGE



### UNDOUBTEDLY JOHN DEERE

How does an app “look and feel” like John Deere? Consider the Industrial Design of our equipment - sharp lines, bold areas of green, accents of yellow. These are all defining features.

Our mobile apps should carry the same design language - areas of green, highlights of yellow, and tones of an industrial, machine feel.

### SIMPLE AND USEFUL

John Deere apps should be simple but intuitive. Not cluttered. Provide easy-to-read details. The design of the app should not get in the way of delivering content to the user.

### OUR APPLICATIONS SHOULD BE

Clear

Hard-Working

Confident

Easy

### OUR DESIGNS SHOULD NOT BE

Cute

Soft

Unsure

Hidden

### COLOR PHILOSOPHY

Our mobile apps should carry a “light” theme based of grays, whites, with dark text (Construction & Forestry themed apps are reversed).

**Use green and yellow sparingly** - they are our signature colors, but they should not be overused. The following pages detail color use in buttons and text, but by principle, avoid making everything green and yellow.

Do not stray from tints and shades of this color palette unless it is absolutely necessary in the case of alerts, relationships to other systems, or safety information.

### VARIATIONS

Tints and shades of these colors are allowed, but should be used sparingly, only when the standard colors will not suffice for the spectrum of a color palette.

*John Deere Green*

HEX: 367c2b

RGB: 54R / 124G / 43B

*John Deere Yellow*

HEX: ffde00

RGB: 255R / 222G / 0B

*John Deere Gray*

HEX: e5e6e6

RGB: 229R / 230G / 230B

*White*

HEX: FFFFFFFF

RGB: 255R / 255R / 255R

*Black*

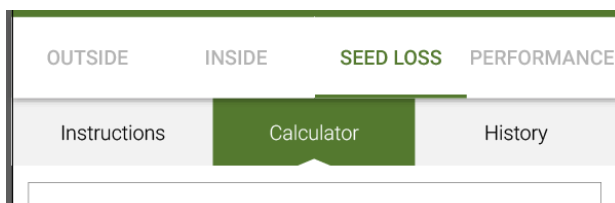
HEX: 000000

RGB: 0R / 0G / 0B

### IN GENERAL...

Use green for headers, accents, links to web content (e.g. from a EULA), or toolbar items.

Use yellow for highlights or next steps - either the “recommended” action, the active menu item, etc.



In order to maintain the best user experience, the W3C has the following recommendations in section 5.3.6 on Use of Colors and Color Contrast on Mobile:

- Mobile devices often do not have good color contrast and are often used in less-than-ideal lighting conditions. Hence information highlighted in color may not be visible to users.
- Do not use blue or purple text, as this may be confused with hyperlinks, especially on devices that do not underline links.
- Use WCAG 1.0 guidelines for Use of Colors on Mobile:

**Brightness Difference:** 125 or greater

**Color Difference:** 500 or greater

You can use the tool available at [http://snook.ca/technical/colour\\_contrast/colour.html](http://snook.ca/technical/colour_contrast/colour.html) to determine your values.

In general, we follow these principles for color contrast:

## Title of element

Metadata or sub-text under a heading can be lighter, but still must be legible, and high contrast.

*The easiest to see UI includes light backgrounds, dark text*

**OK**

**Cancel**

*Yellow or gray buttons (depending on the use) with dark text*

**OK**

**Cancel**

*Do not use yellow buttons with green text. Use green text only for web links.*

## Title of element

Metadata or sub-text under a heading can be lighter, but still must be legible, and high contrast.

**Continue**

*Do not use backgrounds and text that are only subtly different.*

Source: [http://www.w3.org/TR/mobile-bp/#USE\\_OF\\_COLOR](http://www.w3.org/TR/mobile-bp/#USE_OF_COLOR)

App fonts should use a system-native font whenever possible. We want to design apps with text rather than images as text to reduce the size of the app and increase flexibility.

### IOS

For iOS apps, use **Helvetica Neue Condensed Bold** for headers / large text, and the **system font** (San Francisco or Helvetica Neue, depending on iOS version) for all other text. Typically we use condensed bold for headlines, and regular weight for details or text areas. Both fonts come with multiple weights and can be used in a variety of situations.

#### **I am a text heading. Bold and condensed.**

I am some body copy. I should be lighter weight with increased spacing, to make me very legible. Iquisit faceped ut ut quibus mostrup taestiunt, consecusa con eum volor aut eatescia volum eos.

Button 1

Button 2

Use only one font family per app, and use multiple weights to distinguish between things like headlines, main copy text and status items.

### ANDROID

For Android apps, use **Roboto**, the native system font. Use system-standard sizes and weights whenever possible.

Style recommendations and system weights are available here: [developer.android.com/design/style/typography.html](https://developer.android.com/design/style/typography.html)

#### **I am a text heading. Bold and condensed.**

I am some body copy. I should be lighter weight with increased spacing, to make me very legible. Iquisit faceped ut ut quibus mostrup taestiunt, consecusa con eum volor aut eatescia volum eos.

Button 1

Button 2

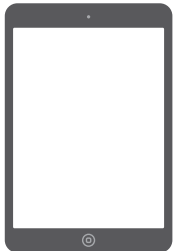
Always strive for readability over trying to get as much text on the screen as possible.  
Allow for plenty of room between lines of text.

We divide our type requirements by apps that are held in-hand, and apps that are potentially mounted in the cab at arms length



## STANDARD

**I am a headline. I should be bold, condensed and a minimum of 22pt**



I am body text. I should be a minimum of 15pt and have a line height of 120% of my x-height. There should be 150% space between me and the next paragraph.

I am a 2nd paragraph. I should not be smashed up against the paragraph on top of me.



## IN-CAB

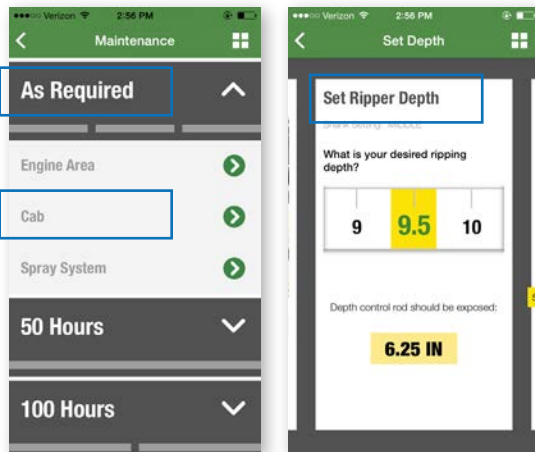
**I am a headline. I should be bold, condensed and a minimum of 25pt**

I am body text. I should also be a minimum of 15pt and have a line height of 120% of my x-height.



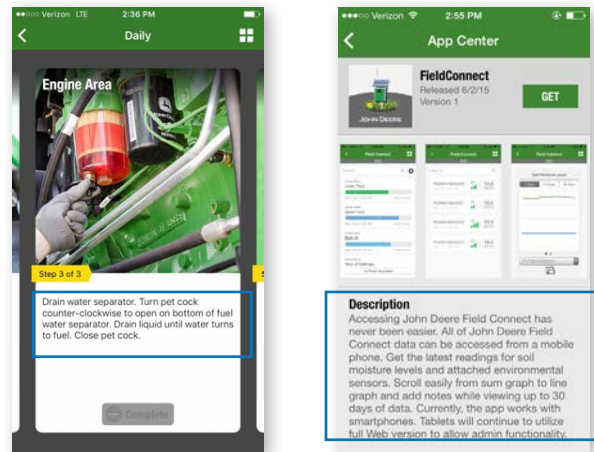
### TITLES

Titles of app modules / sections should be title caps (every first letter capitalized, except words like “the” or “and” or “an”).



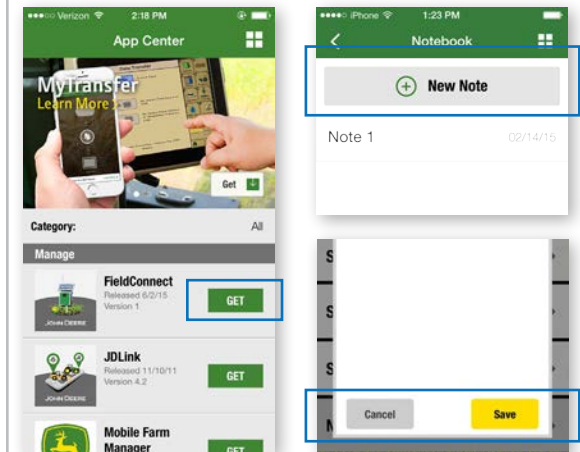
### BODY COPY

Text or copy that is not part of a title or button should be sentence case - capitalize the first letter of a sentence, but no other words besides proper nouns.



### BUTTONS

Text in buttons should have **first-letter capitalization** in iOS, and **all caps** in Android.



## FRAMES AND BUTTONS

Our overall style is moving from crisp and sharp to slightly rounded, with light-themed interface items.

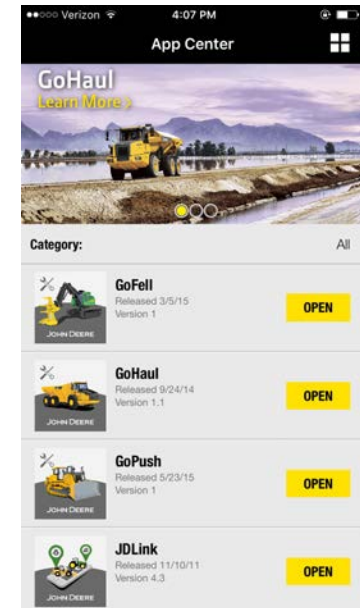
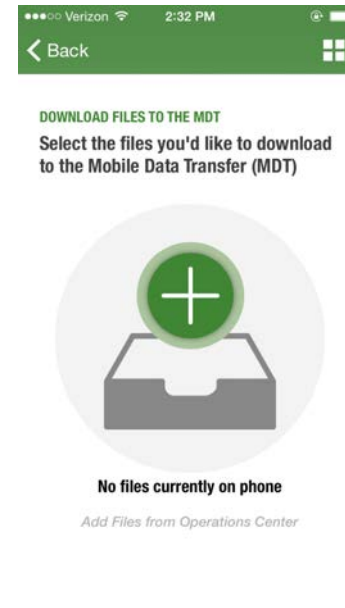
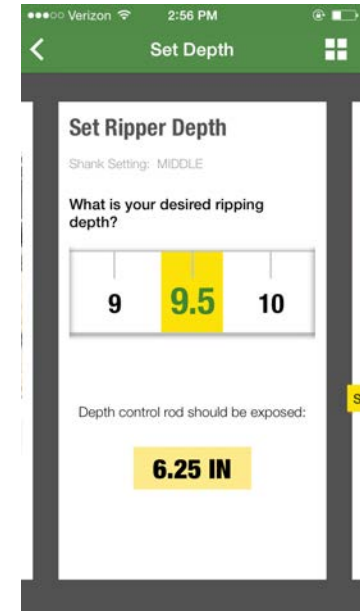
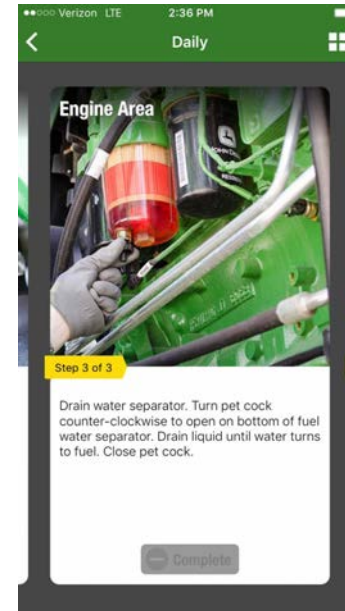
Do not over-exaggerate curves or sizes. Use symmetrical elements as much as possible.

Buttons should have a **5pt radius**

Frames and UI elements should have a **10pt radius**

## ICONS

Icons are solid and filled, not wireframe icons. They should be easy to see from a distance without squinting.



## USE MEANINGFUL ICONS

When selecting icons, do not use vague icons that could mean a number of different things.

Try to show the action that will be taken, as well as a noun that will have the icons.

In many cases for product-related mobile apps, there is an icon for something a user is familiar with. For example, if you are working with MyJohnDeere functions, use the appropriate MyJohnDeere icons, which have been developed for machines and product. If you are working with cab-related symbols or settings, use the appropriate ISO icon that a user would find in the cab setting.



edit



equipment



email



refresh

## USE WHAT IS FAMILIAR

### AVOID OVERCOMPLEXITY

The meaning of an icon has to be taken in at a glance. If someone has to look twice, squint, and lean closer, then chances are your icon isn't very clear.

Show as much function as possible before adding any additional details. What is the minimum amount of art or shapes that can be used to convey your message.

### EXAMPLES



#### FILE SENDING

Don't just show a file icon - the user might think that it is a place they are accessing files. Instead, show the file plus the action - a "send" arrow shows the document is going somewhere.



#### COLOR AND LINES COMPLICATE

There's simply no need for as much detail as you see in the first icon to show settings.



#### DON'T TRY TO BE CLEVER

While it's cute to put all of the little skeumorphic details on something, doing so adds several things for the brain to recognize and understand. Get the message there as fast as possible - show the "what" and the action the user can take.



There are different types of “additional” information you can display to a user in an app within the context of a “show me more” situation. This page describes those classifications of information, and how to visually communicate the types of information.

The symbols and colors are based on the same types of trouble codes we provide to an operator both in context of their cab, as well as in operator’s manuals.

## INFORMATION

### WHEN IS IT APPROPRIATE?

Any time there is additional information about what the user sees on the screen.



### VISUALS - STANDARD APPS

Symbol should be an i with a circle around it. Color can vary depending on the UI.

### VISUALS - SETUP APPS

In a Setup App (GoApp), the i should be blue, and can note when there is additional information on the back of a setup step card.

This symbol can be found in the [MyJohnDeere GitHub symbol library](#).

## CAUTION

### WHEN IS IT APPROPRIATE?

This symbol should always used with the word CAUTION immediately surrounding the symbol. It is reserved to let a user know of any time a task could cause harm if done incorrectly.

***The presence of this symbol is determined by the Product Safety Engineer representative on a project.***



**CAUTION:**



**CAUTION:**

### VISUALS - ALL APPS

The symbol should be yellow with a black outline and black exclamation point, or all black with a white exclamation point.

This symbol can be found in the [MyJohnDeere GitHub symbol library](#).

## SYSTEM DEFAULT BUTTONS

For things like alerts and system notifications, use the system default buttons rather than creating new.

### IOS

Use standard controls whenever possible, incorporating the Deere colors and styles

### ANDROID

Used raised buttons when they are within the screen / interface. If the buttons are encased in something (e.g. at the bottom of a dialog box, separated from the interface), you may use text only buttons.

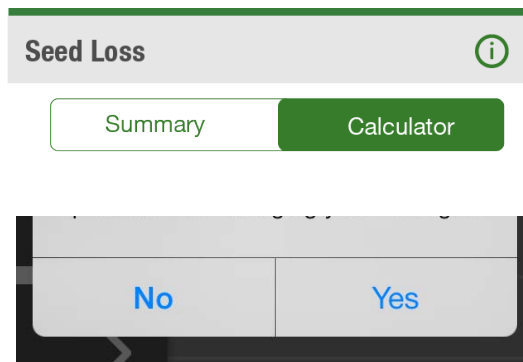
## DEERE STYLING - BUTTONS IN THE UI

Buttons should be solid colored when used in the UI. When used in dialog boxes, place them on a white background with John Deere green as the color.

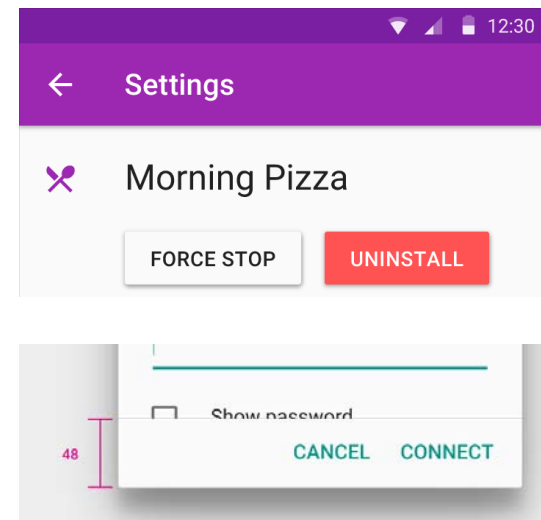
Make sure buttons in the UI are contrasted enough from the background that they do not get lost.

Use a 5pt corner radius on buttons to soften the appearance.

## IOS EXAMPLES



## ANDROID EXAMPLES



### Is the setting correct?



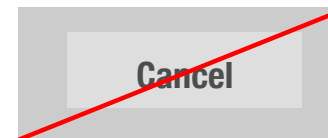
fill: #e5e6e6

text: #333333



fill: #ffde00

text: #333333



Do not use a button color too close to the color of the background.



Do not use green text on a yellow button.



Do not use text alone for a button (unless in Android dialog boxes). Buttons on-screen must have a border to indicate it is interactive.



“Buttons” are be considered anything the user touches to interact with. This includes lists, alerts, tabs, icons, etc.

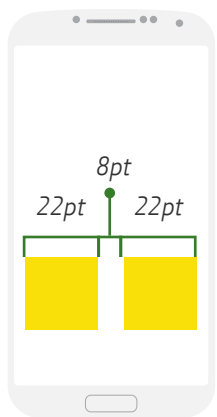
Tab bars and toolbars have their own requirements for buttons and sizes - this page deals with buttons in the main parts of an app’s user interface.

## STANDARD

### INDUSTRY STANDARD

We follow the industry standard for interactive element touch regions on devices.

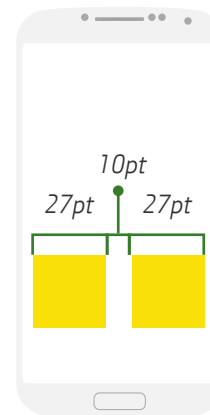
Buttons should be a minimum of **22pt** with a minimum of **8pt** between controls.



### FREQUENT

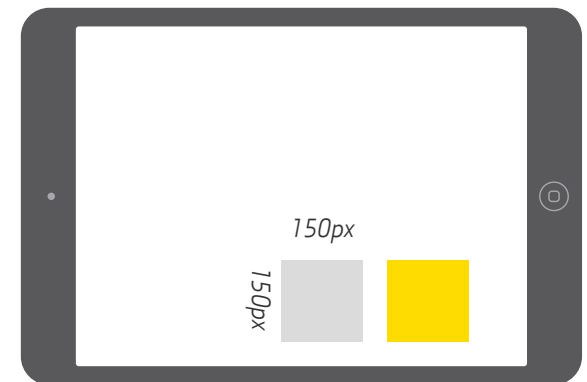
Frequent buttons are accessed very regularly, like “previous/next” buttons walking through a screen flow. To decrease error, these buttons should be larger, so the repeated interaction is more likely to be successful.

These buttons should be a minimum of **27pt**, with a minimum **10pt** between them.



## IN-CAB

The minimum button size for in-cab operation, when the device is mounted at arms length should be **150 x 150px**. Non-operating buttons (such as menu button or things they will not be interacting with as frequently while operating) should follow the standard button size requirements.



# BUTTONS (WORDING)

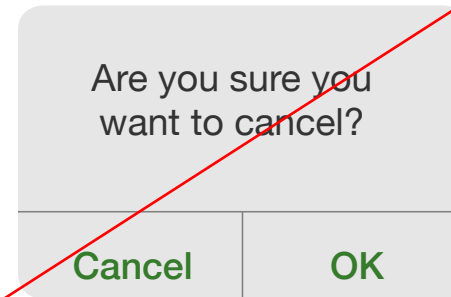
## DESIGN LANGUAGE

### CANCEL VS. GO / OK PLACEMENT

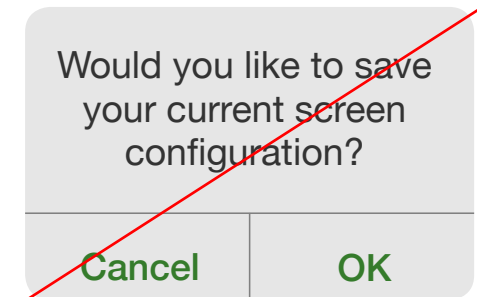
When a user is presented with a stop / go option in an interface, always place “go” on the right and “stop” on the left.

### DO NOT

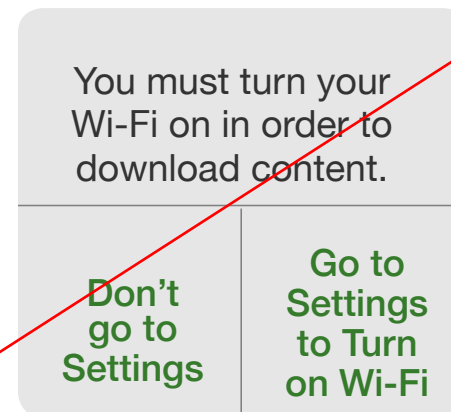
*Do not be vague, or make the user re-read what they are agreeing to.*



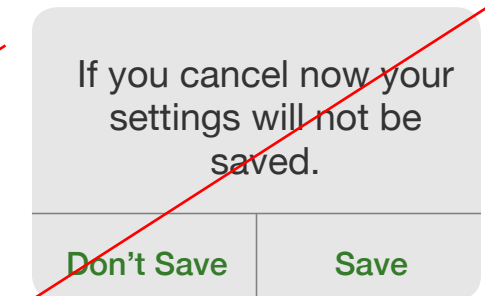
*This isn't even understandable.*



*Using only Cancel and OK is not preferred if you can use action verbs instead.*



*Keep actions on the buttons very concise and easy to understand*



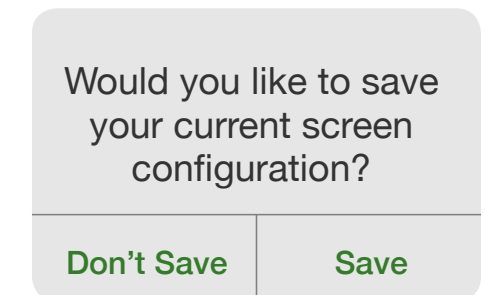
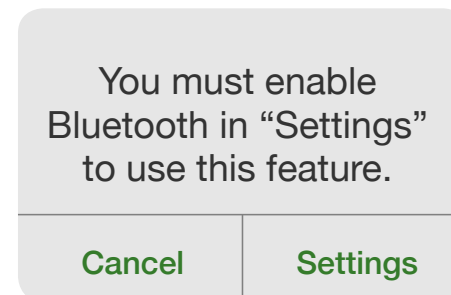
*Be clear: The wording in this box makes the user think they're taking action on canceling, not launching them into a Save-No Save decision.*

### USE ACTIONS ON BUTTONS WHEN POSSIBLE

Text on buttons should not make a user have to stop and think about what they are selecting. Always use an action verb on a button when it is going to do something.

### DO

*Let the user know what action they are taking with a button, rather than “OK and Cancel”*



### IMAGE QUALITY

Never, ever use clipart in any John Deere app. When an icon is needed, develop one according to the icon guidelines. See [“Icons” on page 16](#) for more information.

Photography should be retina-quality, clear, well-lit photos. Do not use photos if they are grainy, pixellated, or cannot be scaled to the full resolution of a device.

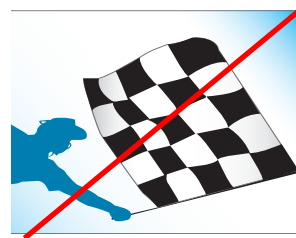
### UNACCEPTABLE TYPES OF IMAGES



*Blurry / poor quality*



*Dark / out of focus*



*No clipart. Ever. For any reason. We can't say it enough.*



*Overexposed - difficult to see what's in the picture.*

### ACCEPTABLE TYPES OF IMAGES



*Shows action - clear, well-lit, focused on the task*



*Zoomed in on task, good lighting*



*Clearly shows the most important part of the action with clear equipment*



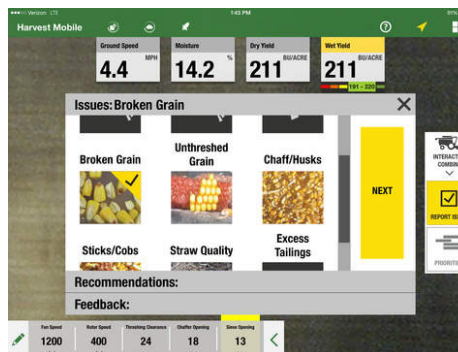
*On-brand, dramatic photography - see [John Deere's branding portal](#) for more examples*

## REFERENCE

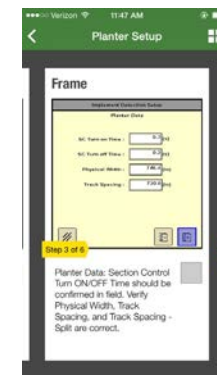
For GoApps, please work with the UX Designer assigned to your project on image sizes and formats.

### USE PHOTOS TO PROVIDE CONTEXT

Use an image appropriate to what you are referencing in an app. If you are telling a user about part of a screen in their cab, provide a screenshot of that screen, and highlight the area you are referencing.



*Example of an app providing images of the type of grain it is asking the user to identify.*



*Example of an app providing a screenshot of the in-cab display the user is being instructed to interact with.*

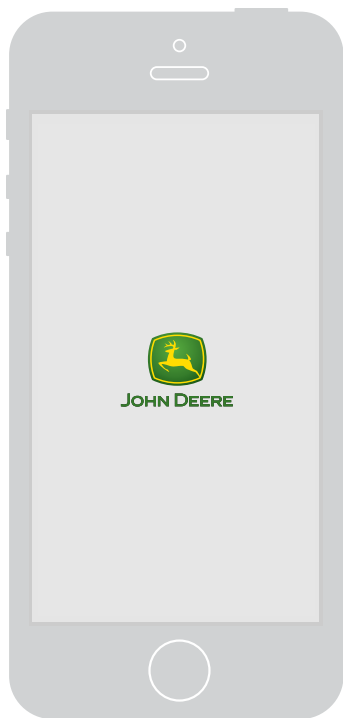
# PATTERN LIBRARY

## SPLASH SCREENS

Apps should open with a flat, gray background and a vertical trademark. This should be displayed as long as it takes the app to open. The screen background can transition to a visually interesting / dramatic photo that includes the name of the app, while the app loads data, but be sure to indicate that the app is working by showing a progress spinner / indicator.

## REFERENCE

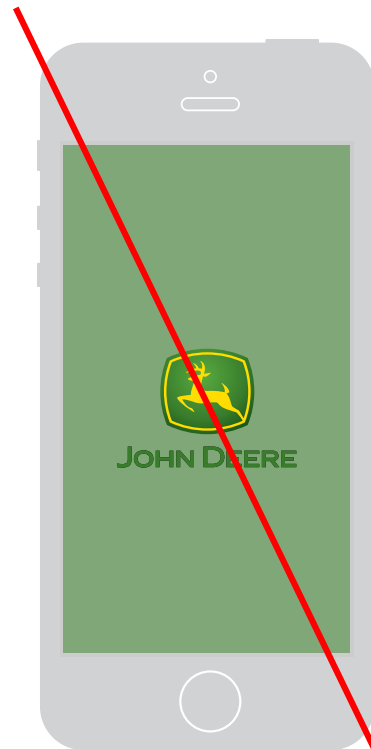
To learn more about the John Deere brand, visit the Brand website at [www.brand.deere.com](http://www.brand.deere.com)



*The trademark should be sized so that the height of the trademark is 1/4 the length of the shortest side of the device.*

*The background color should be #e6e6e6.*

*Use a solid background and the vertical trademark for splash screens*



*Do not use other colors behind the trademark*



*Do not use the horizontal layout of the trademark*

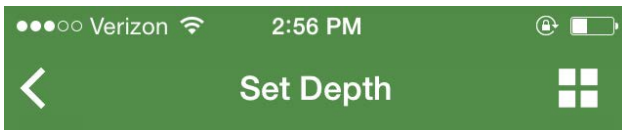


# HEADERS AND NAVIGATION

Phone apps should include a solid green header (black for construction) with no transparency, white text/UI elements, a white 4-square menu button on the right, and the ***title of the screen*** whenever possible. Do not use the title of the app across every screen.

If additional items are required in the header bar should not be navigation, they should be items you can take action on. Use these items extremely sparingly.

## IOS HEADERS



The header bar should be a standard iOS header bar, with a left chevron to indicate when the user has left the home screen.

Do not use the word “back.”

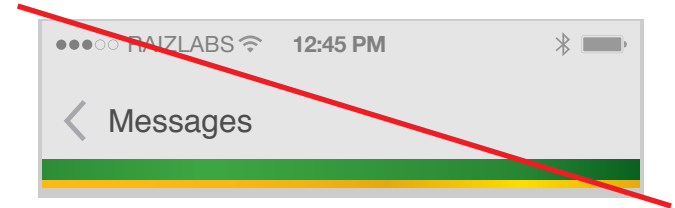
## ANDROID HEADERS



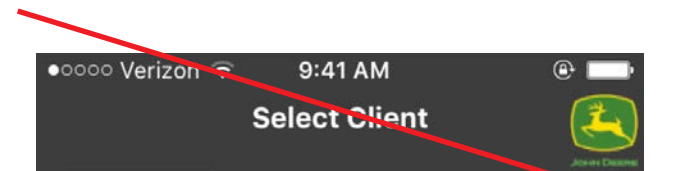
The standard Android app bar should be used with a menu button on the right that slides out a right drawer. Nothing should be placed in the action bar unless you can interact with it.

Back chevrons are not needed, as Android devices have a hardware “back” key.

## DO NOT



Do not place anything in the header bar that is not a button or interactive text.

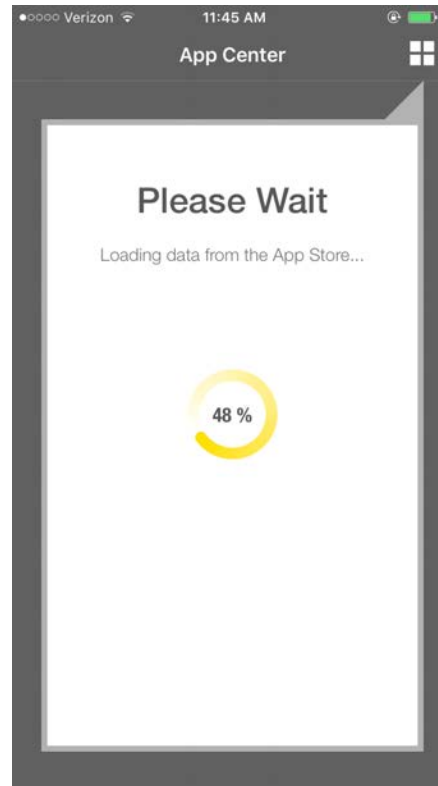


Do not include a logo anywhere in the header (iOS or Android)

Do not use fonts outside of the John Deere style guide

While the app is working, it's important to show the user that something is happening, especially when working with large quantities of data.

Use an animated spinner to show that something is happening, and whenever possible, indicate a percentage or time remaining until the app will be done working.



## TOOLBAR

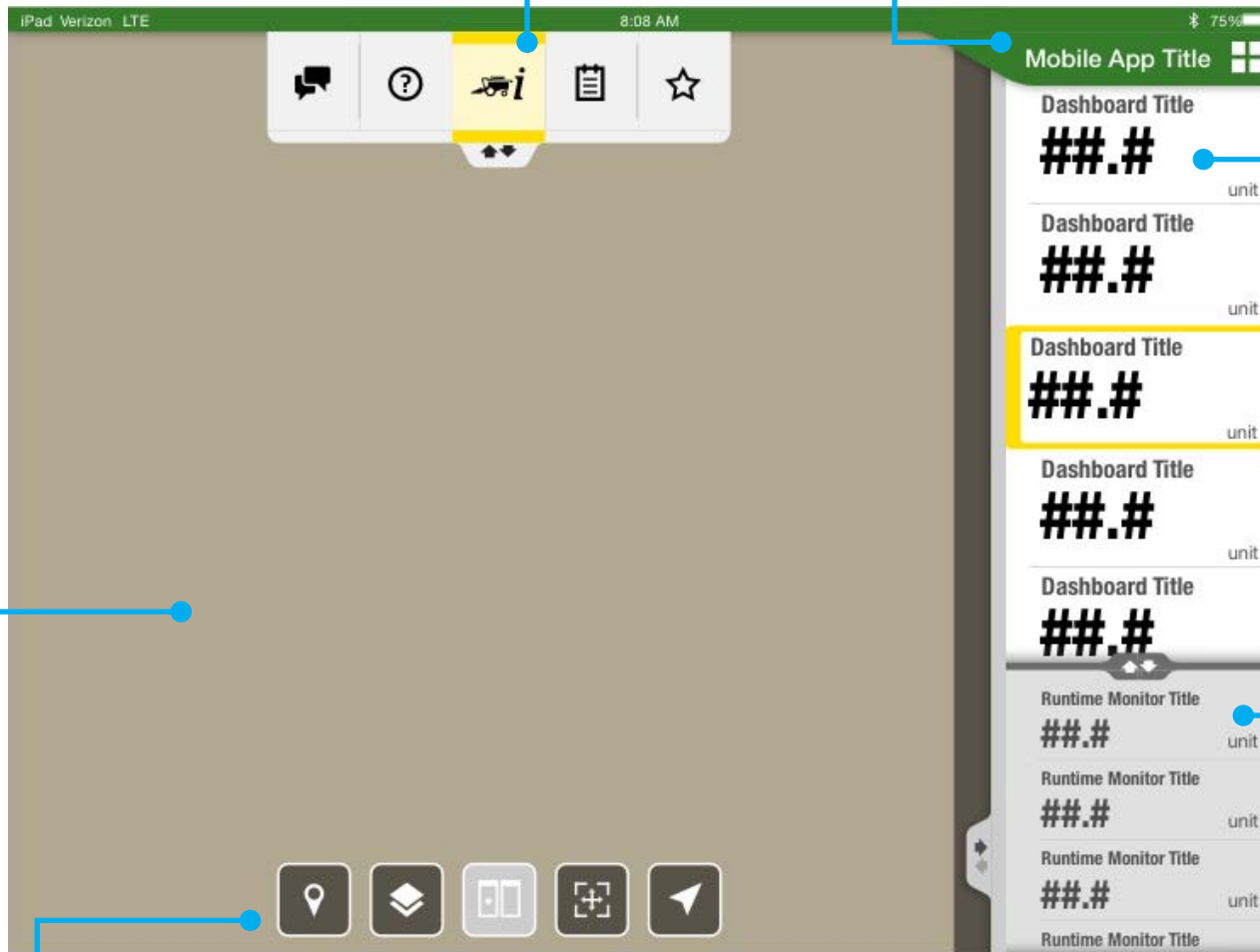
Provides additional tools for use with the app

## APP HEADER

Gets out of the way of the map, incorporates angular design theme

## MAP

Shows the map and data layers in real-time



## MAPPED DATA

Data values that are coming from the mapped data. Users can switch between them to change what shows on the map, but all values are visible.

## MAP / WINDOW TOOLS

Controls layers, split view, re-centering the user on the map, etc.

## MACHINE DATA

Values that are coming from the machine

Menus should include different sections of information in categories, following a specific design pattern. The categories include:

SETTINGS

These are settings that a user has chosen for their app, usually relating to the equipment they have or settings that will affect the app on the device. This can also include login / account information if the app is connected to MyJohnDeere.

ACTIONS

In a GoApp, this would be something like “Reset Progress” - but apps will have varying requirements for what can be in this section.

PRIVACY & LEGAL

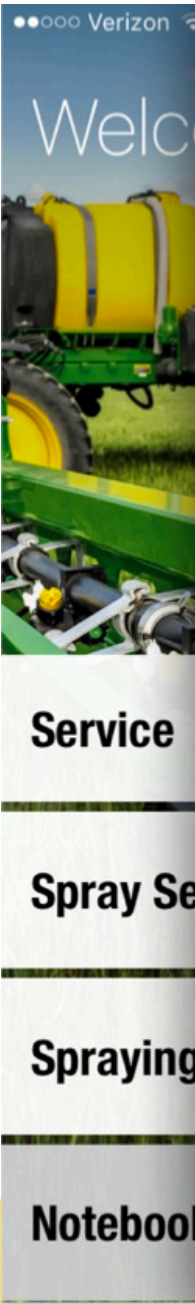
This includes an Analytics Opt-In, End-User License, and Safety Information

CUSTOMER SUPPORT

Usually a way for the user to provide feedback on the app, or back to the group publishing the app

VERSION

Which version of the app the user has on their device

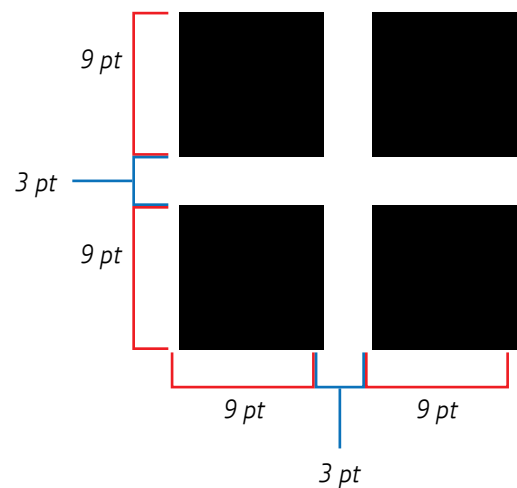
	Menu	
	Settings	
	Location	North America
	Baler	Large Square Baler
	Model	L340
	Cutter	Precutter
Service	Setting	User-Defined Value
	Reset Progress	
	Section 1	
	Section 2	
Spray Se	Section 3	
	Section 4	
Spraying	Privacy & Legal	
	Analytics Opt-In	
Noteboo		

REFERENCE

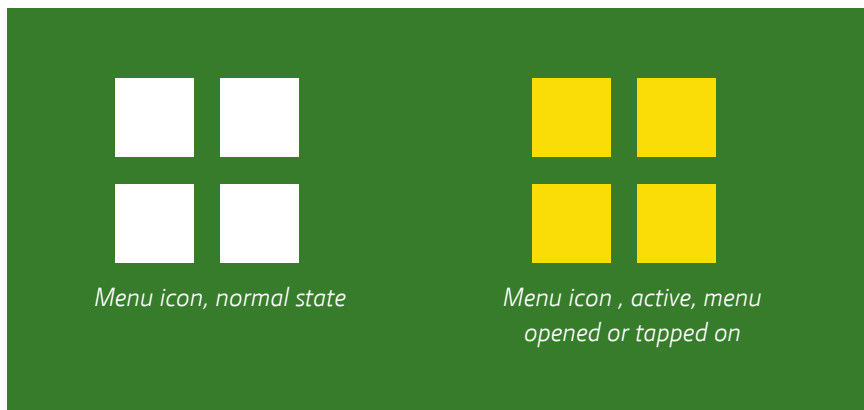
This menu is available as a reusable component - please work with the Mobile Solutions Group for more information.

## ICON

A menu should be opened by a 4-square menu icon in the upper right corner of the header.

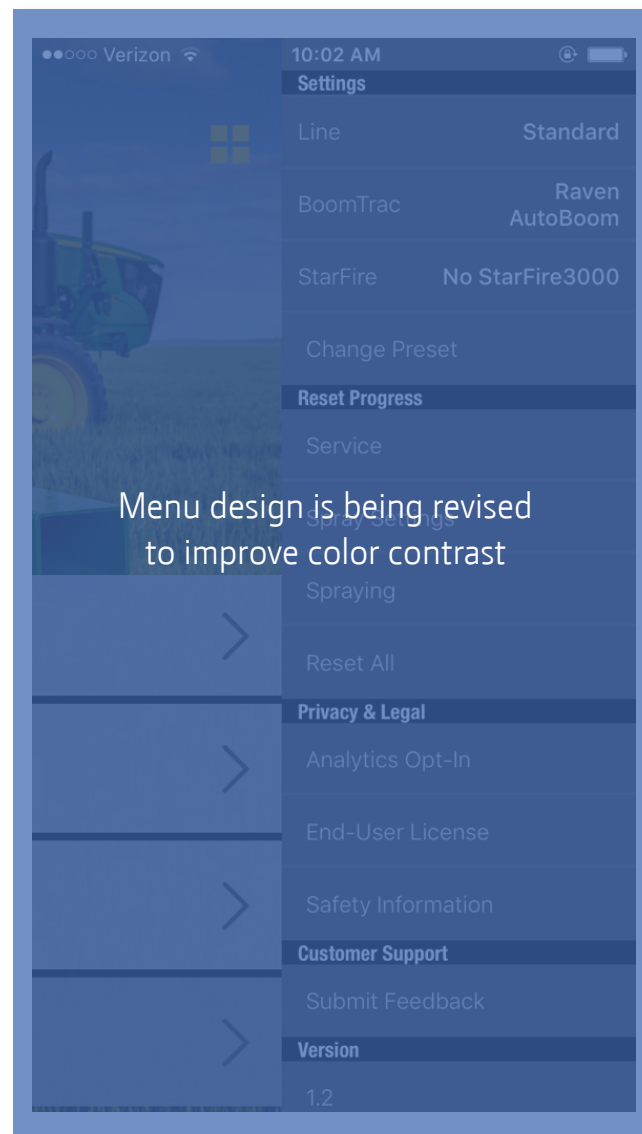


The icon is constructed of four 9pt squares with 3pt gap. When the menu is opened or active, the icon should change from white to yellow.



## COLORS AND STYLES

Colors and type styles are currently being revised to improve usability / increase contrast





# APPENDIX

For updates to this document from inside the John Deere firewall, visit [mobile.ux.deere.com](http://mobile.ux.deere.com)

*iOS Design Guidelines* by Ivo Mynttinen

<http://iosdesign.ivomynttinen.com/>

Color Contrast in Mobile Devices

[http://www.w3.org/TR/mobile-bp/#USE\\_OF\\_COLOR](http://www.w3.org/TR/mobile-bp/#USE_OF_COLOR)