Alchemer Mobile iOS SDK Interaction Customization

Alchemer Mobile (ApptentiveKit) on iOS has four levels of customization available for the interactions it presents:

1. Theme setting
2. UIAppearance overrides
3. UIKit extensions
4. Overriding `InteractionPresenter`

> **Note about WCAG / ADA Accessibility Compliance**
>
> Alchemer Mobile's Out-of-Box UI theme for iOS SDK 6.0 is WCAG 2.0 AA and WCAG 2.1 compliant. Alchemer Mobile cannot guarantee compliance for customized UI themes. If you customize any UI elements in our iOS SDK 6.0, please use https://webaim.org/resources/contrastchecker/ to confirm that your text colors, selector colors, and icon colors meet or exceed WCAG 2.0 AA and WCAG 2.1 minimum contrast levels.

Themes

For apps where cross-platform consistency is less of a concern, or where a developer wants to apply their own visual customization, the `theme` property on the `Apptentive` instance can be set to `.none` (this should be completed before calling the `register(with:completion:)` method):

```
Apptentive.shared.theme = .none
```

By default, ApptentiveKit adopts a cross-platform theme for Surveys and Message Center that includes dark blue navigation bars with white text, and hides most of the default `UITableView` decorations. The colors of other interface elements mostly use system defaults, and system fonts are used throughout. This correspondes to a the `theme` property being set to `.apptentive`.

Internally, these themes use a combination of the next two customization options: `UIAppearance` and the Apptentive `UIKit` extensions (found in `UIKit+Apptentive.swift`).

UIApperance

Some aspects of the Alchemer Mobile (ApptentiveKit) interactions can be customized using familiar `UIAppearance` properties. The properties that the Alchemer Mobile (ApptentiveKit) theme customizes via `UIAppearance` overrides include segmented controls, navigation bars, toolbars, bar button items, and table views.

The customizable Alchemer Mobile (ApptentiveKit) interactions are all contained in a subclass of `UINavigationController` called `ApptentiveNavigationController`, which can be used to scope appearance changes to only apply to Alchemer Mobile (ApptentiveKit) customizable interactions:

```
UITableView.appearance(whenContainedInInstancesOf: [ApptentiveNavigationController.self]).backgroundColor = myBackgroundColor
```

`ApptentiveNavigationController` also has a static property to determine the status bar style:

Property	Description	Default	Alchemer Mobile Theme
`preferredStatusBarStyle`	The foreground color for status bar interface elements	`.default` (black foreground color)	`.lightContent` (white foreground color)

Alchemer Mobile-Specific Appearance Settings

For customizing dialog-style interactions (Prompts and the Love Dialog), the SDK uses `UIAppearance` properties.

`DialogView` Appearance Settings

The dialog appearance can be customized by accessing the appearance proxy for the `DialogView` class. To target properties in either Love Dialog or Prompts (formerly Notes) interactions, use the `EnjoymentDialogViewController` and/or `TextModalViewController` as appearance containers, respectively.

To match the standard `UIAlertController` in its alert style, the `DialogView` uses a `UIVisualEffectView` for its background. This means that the `backgroundColor` property will appear as an underlay behind the visual effect view. To avoid this, you can turn off the effect as follows:

```
UIVisualEffectView.appearance(whenContainedInInstancesOf: [DialogView.self]).effect = .none
```

Property	Description	Default
`backgroundColor`	The background color of the dialog view.	`.white`
`titleTextColor`	The color of the title label’s text.	`.label`

Property	Description	Default
`messageTextColor`	The color of the message label’s text (Prompts only).	`.label`
`titleFont`	The font used for the title label.	System headline font
`messageFont`	The font used for the message label (Prompts only).	System footnote font
`headerImage`	An image placed along the top of the dialog view. The image will be scaled to fit the width of the dialog and the height will be calculated based on the image’s aspect ratio.	`nil`
`cornerRadius`	The radius of the dialog’s corners.	15
`buttonSpacing`	The spacing between adjacent buttons, intended for use when a border is added to the buttons.	0
`buttonInset`	The amount by which the group of buttons is inset from the edges of the dialog and the text above the buttons.	`.zero`
`separatorsAreHidden`	Whether the separators between adjacent buttons are hidden.	`false`
`separatorColor`	The color of the separators, if shown.	`.clear`

`DialogButton` Appearance Settings

The `DialogButton` class draws the buttons in the dialog. By default, the buttons cover the entire corner (for Love Dialog) or row (for Prompts) of the dialog

If you are adding a border or corner radius to dialog buttons, we recommend hiding the separators and setting the inset and spacing on the `DialogView` to create some visual space between multiple buttons and between the buttons and the edges of the dialog.

You can separately style the “yes” and “no” buttons in the Love Dialog (by using the `YesButton` and `NoButton` classes) and the dismiss and other buttons in Prompts (by using the `DismissButton` and `InteractionButton` classes).

Property	Description	Default
`backgroundColor`	The background color of the button.	`.clear`

Property	Description	Default
`titleFont`	The font to use for the button title.	System body font
`cornerRadius`	The radius of the button corners. For a capsule shape (where the corner radius is half of the button height), set a value of -1.	0
`borderWidth`	The width of the button’s border. A value of zero hides the border.	0
`borderColor`	The color of the button’s border.	`.clear`

UIKit Extensions

Alchemer Mobile (ApptentiveKit) extends a number of UIKit classes with Alchemer Mobile-specific static properties that can be used to change the appearance of nearly every interface element. For example, to change the color of a text input (`UITextField` or `UITextView`) border, you would add the following code to your app:

```
UIColor.apptentiveTextInputBorder = .darkGray
```

> Note about WCAG / ADA Accessibility Compliance
>
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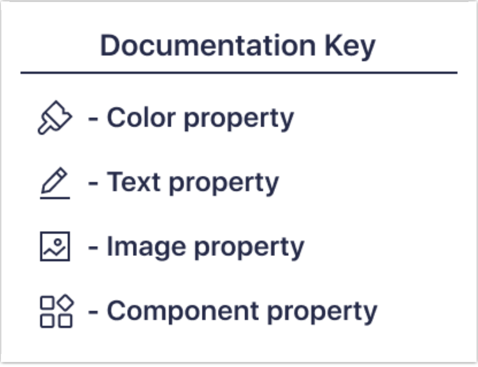
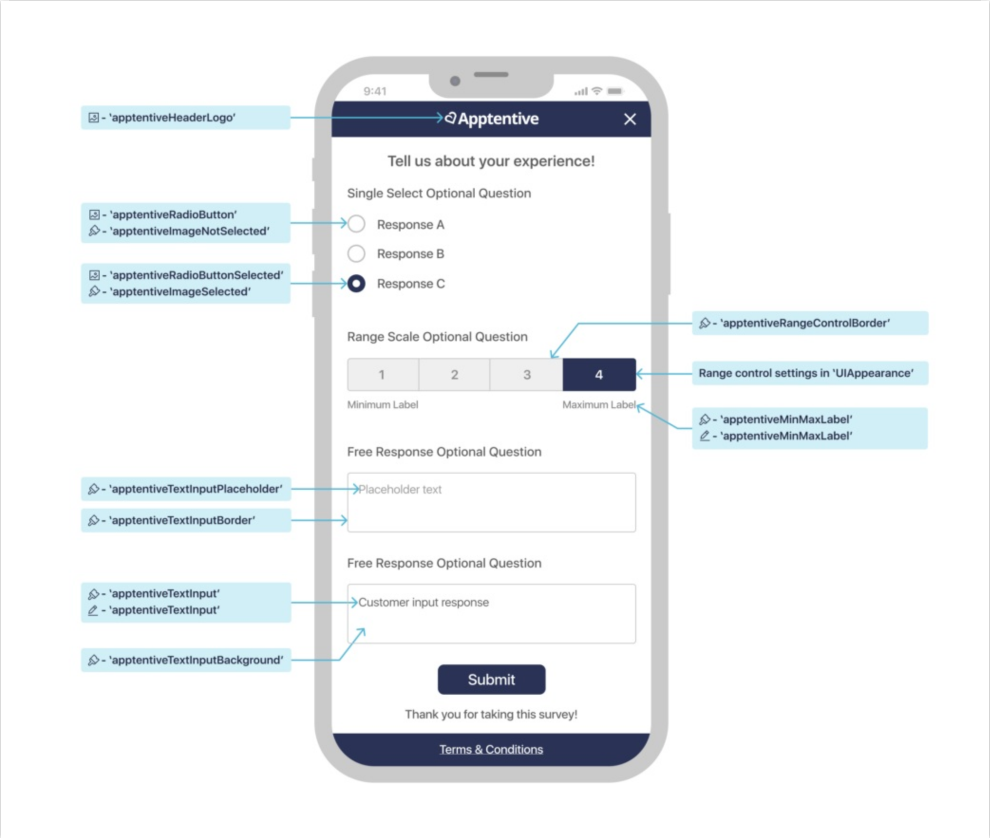


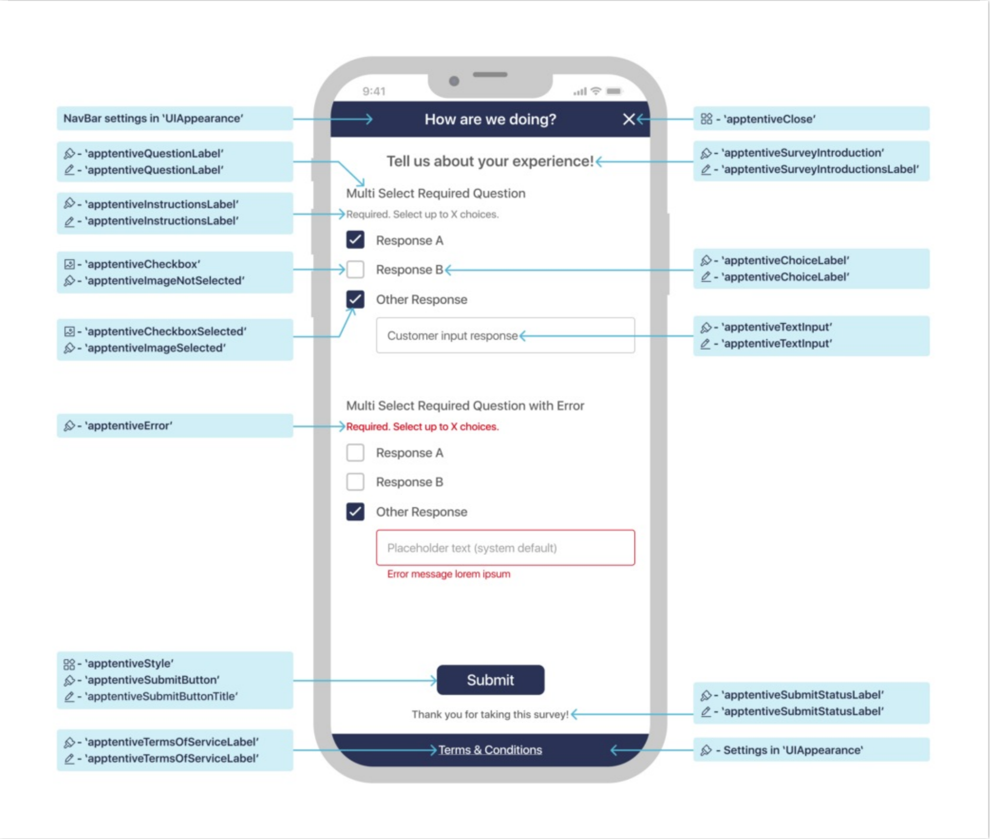
Documentation Key

- 🖌 - Color property
- ✎ - Text property
- 🖼 - Image property
- ▦ - Component property

Illustrations of UIKit Extension Properties

The images below illustrate what each property affects in Message Center and Surveys. Colors, Fonts and Images are indicated by the small icon next to the property name.


- 'apptentiveHeaderLogo'
- 'apptentiveRadioButton'
- 'apptentiveImageNotSelected'
- 'apptentiveRadioButtonSelected'
- 'apptentiveImageSelected'
- 'apptentiveTextInputPlaceholder'
- 'apptentiveTextInputBorder'
- 'apptentiveTextInput'
- 'apptentiveTextInput'
- 'apptentiveTextInputBackground'
- 'apptentiveRangeControlBorder'
Range control settings in 'UIAppearance'
- 'apptentiveMinMaxLabel'
- 'apptentiveMinMaxLabel'
9:41
Apptentive
Tell us about your experience!
Single Select Optional Question
Response A
Response B
Response C
Range Scale Optional Question
1
2
3
4
Minimum Label
Maximum Label
Free Response Optional Question
Placeholder text
Free Response Optional Question
Customer input response
Submit
Thank you for taking this survey!
Terms & Conditions



NavBar settings in 'UIAppearance'

🖌 - 'apptentiveQuestionLabel'
✎ - 'apptentiveQuestionLabel'

🖌 - 'apptentiveInstructionsLabel'
✎ - 'apptentiveInstructionsLabel'

⊡ - 'apptentiveCheckbox'
🖌 - 'apptentiveImageNotSelected'

⊡ - 'apptentiveCheckboxSelected'
🖌 - 'apptentiveImageSelected'

🖌 - 'apptentiveError'

⊞ - 'apptentiveStyle'
🖌 - 'apptentiveSubmitButton'
✎ - 'apptentiveSubmitButtonTitle'

🖌 - 'apptentiveTermsOfServiceLabel'
✎ - 'apptentiveTermsOfServiceLabel'

9:41

How are we doing?

Tell us about your experience!

Multi Select Required Question

Required. Select up to X choices.

☑ Response A

□ Response B

☑ Other Response

Customer input response

Multi Select Required Question with Error

Required. Select up to X choices.

□ Response A

□ Response B

☑ Other Response

Placeholder text (system default)

Error message lorem ipsum

Submit

Thank you for taking this survey!

Terms & Conditions

⊞ - 'apptentiveClose'

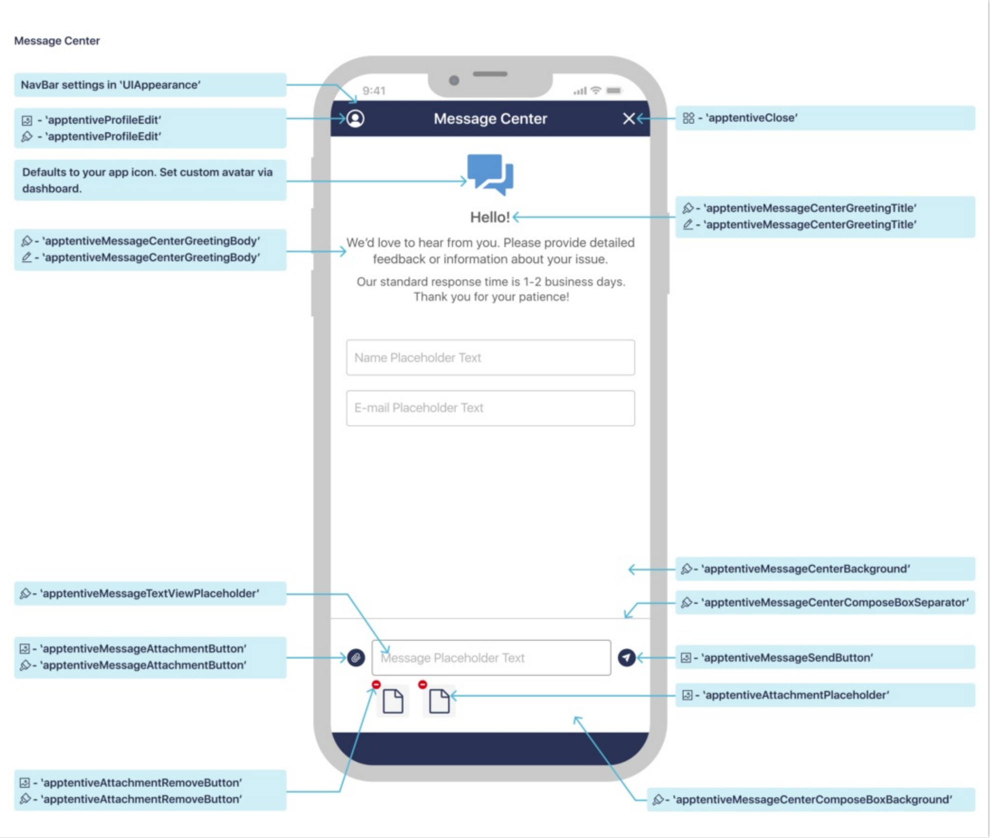
🖌 - 'apptentiveSurveyIntroduction'
✎ - 'apptentiveSurveyIntroductionsLabel'

🖌 - 'apptentiveChoiceLabel'
✎ - 'apptentiveChoiceLabel'

🖌 - 'apptentiveTextInput'
✎ - 'apptentiveTextInput'

🖌 - 'apptentiveSubmitStatusLabel'
✎ - 'apptentiveSubmitStatusLabel'

🖌 - Settings in 'UIAppearance'



Message Center

NavBar settings in 'UIAppearance'

⊡ - 'apptentiveProfileEdit'
🖌 - 'apptentiveProfileEdit'

Defaults to your app icon. Set custom avatar via dashboard.

🖌 - 'apptentiveMessageCenterGreetingBody'
✎ - 'apptentiveMessageCenterGreetingBody'

🖌 - 'apptentiveMessageTextViewPlaceholder'

⊡ - 'apptentiveMessageAttachmentButton'
🖌 - 'apptentiveMessageAttachmentButton'

⊡ - 'apptentiveAttachmentRemoveButton'
🖌 - 'apptentiveAttachmentRemoveButton'

9:41

Message Center

Hello!

We'd love to hear from you. Please provide detailed feedback or information about your issue.

Our standard response time is 1-2 business days. Thank you for your patience!

Name Placeholder Text

E-mail Placeholder Text

Message Placeholder Text

⊞ - 'apptentiveClose'

🖌 - 'apptentiveMessageCenterGreetingTitle'
✎ - 'apptentiveMessageCenterGreetingTitle'

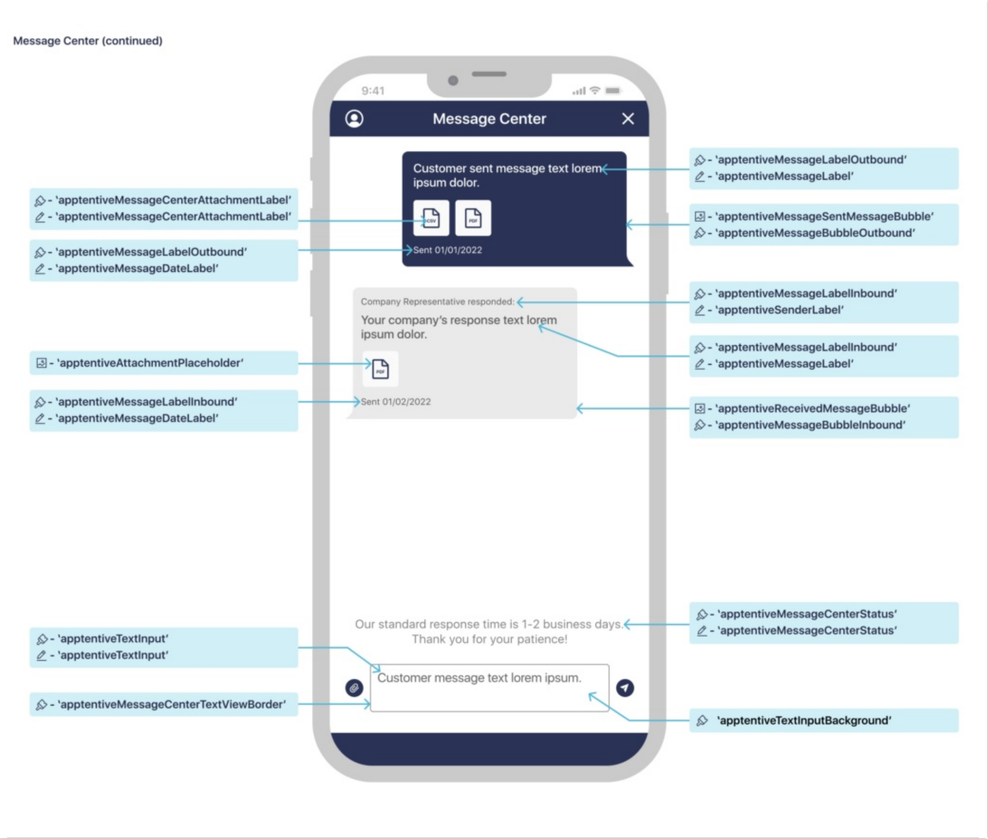
🖌 - 'apptentiveMessageCenterBackground'

🖌 - 'apptentiveMessageCenterComposeBoxSeparator'

⊡ - 'apptentiveMessageSendButton'

⊡ - 'apptentiveAttachmentPlaceholder'

🖌 - 'apptentiveMessageCenterComposeBoxBackground'



Message Center (continued)

9:41
Message Center
Customer sent message text lorem ipsum dolor.
CSV
PDF
Sent 01/01/2022
Company Representative responded:
Your company's response text lorem ipsum dolor.
PDF
Sent 01/02/2022
Our standard response time is 1-2 business days. Thank you for your patience!
Customer message text lorem ipsum.
- 'apptentiveMessageCenterAttachmentLabel'
- 'apptentiveMessageCenterAttachmentLabel'
- 'apptentiveMessageLabelOutbound'
- 'apptentiveMessageDateLabel'
- 'apptentiveAttachmentPlaceholder'
- 'apptentiveMessageLabelInbound'
- 'apptentiveMessageDateLabel'
- 'apptentiveTextInput'
- 'apptentiveTextInput'
- 'apptentiveMessageCenterTextViewBorder'
- 'apptentiveMessageLabelOutbound'
- 'apptentiveMessageLabel'
- 'apptentiveMessageSentMessageBubble'
- 'apptentiveMessageBubbleOutbound'
- 'apptentiveMessageLabelInbound'
- 'apptentiveSenderLabel'
- 'apptentiveMessageLabelInbound'
- 'apptentiveMessageLabel'
- 'apptentiveReceivedMessageBubble'
- 'apptentiveMessageBubbleInbound'
- 'apptentiveMessageCenterStatus'
- 'apptentiveMessageCenterStatus'
'apptentiveTextInputBackground'

List of UIKit Extension Properties

The following is a list of UIKit classes for which Alchemer Mobile (ApptentiveKit) has style properties, what each property is used for, and its value using both the `.none` and `.apptentive` theme.

While the `theme` property must be set before calling `register(with:completion)`, you can change the values below at any time. However if you change them while an interaction is visible on screen, it may behave unpredictably.

`UITableView.Style`

Property	Description	Default	Apptentive Theme
`apptentive`	The style of table view used for surveys	`.insetGrouped` (iOS 13+) or `.grouped` (iOS 11–12)	`.grouped`

`UIModalPresentationStyle`

Property	Description	Default	Apptentive Theme

Property	Description	Default	Apptentive Theme
`apptentive`	How Message Center and Surveys are presented over other view controllers	`.pageSheet` (allows interactive dismissal on iOS 13+)	`.fullScreen`

`UIBarButtonItem`

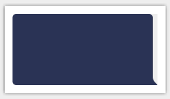
Property	Description	Default	Apptentive Theme
`apptentiveClose`	Bar button item used to dismiss Message Center or a Survey	System `.close` (iOS 13+) or system `.cancel` (iOS 11–12)	`xmark` SF Symbol
`apptentiveProfileEdit`	Bar button item used to edit the profile in Message Center	`person.crop.circle` SF Symbol	*Same*

`UIButton`

Property	Description	Default	Apptentive Theme
`apptentiveStyle`	The outline style for the submit button in Surveys	`.pill` (corner radius is equal to half the height)	`.radius(8)` (corner radius is 8 points)

`UIImage`

Property	Description	Default	Apptentive Theme
`apptentiveMessageAttachmentButton`	The image for the button used to attach an image or file to a message	`paperclip.circle.fill` SF Symbol	*Same*

Property	Description	Default	Apptentive Theme
`apptentiveMessageSendButton`	The image for the button used to send a message	`paperplane.circle.fill` SF Symbol	*Same*
`apptentiveSentMessageBubble`	The background image for a sent message	 Resizable, using 9 point top and left insets, and 18 point bottom and right insets, rendered as template	*Same*
`apptentiveReceivedMessageBubble`	The background image for a received message	 Resizable, using 9 point top and right insets, and 18 point bottom and left insets, rendered as template	*Same*
`apptentiveAttachmentPlaceholder`	The placeholder image for a yet-to-be-downloaded attachment	Resizable, using 14 point top and right insets, and 4 point bottom and left insets	*Same*
`apptentiveAttachmentRemoveButton`	The image for a button used to remove an attachment from the draft message	`minus.circle.fill` SF Symbol	*Same*

Property	Description	Default	Apptentive Theme
`apptentiveHeaderLogo`	An image that can replace the navigation bar’s title view in Surveys. Recommended size is 200 × 44 points.	*None*	*None*
`apptentiveRadioButton`	The accessory image for an unselected answer to a single-select survey question	`circle` SF Symbol	*Same*
`apptentiveCheckbox`	The accessory image for an unselected answer to a multi-select survey question	`square` SF Symbol	*Same*
`apptentiveRadioButtonSelected`	The accessory image for the selected answer to a single-select survey question	`smallcircle.fill.circle.fill` SF Symbol	*Same*
`apptentiveCheckboxSelected`	The accessory image for a selected answer to a multi-select survey question	`checkmark.square.fill` SF Symbol	*Same*

`UIColor`

Property	Description	Default Light/Dark	Apptentive Theme Light/Dark
`.apptentiveMessageCenterTextViewBorder`	The border color to use for the message text view	555555	858585
`.apptentiveMessageCenterAttachmentButton`	The color to use for the attachment button for the compose view for message center	0000FF	2A3355

Property	Description	Default Light/Dark	Apptentive Theme Light/Dark
.apptentiveMessageTextViewPlaceholder	The color to use for the text view placeholder for the compose view for message center	AAAAAA	AAAAAA
.apptentiveMessageCenterStatus	The color to use for the status message in message center	3C3C43 EBEBF5	3C3C43 EBEBF5
.apptentiveMessageCenterGreetingBody	The color to use for the greeting body on the greeting header view for message center	3C3C43 EBEBF5	5D5D5D C4C4C4
.apptentiveMessageCenterGreetingTitle	The color to use for the greeting title on the greeting header view for message center	3C3C43 EBEBF5	5D5D5D C4C4C4
.apptentiveMessageBubbleInbound	The color to use for the message bubble view for inbound messages	555555	EAEAEA C4C4C4
.apptentiveMessageBubbleOutbound	The color to use for the message bubble view for outbound messages	007AFF 0A84FF	2A3355 40566B
.apptentiveMessageLabelInbound	The color to use for message labels for the inbound message body	FFFFFF	5D5D5D 4A4A4A
.apptentiveMessageLabelOutbound	The color to use for message labels for the outbound message body	FFFFFF	FFFFFF E1E1E1
.apptentiveQuestionLabel	The color to use for labels in a non-error state	000000 FFFFFF	5D5D5D C4C4C4

Property	Description	Default Light/Dark	Apptentive Theme Light/Dark
`.apptentiveInstructionsLabel`	The color to use for instruction labels	3C3C43 EBEBF5	858585 C4C4C4
`.apptentiveChoiceLabel`	The color to use for choice labels	555555	5D5D5D C4C4C4
`.apptentiveError`	The color to use for UI elements to indicate an error state	FF3B30 FF453A	D46363 DC9696
`.apptentiveRangeControlBorder`	The border color to use for the segmented control for range surveys	000000	5D5D5D C0C0C0
`.apptentiveSurveyIntroduction`	The color to use for the survey introduction text	000000 FFFFFF	5D5D5D C4C4C4
`.apptentiveTextInputBorder`	The color to use for the borders of text fields and text views	AAAAAA	C0C0C0
`.apptentiveTextInputBackground`	The color to use for text fields and text views	FFFFFF 000000	FFFFFF 212121
`.apptentiveTextInput`	The color to use for text within text fields and text views	000000 EBEBF5	858585 C4C4C4
`.apptentiveTextInputPlaceholder`	The color to use for the placeholder text within text fields and text views	3C3C43 EBEBF5	858585 C4C4C4
`.apptentiveMinMaxLabel`	The color used for min and max labels for the range survey	808080	808080

Property	Description	Default Light/Dark	Apptentive Theme Light/Dark
`.apptentiveGroupedBackground`	The color used for the background of the entire survey	F2F2F7 000000	FFFFFF 212121
`.apptentiveSecondaryGroupedBackground`	The color used for the cell where the survey question is located	FFFFFF 1C1C1E	FFFFFF 212121
`.apptentiveSeparator`	The color to use for separators in e.g. table views	3C3C43 545458	FFFFFF 212121
`.apptentiveImageSelected`	The color to use for images in a selected state for surveys	007AFF 0A84FF	5A95D4 94A8B8
`.apptentiveImageNotSelected`	The color to use for images in a non-selected state for surveys	007AFF 0A84FF	C0C0C0 C0C0C0
`.apptentiveSubmitButton`	The background color to use for the submit button on surveys	007AFF 0A84FF	2A3355 40566B
`.apptentiveSubmitLabel`	The color to use for the survey footer label (Thank You text)	000000 FFFFFF	000000 FFFFFF
`.apptentiveTermsOfServiceLabel`	The color to use for the terms of service label	007AFF 0A84FF	FFFFFF E1E1E1
`.apptentiveSubmitButtonTitle`	The color to use for the submit button text color	FFFFFF	FFFFFF
`.apptentiveMessageCenterBackground`	The color to use for the background of Message Center.	FFFFFF	FFFFFF 212121

Property	Description	Default Light/Dark	Apptentive Theme Light/Dark
`.apptentiveAttachmentRemoveButton`	The color to use for the button that deletes the attachment from the draft message.	FF3B30 FF453A	D46363 DC9696
`.apptentiveMessageCenterComposeBoxBackground`	The color to use for the compose box for Message Center.	FFFFFF	FFFFFF 212121
`.apptentiveMessageCenterComposeBoxSeparator`	The color to use for the compose box separator.	D3D3D3	D3D3D3
`.apptentiveUnselectedSurveyIndicatorSegment`	The color to use for survey indicator segments in branched surveys when not selected.	808080	D6D6D6
`.apptentiveSelectedSurveyIndicatorSegment`	The color to use for survey indicator segments in branched surveys when selected.	007AFF 0A84FF	2A3355 5995D3

`UIFont`

Property	Description	Default	Apptentive Theme
`apptentiveMessageCenterGreetingTitle`	The font to use for the greeting title for message center	System headline font	Same
`apptentiveMessageCenterGreetingBody`	The font to use for the greeting body for message center	System body font	Same
`apptentiveMessageCenterAttachmentLabel`	The font to use for attachment placeholder file extension labels	System caption1 font	Same
`apptentiveQuestionLabel`	The font used for all survey question labels	System body font	System callout font

Property	Description	Default	Apptentive Theme
`apptentiveTermsOfServiceLabel`	The font used for the terms of service	System footnote font	Same
`apptentiveChoiceLabel`	The font used for all survey answer choice labels	System body font	System callout font
`apptentiveMessageLabel`	The font used for the message body in message center	System body font	Same
`apptentiveMinMaxLabel`	The font used for the min and max labels for the range survey	System caption2 font	Same
`apptentiveSenderLabel`	The font used for the sender label in message center	System caption2 font	Same
`apptentiveMessageDateLabel`	The font used for the message date label in message center	System caption2 font	Same
`apptentiveInstructionsLabel`	The font used for the instructions label for surveys	System caption1 font	Same
`apptentiveSurveyIntroductionLabel`	The font used for the survey introduction label	System subheadline font	Same
`apptentiveSubmitLabel`	The font used for the survey footer label (Thank You text)	System headline font	Same
`apptentiveSubmitButtonTitle`	The font used for the submit button at the end of surveys	System headline font	Same
`apptentiveTextInput`	The font used for the multi- and single-line text inputs in surveys	System body font	System callout font

Overriding `InteractionPresenter`

As a final customization option (short of forking ApptentiveKit itself), your app can subclass ApptentiveKit's `InteractionPresenter` class and set the `interactionPresenter` property on the Alchemer Mobile (ApptentiveKit) instance to an instance of your subclass.

```
Apptentive.shared.interactionPresenter = MyInteractionPresenter()
```

This can be useful, for example, to customize the Love Dialog or Prompts interactions, since the `UIAlertController` class used by Alchemer Mobile (ApptentiveKit) is not customizable.

Your `InteractionPresenter` subclass can override one or more of the following methods, which will be passed a view model with the properties and methods necessary to implement the interaction:

- `presentEnjoymentDialog(with:)` (for Love Dialog interactions)
- `presentMessageCenter(with:)`
- `presentSurvey(with:)`
- `presentTextModal(with:)` (for Prompts interactions)

Your override method should create a suitable view controller (using the view model to configure it) and present it, for example by calling the `presentViewController(_:completion:)` method.

If you use a different method of displaying your interaction view controller, be sure to override `dismissPresentedViewController(animated:)` to handle the programmatic dismissal of your view controller.

Because of their complexity, for Message Center and Survey interactions we strongly recommend starting with a copy of the code in the "Default UI" group ("List UI" for Surveys) under each interaction's group in the Alchemer Mobile (ApptentiveKit) Xcode project.

While we will make a strong effort to maintain API compatibility with current view models, you should expect the view model API to potentially have breaking changes when Alchemer Mobile (ApptentiveKit) minor version number changes.

Related Articles