



Screen

Category	Requires	Version
Layout > General	API 19, Android 4.4 - 4.4.4 KitKat	42

Overview

Top-level component containing all other components in the program.

 **Permissions** 

- [android.permission.INTERNET](#)
- [android.permission.ACCESS_NETWORK_STATE](#)
- [android.permission.ACCESS_WIFI_STATE](#)

Screen is the top-most component in any app. All the other components are placed on a Screen.

If you take the app as a book, the Screens can be regarded as the pages of a book and the other components as the various elements present on a page of a book, text, images etc.

screen-book-analogy

Screen <--> Book

Events

Back Pressed

Device back button pressed.

Error Occurred

Event raised when an error occurs. Only some errors will raise this condition. For those errors, the system will show a notification by default. You can use this event handler to prescribe an error behavior different than the default.

Params	
component	Component
function Name	Text
error Number	Number
message	Text

Got Received Shared

Event to detect that a user shared content to your app throw the sharing dialog of any other app. Type stand for integer. 0 = nothing shared, 1 = audio, 2 = image, 3 = text or 4 = video

Params	
type	Number
value	Text

Initialize

Screen starting

Keyboard Visibility Changed

Event will be invoked if the keyboard was visible or invisible.

Params	
is Keyboard Visible	Boolean

Menu Initialize

Event to detect when the menu has loaded. Set here your blocks like TitleBarIcon or AddMenuItem.

Menu Item Selected

Event to detect when a menu item has been selected.

Params	
menu Item	Text

On App Pause

The system calls this method as the first indication that the user is leaving your activity (though it does not always mean the activity is being destroyed).

On App Resume

When the activity enters the Resumed state, it comes to the foreground, and then the system invokes this event.

On App Stop

When your activity is no longer visible to the user, it has entered the Stopped state, and the system invokes this event.

Other Screen Closed

Event raised when another screen has closed and control has returned to this screen.

Params	
other Screen Name	Text
result	Any

Permission Denied

Event to handle when the app user has denied a needed permission.

Params	
component	Component
function Name	Text
permission Name	Text

Permission Granted

Event to handle when the app user has granted a needed permission. This event is only run when permission is granted in response to the `AskForPermission` method.

Params	
permission Name	Text

Screen Orientation Changed

Screen orientation changed

Side Menu Closed

Event will be invoked if the side menu was closed.

Side Menu Opened

Event will be invoked if the side menu was opened.

Title Bar Back Button Clicked

Event to detect when a menu item has been selected.

Title Bar Icon Selected

The event returns the 'icon' or 'name' of the selected icon.

Params	
icon	Text
name	Text

Methods

Add Menu Item

Add a new item to the menu. Use the 'make a list' block.

Params	
menu Item	List

Add Menu Item With Icon

Add a new item with a icon on the left side to the menu. This function does not use the make a list block. If you want more items with icon then use this block again.

Params	
menu Item	Text
menu Icon	Text

Add Title Bar Icon

Add a new action icon to the TitleBar. You will see a toast message on a long click with your choosen name. Add this block to the "MenuInitialize" event.

Params	
icon	Text
name	Text

Are Permissions Granted

Returns: *Boolean*

Returns true if ALL needed app permissions were granted, else false.

Ask For Permission

Ask the user to grant access to a dangerous permission.

Params	
permission Name	<input type="text" value="Text"/>

Can Write System Settings

Returns: *Boolean*

Returns true if the app can write system settings, else it returns false. It will return true automatic for devices with android version below 6 (API 23).

Hide Keyboard

Hide the keyboard.

Lock Side Menu

Use this block to lock the side menu. This means the user can not open the side menu until the side menu unlock block is used.

Move Task To Back

Move task to back. That means it will minimize your current app.

Open App Settings

Opens the settings screen of the app. Useful if 'Are Permissions Granted' has returned false.

Open System Write Settings

Opens the app's system settings page. This works only for devices with android 6+.

Remove Side Menu

Remove a first created side menu. This block will be usefull if you need to update a side menu dynamically. You can use this block too to test a side menu in the companion. Add then this block above of the 'Side Menu' block.

Remove Title Bar Icons

Remove all added action icons from the TitleBar.

Reset Options Menu

Reset the menu back to its default

Show About Application

Show the dialog which shows when pressing the "About This Application" button in the menu.

Show Keyboard

Show the keyboard

Side Menu

Create a Side Menu. Set to "layout" your layout that will be then your side menu. Use as example a vertical arrangement. Your choosen layout will be then removed from the screen and only visible in the side menu."Information": This block works on companion only if you add a side menu on button click.Don't add it in companion on "screen initialize event". Else the companion will crash.Do NOT use this block with the Side Menu Layout component

Params	
layout	Component

Side Menu Close

If you had set your side menu then you can use this block to close it as example with a button click.

Side Menu Open

If you had set your side menu then you can use this block to open it as example with a button click.

Task Description

Sets information describing the task with this activity for presentation inside the Recents System UI. You will see the settings if the device API is ≥ 21 and you minimize the app.

Params	
text	Text
color	Number

Unlock Side Menu

Use this block to unlock the side menu. This means the user can now open again the side menu.

Version Code

Returns: *Number*

This block will returns the version code

Version Name

Returns: *Text*

This block will returns the version name

Properties

About Screen

Text — Read Write - **Designer** **Blocks**

Information about the screen. It appears when "About this Application" is selected from the system menu. Use it to inform people about your app. In multiple screen apps, each screen has its own AboutScreen info.

About Screen Background Color

Color **Default: #444444FF**  — Read Write - **Designer** **Blocks**

About Screen Light Theme

Boolean **Default: *False*** — Read Write - **Designer** **Blocks**

About Screen Title

Text **Default: *About this application*** — Write - **Designer** **Blocks**

Define the title of the about application option.

Accent Color

Color **Default: #FF4081FF**  — Write - **Designer**

This is the accent color used for highlights and other user interface accents.

Align Horizontal

Number **Default: 1** — **Read** **Write** - **Designer** **Blocks**

A number that encodes how contents of the screen are aligned horizontally. The choices are: 1 = left aligned, 2 = horizontally centered, 3 = right aligned.

Align Vertical

Number **Default: 1** — **Read** **Write** - **Designer** **Blocks**

A number that encodes how the contents of the arrangement are aligned vertically. The choices are: 1 = aligned at the top, 2 = vertically centered, 3 = aligned at the bottom. Vertical alignment has no effect if the screen is scrollable.

App ID

Text — **Write** - **Designer**

The unique APP_ID for the user (which is generated by GWT and stored in Datastore)

App Name

Text — **Write** - **Designer**

This is the display name of the installed application in the phone. If the AppName is blank, it will be set to the name of the project when the project is built.

Background Color

Color **Default: #FFFFFF**  — **Read** **Write** - **Designer** **Blocks**

BackgroundColor property getter method.

Background Image

Text — **Read** **Write** - **Designer** **Blocks**

The screen background image.

Close Screen Animation

Text **Default: *default*** — **Read** **Write** - **Designer** **Blocks**

The animation for closing current screen and returning to the previous screen.
Valid options are default, fade, zoom, slidehorizontal, slidevertical, and none

Drawer Arrow Icon Color

Number — **Read** **Write** - **Blocks**

Set the drawer arrow icon color.

Height

Number — **Read** - **Blocks**

Screen height (y-size).

High Quality Images

Available as [Advanced](#) Property

Boolean **Default: *False*** — **Read** **Write** - **Designer** **Blocks**

If set to true, pictures will be loaded in high quality.

Icon

Text — **Write** - **Designer**

Specifies the name of the application icon.

Is Companion

Boolean — Read - Blocks

This block will return true, if you are running your project current in the companion application. Else it will return false.

is Keyboard Visible

Boolean — Read - Blocks

Returns the status of the keyboard. If the keyboard is visible then the result is true.

is Side Menu Added

Boolean — Read - Blocks

Returns true if a side menu is added to the screen.

is Side Menu Open

Boolean — Read - Blocks

Returns true if a side menu is current open. Else it will return false.

Keep Screen On

Available as [Advanced](#) Property

Boolean **Default: False** — Read Write - Designer Blocks

Keep the device's screen turned on and bright.

Min SDK (Min. Android Version)

Available as [Advanced](#) Property

Number Default: 19 — Write - Designer

Navigation Bar Color

Color Default: #000000FF  — Read Write - Designer Blocks

Set navigation bar color. This will work starting from API Level 21 (Android Lollipop)

Navigation Bar Light Icons

Boolean — Read Write - Blocks

This option tells the system to use dark navigation bar icons, useful for lighter colored navigation bars. Works only for devices with API >= 26.

Navigation Icon Color

Number — Read Write - Blocks

Set the navigation icon color.

Open Screen Animation

Text Default: *default* — Read Write - Designer Blocks

The animation for switching to another screen. Valid options are default, fade, zoom, slidehorizontal, slidevertical, and none

Options Menu Icon Color

Number — Read Write - Blocks

Set the options menu icon color.

Package Name

Available as [Advanced](#) Property

Text — **Write** - **Designer**

Set a custom PackageName for the app

Primary Color / Title Bar

Color **Default: #3F51B5FF**  — **Write** - **Designer**

This is the primary color used for Material UI elements, such as the ActionBar.

Primary Color Dark / Status Bar

Color **Default: #303F9FFF**  — **Write** - **Designer**

This is the primary color used for darker elements in Material UI.

Receive Shared Files

Text — **Write** - **Designer**

RTL Support

Available as [Advanced](#) Property

Boolean **Default: *False*** — **Write** - **Designer**

Screen Orientation

Text **Default: *unspecified*** — **Read** **Write** - **Designer** **Blocks**

The requested screen orientation, specified as a text value. Commonly used values are landscape, portrait, sensor, user and unspecified. See the Android developer documentation for ActivityInfo.Screen_Orientation for the complete list of possible settings.

Scrollable

Boolean **Default: *False*** — **Read** **Write** - **Designer** **Blocks**

When checked, there will be a vertical scrollbar on the screen, and the height of the application can exceed the physical height of the device. When unchecked, the application height is constrained to the height of the device.

Show Lists As Json

Available as [Advanced](#) Property

Boolean **Default: *False*** — **Write** - **Designer**

If false, lists will be converted to strings using Lisp notation, i.e., as symbols separated by spaces, e.g., (a 1 b2 (c d)). If true, lists will appear as in Json or Python, e.g. ["a", 1, "b", 2, ["c", "d"]]. This property appears only in Screen 1, and the value for Screen 1 determines the behavior for all screens. The property defaults to "false" meaning that the App Inventor programmer must explicitly set it to "true" if JSON/Python syntax is desired. At some point in the future we will alter the system so that new projects are created with this property set to "true" by default. Existing projects will not be impacted. The App Inventor programmer can also set it back to "false" in newer projects if desired.

Show Navigation Bar

Available as [Experimental](#) Property

Boolean **Default: *True*** — **Read** **Write** - **Designer** **Blocks**

Show/Hide Navigation Bar

Show Options Menu

Boolean **Default: *True*** — **Write** - **Designer**

Show Status Bar

Boolean **Default: *True*** — **Read** **Write** - **Designer** **Blocks**

The status bar is the topmost bar on the screen. This property reports whether the status bar is visible.

Show Title Bar Back Button

Boolean — Read Write - Blocks

If true it will show in the TitleBar a back button only if no side menu was added. If a side menu was added it will remove the 'hamburger'-menu icon but the side menu can still be opened.

Sizing

Text Default: *Responsive* — Write - Designer

If set to fixed, screen layouts will be created for a single fixed-size screen and autoscaled. If set to responsive, screen layouts will use the actual resolution of the device. See the documentation on responsive design in App Inventor for more information. This property appears on Screen1 only and controls the sizing for all screens in the app.

Splash Enabled

Available as [Advanced](#) Property

Boolean Default: *True* — Write - Designer

If set to true the user will see a splash screen while the app is loading the content.

Splash Image

Available as [Advanced](#) Property

Text — Write - Designer

Status Bar Color

Number — Read Write - Blocks

Set status bar color. This will work starting from API Level 21 (Android Lollipop

Status Bar Light Icons

Boolean — Read Write - **Blocks**

This option tells the system to use dark statusbar icons, useful for lighter colored status bars. Works only for devices with API >= 23.

Theme

Text **Default: *AppTheme*** — Write - **Designer**

Sets the theme used by the application.

Title

Text — Read Write - **Designer** **Blocks**

The caption for the form, which appears in the title bar

Title Bar Color

Number — Read Write - **Blocks**

Set title bar color

Title Bar Font Typeface

Number **Default: 0** — Write - **Designer**

Title Bar Subtitle

Text — Read Write - **Designer** **Blocks**

Set the TitleBar's subtitle.

Title Bar Text Color

Number — Read Write - Blocks

Set a custom color for the TitleBar text.

Title Bar Typeface Import

Available as [Advanced](#) Property

Text — Write - Designer Blocks

Set a custom font.

Title Visible

Boolean Default: *True* — Read Write - Designer Blocks

The title bar is the top gray bar on the screen. This property reports whether the title bar is visible.

Tutorial URL

Text — Write - Designer

A URL to use to populate the Tutorial Sidebar while editing a project. Used as a teaching aid.

Version Code

Number Default: *1* — Write - Designer

An integer value which must be incremented each time a new Android Application Package File (APK) is created for the Google Play Store.

Version Name

Text Default: *1.0* — Write - Designer

A string which can be changed to allow Google Play Store users to distinguish between different versions of the App.

Width

Number — **Read** - **Blocks**

Screen width (x-size).

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