



Fundusze
Europejskie
Wiedza Edukacja Rozwój



Unia Europejska
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Aplikacje Mobilne – pierwsze kroki
rezultat projektu

Nowe Technologie wsparciem dla edukacji

nr umowy - POWERSE-2018-1-PL01-KA101-049291

realizowanego ze środków POWER na zasadach programu Erasmus+

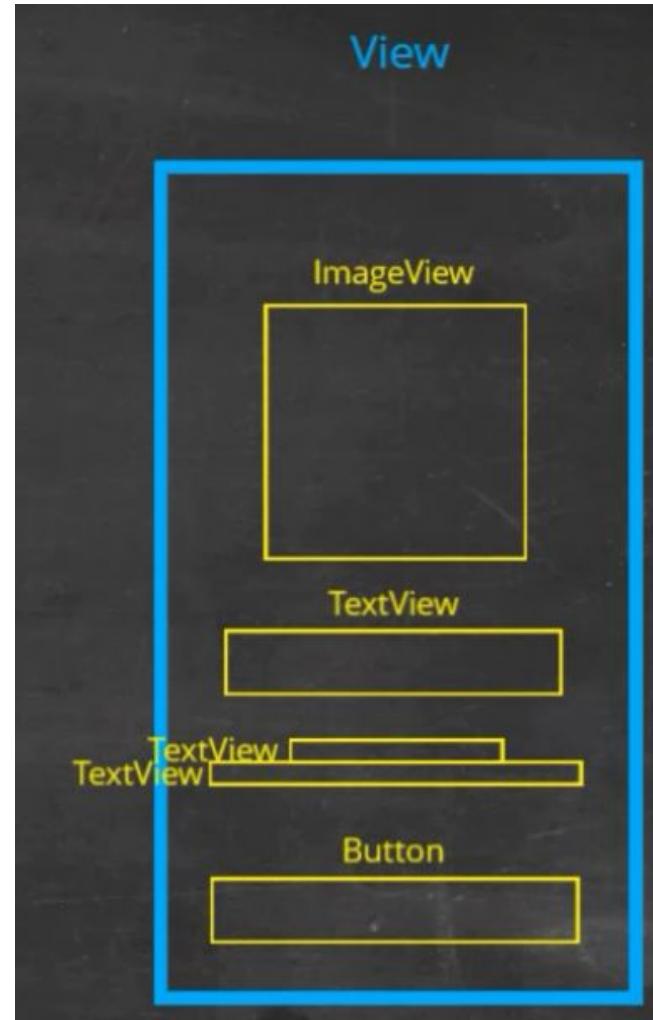
sektor Edukacja szkolna

„Ponadnarodowa mobilność kadry edukacji szkolnej”

Zespół Szkół Łączności w Gliwicach
44-100 Gliwice, ul. Warszawska 35 tel. 32 231 36 12, www.zsl.gliwice.pl

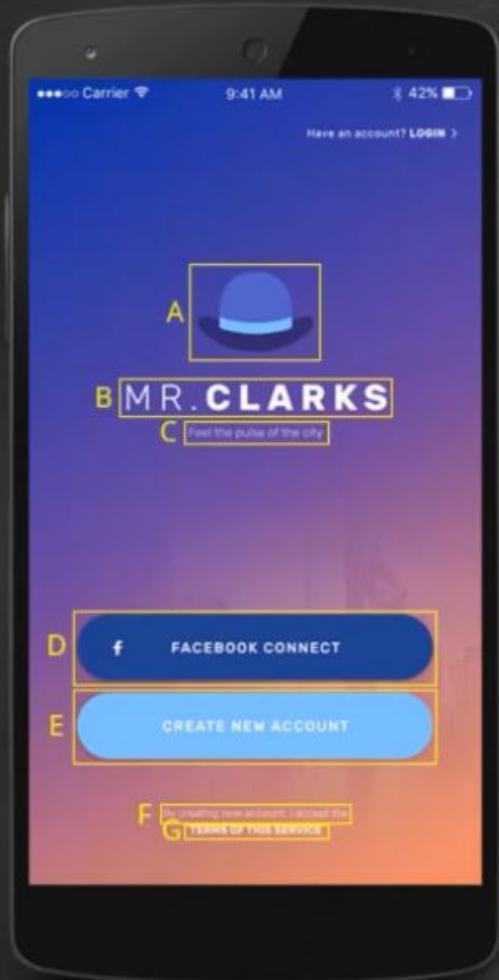
APLIKACJE MOBILNE

PIERWSZE KROKI



Podsumowanie

- Aplikacja mobilna jest oprogramowaniem tworzonym na urządzenia przenośne, takie jak telefony, tablety, czy smartwatche (obecnie również telewizory, sprzęt AGD oraz systemy samochodowe);
- Na aplikację składają się trzy warstwy – interfejs użytkownika, warstwa logiczna oraz warstwa zarządzania danymi. Wszystkie ze sobą ścisłe współpracują;
- Interfejs użytkownika – XML. Warstwa logiczna – Java. Warstwa zarządzania danymi – SQLite;
- Interfejs użytkownika składa się z jednego głównego elementu typu View, który stanowi kontener dla wszystkich innych elementów interfejsu. Tymi elementami mogą być elementy typu ImageView, TextView, czy Button.



A

B

C

D

E

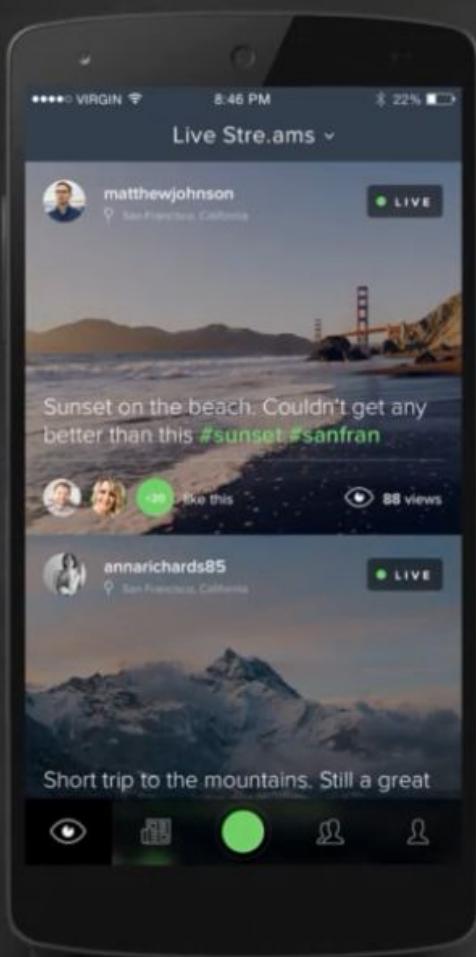
F

G

Podaj rodzaj elementów określonych literami alfabetu A-G.

Wybierz z poniższych trzech:

ImageView, TextView, Button



- Android jest zbudowany na jądrze Linuxa przy użyciu języka C;
- Android SDK (Android Software Development Kit) jest zbudowane w Javie;
- Dlatego Java jest „natywnym” językiem platformy Android.

- Dlaczego nie tworzy się CAŁYCH aplikacji w Javie?
- Dlaczego interfejs użytkownika tworzy się w XMLu?
- Można tworzyć UI w Javie, ale...
 - Czas tworzenia aplikacji;
 - Łatwość tworzenia aplikacji;
 - Łatwość modyfikowania aplikacji.

- Pisanie interfejsu użytkownika w Javie wymagałoby nieustannych komplikacji oraz uruchamiania tworzonej aplikacji;
- Niezależnie od sposobu uruchamiania (emulator/prawdziwe urządzenie) zajmuje to sporo czasu;
- Łatwiej prototypować i modyfikować interfejs napisany w XML.

- Można tworzyć CAŁE aplikacje w Javie, ale...
- ...nie ma to zbyt wielkiego sensu;
- Interfejs użytkownika tworzy się łatwiej i szybciej w XMLu;

- Dlaczego nie tworzy się CAŁYCH aplikacji w Javie?
- Dlaczego interfejs użytkownika tworzy się w XMLu?
- Można tworzyć UI w Javie, ale...
 - Czas tworzenia aplikacji;
 - Łatwość tworzenia aplikacji;
 - Łatwość modyfikowania aplikacji.

Processing

p5.js

Processing.py

Processing for Android

Processing Foundation

Processing

Cover

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Exhibition

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Overview

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Welcome to Processing 3! Dan explains the new features and changes; the links Dan mentions are on the [Vimeo page](#).

[» Download Processing](#)

[» Browse Tutorials](#)

[» Visit the Reference](#)

Processing is a flexible software sketchbook and a language for learning how to code within the context of the visual arts. Since 2001, Processing has promoted software literacy within the visual arts and visual literacy within technology. There are tens of thousands of students, artists, designers, researchers, and hobbyists who use Processing for learning and prototyping.

[» Exhibition](#)

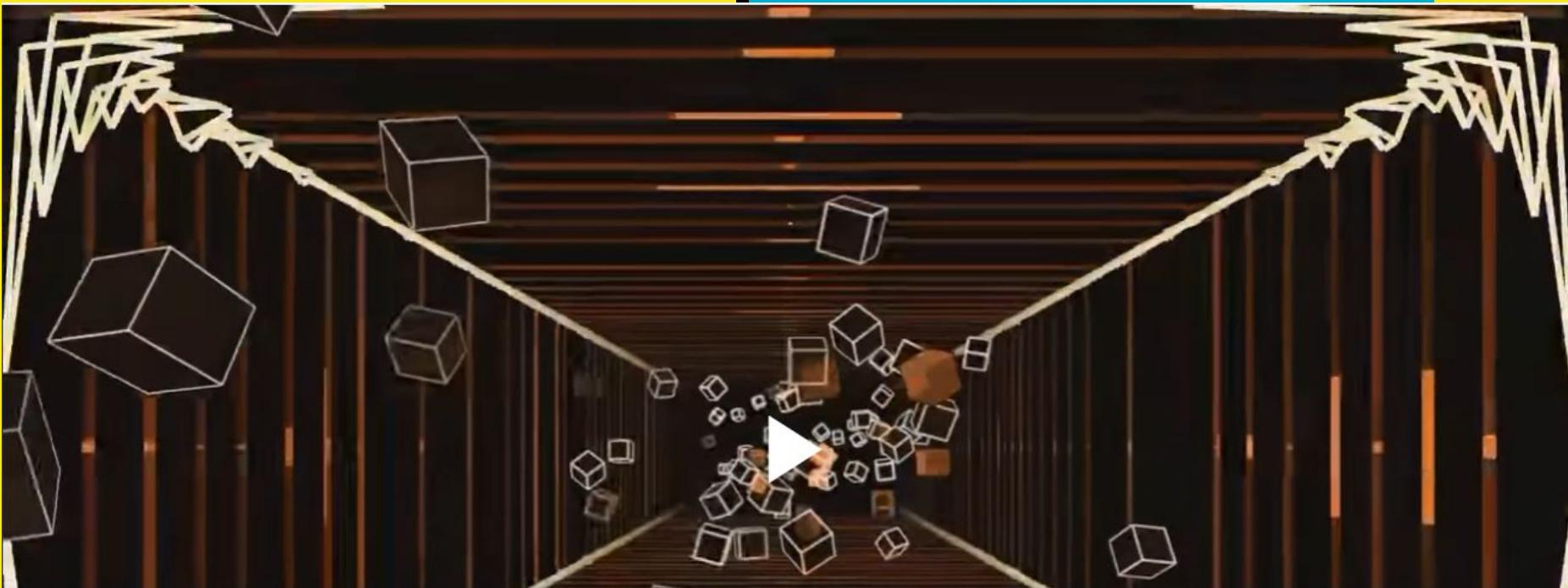


Behavioural Complexity
by AADRL



Terrapattern
by Golan Levin, David Newbury, Kyle McDonald, Irene Alvarado, Aman Tiwari, Manzil Zaheer and The Frank-Ratchye STUDIO for Creative Inquiry





YouTube: "<https://www.youtube.com/watch?v=gHpxRv4MBBA>"

Processing for Android



[Home](#)
[Install](#)
[Reference](#)
[Tutorials](#)
[Forum](#)
[GitHub](#)

Introduction to Cardboard

Get started with Google Cardboard to write VR apps using Processing.

(This tutorial is applicable only to version 4+ of the mode)

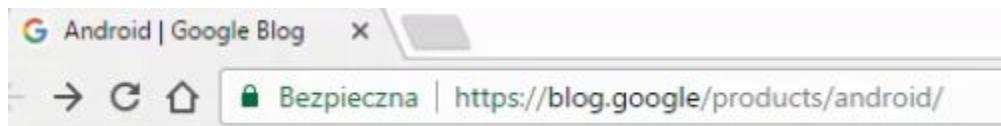
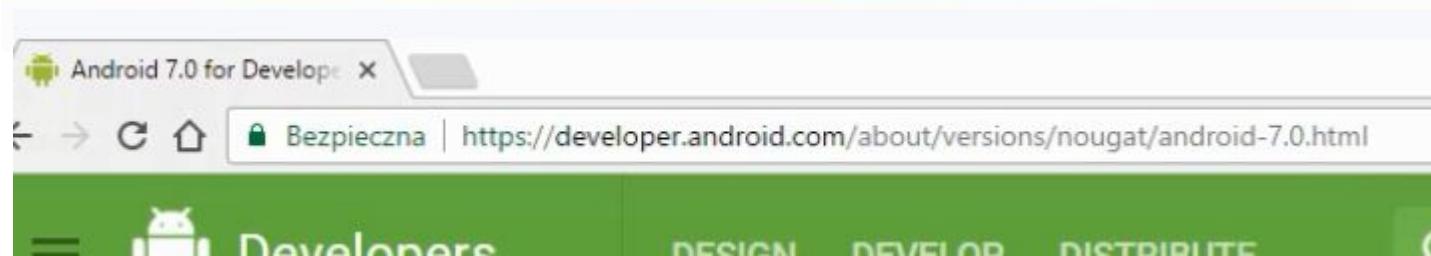
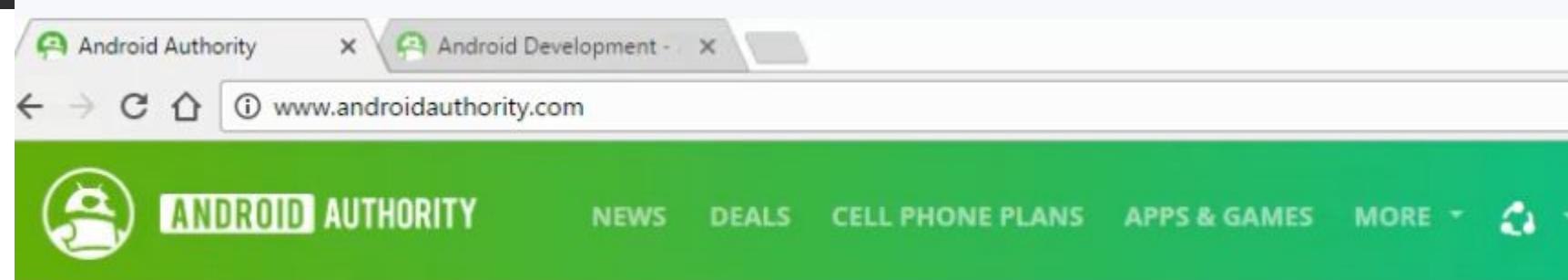
Google Cardboard

The Google Cardboard platform lets you use your smartphone as a quick entry point to Virtual Reality. The Android mode supports Google Cardboard, and you should be able to write 3D sketches that run on the phone as Cardboard apps in stereo mode and respond to the head movement. If you first need to get started with 3D in Processing, check this tutorial out.

Requirements



- Istnieje masa stron tematycznych poświęconych wybranej technologii;
- A jakie są kluczowe z punktu widzenia dewelopera aplikacji na platformę Android?





DESIGN DEVELOP DISTRIBUTE

Search

► DEVELOPER CONSOLE

← Reference

Android Platform API: 25

- ▼ android
- ▼ android.accessibilityservice
- ▼ android.accounts
- ▼ android.animation
- ▼ android.annotation
- ▼ android.app
- ▼ android.app.admin
- ▼ android.app.assist
- ▼ android.app.backup
- ▼ android.app.job
- ▼ android.app.usage
- ▼ android.appwidget
- ▼ android.bluetooth
- ▼ android.bluetooth.le
- ▼ android.content
- ▼ android.content.pm
- ▼ android.content.res
- ▼ android.database

Package Index

These are the API packages. See all [API classes](#).

android	Contains resource classes used by applications included in the platform and defines application permissions for system features.
android.accessibilityservice	The classes in this package are used for development of accessibility service that provide alternative or augmented feedback to the user.
android.accounts	
android.animation	These classes provide functionality for the property animation system, which allows you to animate object properties of any type. <code>int</code> , <code>float</code> , and hexadecimal color values are supported by default. You can animate any other type by telling the system how to calculate the values for that given type with a custom



Samples

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1. In the Android Studio menu, select **File > Import Sample** to open the Import Sample wizard.
2. Select a sample to import and click **Next**.
3. Specify the application name and project location if different from the displayed settings.
4. Click **Finish**.

The sample project opens in a new Android Studio project.

Note: When starting Android Studio, you can also select **Import an Android code sample** in the Welcome to Android Studio wizard to import a sample project from GitHub as a new project.

To view the Android code samples that you can import, see the [Google Samples page](#) on GitHub.

Download Samples

Although importing samples from Android Studio is the recommended method, you can also use the categories on the left to browse the available samples and learn how to build different components for your applications.

If you want to download a complete project, just click on any source file in the project and click the **Download** link in

← Android Developers

O MNIE



Android Developers

A place for Android developers everywhere to meet, share and discuss the latest on Android development

996 003 obserwatorów

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Kolekcje

Społeczności

Profil

Osoby

Wydarzenia

Powiadomienia

Advance your education with the Associate Android Developer (AAD) Certification by Google

The AAD Certification is intended for developers who can display typical skills of an entry-level Android developer. By earning the AAD Certification, developers can get recognized for their skills and advance their careers.

Learn more from this video here: <https://goo.gl/KeuFJZ>

Przetłumacz





Android Developers



Introducing the Associate Android Developer Fast Track by Google | Udacity

[Przetłumacz](#)

Autor wpisu: Udacity – 7 komentarzy

Are you an aspiring [#AndroidDeveloper](#)? Would you like to prove your Android skills through certification by Google? Then definitely take a look at the new Associate Android Developer Fast Track from Google and Udacity! [...](#)

Introducing the Associate Android Developer Fast Track
by Google | Udacity



Android Developers - Yo X

Bezpieczna | https://www.youtube.com/user/androiddevelopers

YouTube PL Szukaj

Android Developers Wideo Playlisty Kanały Informacje

What's new in Android - Google I/O 2016 42:36
Android Developers 218 367 wyświetleń • 8 miesięcy temu CC

Image compression for Android developers - Google I/O 2016 40:07
Android Developers 39 423 wyświetleń • 8 miesięcy temu CC

Android Pay everywhere: New developments - Google I/O 2016 41:43
Android Developers 27 765 wyświetleń • 8 miesięcy temu CC

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Android Developers 11 233 wyświetleń • 8 miesięcy temu CC

Android Development Patterns

Designing for Split Screen Multi-Window 4:51
Android Developers 41 064 wyświetleń • 7 miesięcy temu CC

Picture in Picture on Android TV 4:28
Android Development Patterns 15 508 wyświetleń • 7 miesięcy temu CC

An ~extended~ Doze mode 2:37
Android Developers 15 806 wyświetleń • 7 miesięcy temu CC

Notifications with Direct Reply 4:07
Android Development Patterns 15 354 wyświetleń • 7 miesięcy temu CC

Android Performance Patterns

- Android Blog - <https://blog.google/products/android/>;
- Android Authority - <http://www.androidauthority.com/>;
- YouTube Android Authority - <https://www.youtube.com/user/AndroidAuthority>;
- Android for Developers - <https://developer.android.com/index.html>;
- Google+ Android Developers - <https://plus.google.com/+AndroidDevelopers>;
- YouTube Android Developers - <https://www.youtube.com/user/androiddevelopers>;

How to make part of the text Bold in android at runtime? - Stack Overflow

[stack overflow.com/.../how-to-make-part-of-the-text-bold-in-andr...](https://stackoverflow.com/questions/10000000/how-to-make-part-of-the-text-bold-in-android) ▾ Tłumaczenie strony
11 cze 2012 - Say you have a TextView called etx . You would then use the following code: ... BOLD);
// Span to make text bold final StyleSpan iss = new ...

Questions
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beta

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- 0 votes 0 answers 2 views HttpClient POST List<User> - java asked 33 secs ago N.Cokljat 47

- 0 votes 0 answers 4 views "Caching" Alternatives on Process Intense Calculations asked 1 min ago Walls 2,914

- 0 votes 0 answers 26 views Issue in encoding with Python modified 1 min ago falsetru 184k

- 0 votes 0 answers 12 views FindViewbyID with fragments modified 1 min ago Murat K. 4,385

- 0 votes 1 answer 11 views How migrate android eclipse project to higher version of libpng? answered 1 min ago Shailesh 577

- 0 votes 1 answer 10 views Define queue on multiple node on RabbitMQ answered 2 mins ago Gabriele 9,676

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Microsoft SQL Server 104 topics Dashboard 21 / 0 ▲ 1	JavaScript 100 topics Dashboard 0 / 0 ▲ 5	Node.js 88 topics Dashboard 47 / 0 ▲ 4	Haskell Language 69 topics Dashboard 29 / 0 ▲ 9
MySQL 69 topics Dashboard 31 / 0 ▲ 2	Go 65 topics Dashboard 11 / 0 ▲ 0	Ruby Language 64 topics Dashboard 14 / 0 ▲ 2	PowerShell 63 topics Dashboard 17 / 0 ▲ 11

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Getting started with Android Introduction Topic

218 Creating a new project

54 Setting up Android Studio

2 more examples

edited Dec 28 '16 at 0:52



+10

Intent

All Versions

352 Getting a result from another Activity

111 Passing data between activities

19 more examples

edited yesterday



+78

Gradle for Android

All Versions

109 A basic build.gradle file

61 Define and use Build Configuration Fields

22 more examples

edited Jan 24 at 8:41



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Documentation Update, February 6th

HOT META POSTS

9 "Not an answer" declined because it looks like an answer

27 Is answering the question with an outdated method not a good idea?

INTRODUCTION TOPIC

Getting started with Android

Creating a new project
Setting up Android Studio
Android programming without an IDE
Application Fundamentals

The screenshot shows the Material Design Tools website at <https://material.io/tools/>. The top navigation bar includes links for MATERIAL DESIGN, Design, Develop, and Tools. A red arrow points from the 'Tools' link to a sidebar on the right labeled 'POPULAR' which lists Icons, Material Theme Editor, and Gallery.

Tools

Use Material tools to simplify your workflow.

Shape

Corner style
Pick a corner style treatment to apply to component surfaces.

Curved Angled

16

Icons

Material Theme Editor

Gallery

Design

Develop

Tools

NEXT >

Learn more

1

2

3

← → 🔍 https://material.io/tools/icons/?style=baseline

MATERIAL DESIGN

Design Develop Tools

Filter by name

THEMES

Filled

Outlined

Rounded

Two-Tone

Sharp

CATEGORIES

All

Icons

Material icons are delightful, beautifully crafted symbols for common actions and items. Download on desktop to use them in your digital products for Android, iOS, and web.

RELATED CONTENT

Icon design principles

Animated icons

Icon themes

Fit for use

Each symbol is available in five themes and a range of downloadable sizes and densities.

Icon font

For web projects, the best format is our easy-to-use icon web font.

Open source

Our icons are free for everyone to use. Please don't try to sell them.

Also available as a [git repository](#).

Learn how to use icon fonts in our [developer guide](#).

Available under [Apache license version 2.0](#).

Action

<code>3d_rotation</code>	<code>accessibility</code>	<code>accessibility...</code>	<code>accessible</code>	<code>accessible_fo...</code>	<code>account_balance</code>	<code>account_balance...</code>	<code>account_box</code>	<code>account_circle</code>	<code>add_shopping...</code>	<code>alarm</code>	<code>alarm_add</code>
<code>alarm_off</code>	<code>alarm_on</code>	<code>all_inbox</code>	<code>all_out</code>	<code>android</code>	<code>announcement</code>	<code>arrow_right_a...</code>	<code>aspect_ratio</code>	<code>assessment</code>	<code>assignment</code>	<code>assignment_in...</code>	<code>assignment_late...</code>
<code>assignment_re...</code>	<code>assignment_re...</code>	<code>assignment_tu...</code>	<code>autorenew</code>	<code>backup</code>	<code>book</code>	<code>bookmark</code>	<code>bookmark_bord...</code>	<code>bookmarks</code>	<code>bug_report</code>	<code>build</code>	<code>cached</code>

← → C https://material.io/ MATERIAL DESIGN Design Develop Tools

Make beautiful products, faster. Material is a design system – backed by open-source code – that helps teams build digital experiences

Design flexibly

Get started with detailed design guidance and create custom Material themes to make your product unique.

LEARN MORE

Develop across platforms

The screenshot shows a Material Design interface. On the left, there's a sidebar with a purple header containing a menu icon and a share icon, followed by a 'Files' section with a '+' button. Below it is a list of files: 'Vacation Jan 24, 2018', 'Recipes March 8, 2018', and 'Kitchen remodel May 14, 2018', each with a folder icon. To the right of the sidebar is a large area featuring a grid of purple and grey shapes with letters 'S' and 'P' on them. Below this are three rows of text examples: 'Headline Regular 18', 'Title Regular 18', and 'Subtitle Regular 18'. The entire interface is set against a dark background.

Text Type	Font Style
Headline	Regular 18
Title	Regular 18
Subtitle	Regular 18



Vocabulary Glossary

This glossary of Android and Java vocab words supplements the [Udacity Android for Beginners](#) course. This course is targeted at those who are new to programming but want to start building Android apps.



Access Modifier

Activity.onCreate

Android Studio

Assignment Operator

Attributes

Black Box

Boolean

Breakpoint

Button

Call a Method

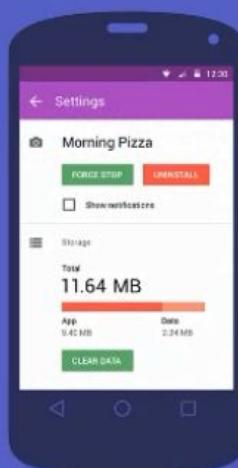
Camel Case

Button



DESCRIPTION

SAMPLE CODE



```
<Button  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:padding="8dp"  
    android:background="#00FF00"  
    android:text="Force stop"  
    android:onClick="forceStop"/>
```

Podsumowanie

- Android Blog - [https://blog.google/products/android/.](https://blog.google/products/android/)
- Android Authority - [http://www.androidauthority.com/.](http://www.androidauthority.com/)
- YouTube Android Authority - [https://www.youtube.com/user/AndroidAuthority.](https://www.youtube.com/user/AndroidAuthority)
- Android for Developers - [https://developer.android.com/index.html.](https://developer.android.com/index.html)
- Google+ Android Developers - [https://plus.google.com/+AndroidDevelopers.](https://plus.google.com/+AndroidDevelopers)
- YouTube Android Developers - [https://www.youtube.com/user/androiddevelopers.](https://www.youtube.com/user/androiddevelopers)
- Dowiedzieliśmy się w jaki sposób wyszukiwać rozwiązania problemów.
- Niezbędna jest do tego wyszukiwarka internetowa...
- ...oraz forum StackOverflow - [http://stackoverflow.com/.](http://stackoverflow.com/)
- Pssst! Pamiętaj też o słowniczku! - [https://developers.google.com/android/forall/vocab-words/.](https://developers.google.com/android/forall/vocab-words/)
- Internet, to Twoja główna broń w walce z kodem.