

## dictionary

english (a - z)	polish
(polygon) mesh	siatka (wielokątów)
24/7 surveillance	całodobowa obserwacja
above-mentioned	wyżej wymieniony
adjacent node	sąsiedni węzeł
adware	oprogramowanie reklamowe
appraising	ocena
asset	zasób
associated	kojarzone
at a meteor pace	w szybkim tempie
atomicity	atomowość/niepodzielność
backstack	stos cofania (operacja cofnij)
bloom	barwa
botnet	grupa komputerów zainfekowanych oprogramowaniem wirusowym, pozwalającym sterować nimi zdalnie
by posing	podszycując się
canvas	plótno
catchall	ogólny
commands	polecenia
comprised of	składa się z
conducted	przeprowadzone
consistency	spójność
constituent	częściowy, składniowy
core features	kluczowe funkcjonalności
cumbersome	nieporęczny
data models	modele danych

english (a - z)	polish
data volumes	woluminy danych
ddos attacks (distributed denial of service)	atak na system komputerowy lub usługę sieciową przeprowadzany równocześnie z wielu komputerów
defrauded	oszukany
deliverability	dostarczalność
dependencies	zależności
descendants	potomkowie
detection	wykrycie
dictionary	słownik
directional	kierunkowy
distinct	odrebnny
dna strand	łańcuch dna
dos attack (denial-of-service attack)	blokada usług
double-checked	sprawdzony podwójnie
dusk	wieczór
edge	krawędź
embedded	osadzony
embedding	osadzanie
embeded	wbudowany
encapsulation	enkapsulacja
endurance	wytrzymałość
entity	byt
execution phase	faza realizacji
exponential	wykładniczy
extensively	intensywnie
extent	zasięg
file cabinets	szafki na akta
functional composition	skład funkcjonalny
fundamentals	podstawy

english (a - z)	polish
gel electrophoresis	elektroforeza żelowa
generic	generyczny/uogólniony
generic testing	testowanie ogólne
gloomy	mroczny
grading	stopniowanie
graph	graf
grey-box environment	środowisko szarej skrzynki
hash table	tablica z haszowaniem
hdr image	obraz hdr
hook	haczyk
in particular	w szczególności
inadequate	nieodpowiednie
inheritance	dziedziczenie
inscattering	rozpraszanie
instantiation	proces tworzenia instancji
intensity	intensywność/natężenie
interim	przejściowe
kernel	jądro
layered approach	podejście warstwowe
layout	układ
lightweight operating system	lekki system operacyjny (o niskich wymagach sprzętowych)
lockboxes	skrytki
lot (internet of things)	sieć obiektów rzeczy (obiektów)
malicious	złośliwy
malicious	złośliwy
malware	złośliwe oprogramowanie
malware	złośliwe oprogramowanie
measurements	pomiary
measures	środki

english (a - z)	polish
metrics	metryki
middleware	oprogramowanie pośrednie / łączące
molecule manipulation	manipulacja cząsteczkami
molecules	cząsteczki
nefarious	nikczemny
node	węzeł
object identifier	identyfikator obiektu
outdoor	na zewnątrz
oversaturated	przesycony
parallel	równoległy
partition	partycja
phishing	wyłudzanie informacji
polymorphism	polimorfizm/wielopostaciowość
post processing	przetwarzanie końcowe
prediction	przewidywanie
prevention	zapobieganie
quality software requirements	wymagania dotyczące jakości oprogramowania
quality team	zespół ds. jakości
ransom	okup
ransomware	oprogramowanie blokujące dostęp do systemu komputerowego lub plików mające na celu wyłudzenie pieniędzy
readiness	gotowość
readiness	gotowość
reflection	odbicie
relational database management system (rdbms)	system zarządzania relacyjną bazą danych
requirement analysis	analiza wymagań
response	odpowiedź
restrict	ograniczać
scalability	skalowalność

english (a - z)	polish
secluded servers	odosobnione serwery
security vulnerability	luka w zabezpieczeniach
setbacks	regresy
software stack	pakiet oprogramowania
spyware	oprogramowanie szpiegujące
stringent encryption	rygorystyczne szyfrowanie
structured Query language (sQL)	strukturalny język zapytań
subdivided	podzielony
suitability	przydatność
surreptitiously	tajemnie
system call hijacking	przechwytywanie wywołań systemowych
test cases	przypadki testowe
test evaluation	ocena testów
tinted	przyciemniony
to capture something	przechwycić coś
to enhance	wzmacniać/uwydatniać
to tweak	dostrajać
travelling salesman problem	problem komiwojażera
tuple	krotka
unforeseen	nieprzewidziane
various	różnorodne
vignette	winieta
virtual storage spaces	wirtualne przestrzenie magazynowe
vitro	szkło (laboratoryjne)
vivid	żywy
vivo	ciało
volume	objętość
vulnerability	luka
worn-out	zużyty

# exercises

---

## Given the text below. Associate words with their definition.

---

The Android SDK has a base class for each type of component (Activity, Service, Receiver, and Provider), with callback methods that are invoked at various points in the life cycle of the associated component. Each component has a life cycle. Each component of an application is defined by

extending one of the base classes, and overriding the methods in that class. In particular:

1. The Activity class has methods that are run when activity is created, or activity calls some other activity, or returns to the activity.
  2. The Service class has methods that are run when the service is started, or some component binds to this service or even combination of both.
  3. The Receiver class has a method that is run when a message is sent to this receiver.
  4. The Provider class has methods to delete, query and update the data stored by this provider.
- 
- A. \_\_\_\_\_ – in order to use its functionality, you need to invoke its start method. It has the ability to link itself with other components.
  - B. \_\_\_\_\_ – its main purpose is to store, read, modify and destroy data.
  - C. \_\_\_\_\_ – it invokes its methods in the moment of instantiation, during which other objects of this class can be referenced as well.
  - D. \_\_\_\_\_ – in order to invoke its method we have to send some information to it.

## Fill the gaps in the text below using provided words. Be careful, there are two extra words.

---

- suspicious,
- open-source,
- core features,
- technology,
- vulnerability,
- meteor pace,
- analysis,
- downloads,
- layered, malware

In the advancing world of \_\_\_\_, Mobile applications are a rapidly growing segment of the global mobile market. Mobile applications are evolving at a \_\_\_\_ to give users a rich and fast user experience. In this paper, Android mobile platform for the mobile application development, \_\_\_\_ layered approach and the details of security information for Android is discussed. Google released Android which is an \_\_\_\_ open-source mobile phone operating system with Linux-based platform. It consists of the operating system, middleware, and user interface and application software. Certainly, Android is about to become the most widely used OS on mobile phones, but with Android comes a security \_\_\_\_ that few users take into account. On Android Market, where you can download thousands of applications for Android, anyone can upload their programs without having to submit them to careful security checks. This makes Android a prime target for computer criminals. In this paper, we discuss a layered approach for android application development where we can

develop application which \_\_\_\_ data from the server. Also an Android Application Sandbox (AASandbox) which is able to perform both static and dynamic \_\_\_\_ on Android programs to automatically detect \_\_\_\_ applications is also discussed.

## **Given the text below. Assert if the sentences are true or false**

---

### **SECURITY ISSUES RELATED TO ANDROID PLATFORM**

The integrity of the Android platform is maintained through a variety of security measures.

#### **A. Applications as Operating System User**

Each and every application is a user using the operating system. When an application is installed, the operating system creates a new user profile associated with the application. Each application runs as a different user, with its own private files on the file system, a user ID, and a secure operating environment. The application executes in its own process with its own instance of the Dalvik VM and under its own user ID on the operating system.

#### **B. Explicitly Defined Application Permission**

When an Android requires explicitly defined application permissions in the manifest file. To access shared resources on the system, Android applications register for the specific privileges they require. While developing the application required permissions should be specified in Android manifest file. For example if the phone vibration functionality is required then it must be specified in the android manifest file. While installing the application it shows the list of resources that the application is going to access. Some of these privileges enable the application to use phone functionality to make calls, access the network, and control the camera and

other hardware sensors. Applications also require permission to access shared data containing private and personal information such as user preferences, user's location, and contact information. Applications might also enforce their own permissions by declaring them for other applications to

use. The application can declare any number of different permission types, such as read-only or read-write permissions, for finer control over the application.

#### **C. Limited Ad-Hoc Permissions**

Content providers might want to provide some on-the-fly permissions to other applications for specific information they want to share openly. This is done using ad-hoc granting and

revoking of access to specific resources using Uniform Resource Identifiers (URIs). URIs points to specific data

assets on the system, such as MediaStore, Contacts, CallLog etc. Here is an example of a URI that provides the phone numbers of all contacts: content://contacts/phones.

#### **D. Application Signing for Trust Relationships**

All Android applications packages are signed with a certificate, so users know that the application is authentic. The private key for the certificate is held by the developer. This helps establish a trust relationship between the developer and

the user. It also allows the developer to control which applications can grant access to one another on the system. No certificate authority is necessary; self-signed certificates are acceptable.

1. Each instance of the application runs as separate process
2. Each application is using one system-wide instance of Dalvik VM
3. Application can access any resource that system provides
4. Application can define its own permissions, which grant access to its resources for other applications to use
5. Application can not grant permissions temporarily
6. User can install application that does not have certificate
7. Android operation system have to grant the access to user's location

## Match the phrases with their meanings.

---

1. Preparing a test schedule
  2. Choosing the test tools
  3. Preparing version control procedures
  4. Preparing reporting procedures
  5. Reviewing / approving the plan
- A. They play an important role in creating a more accurate and fast software product by providing an automation approach especially on large projects.
- B. Its purpose is to reporting the testing process in the direction of the objectives, the testing issue, problems, and interests of the report.
- C. It should be created to included test steps, targeted beginning and ending dates and responsibilities.
- D. The purpose of this task is to develop, to agree on the project sponsor, and to accept the test plan.
- E. The only method of defining each software component is by project tagging. Delivery and level numbers such as 1.1, 1.2 are given in each arrangement of software components.

## Fill in the gaps with the given words.

---

- Software testing process,
- determine,
- quality team,
- effectiveness,
- test cases

1. \_\_\_\_ consists of a series of actions that were planned, enforced, and the results recorded and documented.
2. In the first phase of the testing process of software projects, software requirements are reviewed, and the basic requirements for testing are performed by software \_\_\_\_.
3. The \_\_\_\_ are usually prepared by the quality team manually or in some cases, automated test cases are formed.
4. Software testing process is performed to \_\_\_\_ defects and errors in software and it can be realized manual or automated.
5. Test process development is important for the continuous development of the test process, which will increase the \_\_\_\_ of test groups.

## Read a definition and choose correct word

---



1. A light that gets emitted in a specific direction. This light will behave as though it is infinitely far away and the rays produced from it are all parallel. **(spotlight/directional light/sky light/ambient light)**
2. Can grow or increase very rapidly. Connected with mathematical function describing making repeated multiplication. **(exponential/logarithmic/linear/parabolic)**
3. Visual perception in which a source appears to be emitting or reflecting light. **(contrast/diffusion/occlusion/brightness)**
4. The relation of substance's mass or weight to its volume. **(capacity/density/torque/weight)**

## Choose a word from list and fill gaps in following sentences:

---

- vivid,
- polygon,
- shadow,
- tinted,
- tweaking

1. When a Earth cast \_\_\_\_ onto a Moon, there is occurring a lunar eclipse.
2. Inside gloomy areas there is no occasion to see \_\_\_\_ colors.
3. Cars with \_\_\_\_ glass is often used by very important people like politicians.
4. He spends all of his hours in the studio \_\_\_\_ things.
5. Object can contain a couple of \_\_\_\_ meshes with low number of faces.

## Join matching words from the group 1 with words from the group 2:

---

Group 1:

- chemical,
- cell,
- molecue,
- directed,
- traveling,

Group 2:

- graph,
- differentiation,
- reaction,
- manipulation,
- salesman problem