Started on	
State	Finished
Completed on	
Time taken	
Grade	13.0 out of 13.0 (100%)

Question 1
Correct
Mark 1.0 out of 1.0

A broadcast receiver is:

Select one:
- a message that can be sent by the Android operating systems or any application and can be received by only one activity.
- a message that can only be sent by the Android operating system and that can be received by only one activity.
- I do not want to answer (no penalty)
- a message that can be sent by the Android operating system or by an application and that once received by one application can be received by other applications.
- a message that can be sent by the Android operating system or by an application and that once received by one application cannot be received by other applications.

A sua resposta está correta.
The correct answer is: a message that can be sent by the Android operating system or by an application and that once received by one application can be received by other applications.

Question 2
Correct
Mark 1.0 out of 1.0

The principle of least privilege asserts that:

Select one:
- applications can only access resources (hardware or data) that are requested in the manifest.
- applications can only access resources (hardware or data) for which the user granted privileges at installation time.
- activities which have higher priority than services which have higher priority than applications.
- applications should only use the lowest hardware permissions required to execute the task.
- I do not want to answer (no penalty)

A sua resposta está correta.
The correct answer is: applications can only access resources (hardware or data) for which the user granted privileges at installation time.

Question 3
Correct
Mark 1.0 out of 1.0

An explicit intent is:

Select one:
- a message to start a new specific Activity class in another running application.
- a message to start a new specific Activity class within the same application.
- I do not want to answer (no penalty)
- a long running computation executed in the background.
- a message that is explicitly received by all applications on the device.

A sua resposta está correta.
The correct answer is: a message to start a new specific Activity class within the same application.

Question 4
Correct
Mark 1.0 out of 1.0

Which of the following instructions sends an implicit intent?

Select one:

B.
```
Intent intent = new Intent(this, SignInActivity.class);
startActivity(intent);
```
I do not want to answer (no penalty)

A.
```
public void onCreate(Bundle SavedInstanceState) {
    super.onCreate(savedInstanceState);
}
```
D.
```
public void pickImage(View View) {
Intent intent = new Intent();
intent.setType("image/*");
intent.setAction(Intent.ACTION_GET_CONTENT);
intent.addCategory(Intent.CATEGORY_OPENABLE);
startActivityForResult(intent, REQUEST_IMAGE_PICK)
}
```
C.
```
Intent intent=new Intent(Intent.ACTION_VIEW);
intent.setData(Uri.parse("http://www.123.com"));
startActivity(intent);
```
F. Both C and D
G. None of the others
E. Both A and C

A sua resposta está correta.
The correct answer is: F. Both C and D

Question 5
Correct
Mark 1.0 out of 1.0

Using applications that are deployed as signed code and verifying their signature on our device means that:

Select one:
- I do not want to answer (no penalty).
- A. No viruses were added to these application since they were packaged by the application store.
- D. These applications cannot be copied while being transferred from a server on an open network.
- C. These applications were not changed since they were packaged (in an apk file, for example) by someone with a known digital identity.
- B. These applications come from a trusted person whose real-world identity is guaranteed by a certificate.
- E. Both C and D.

A sua resposta está correta.
The correct answer is:
C. These applications were not changed since they were packaged (in an apk file, for example) by someone with a known digital identity.

Question 6
Correct
Mark 1.0 out of 1.0

In context-aware systems, where would you place a context information inference component for maximum reusability?

Select one:
- I don't want to answer (no penalty)
- Integrated with the sensor
- In a cloud server
- In the application
- In the network
- In a middleware layer

A sua resposta está correta.
The correct answer is: Integrated with the sensor

Question 7
Correct
Mark 1.0 out of 1.0

In case a programmer has the option of using both physical or virtual sensors to detect context information around the device which should she try to use and why?

Select one:
- Virtual sensors because they provide digital data that does not need to be converted and is easier to use.
- Physical sensors because they provide analog measurements that are more precise.
- virtual sensors because they are always faster.
- I do not want to answer (no penalty)
- Physical sensors because they acquire context information from the real world.

A sua resposta está correta.
The correct answer is: Virtual sensors because they provide digital data that does not need to be converted and is easier to use.

Question 8
Correct
Mark 1.0 out of 1.0

Label the sensor type as a physical or virtual sensors:

Thermometer
Application usage
retina scanner
GPS
Networked calendar system

A sua resposta está correta.
The correct answer is: Thermometer → physical sensor, Application usage → virtual sensor, retina scanner → physical sensor, GPS → physical sensor, Networked calendar system → virtual sensor

Question 9
Correct
Mark 1.0 out of 1.0

A partial replica of an data item collection:

Select one:
- Contains all of collection but allows writing only on part of the replica.
- Contains all of collection but allows reading only on part of the replica.
- It is a replica for partially connected devices.
- I do not want to answer (no penalty)
- Allows both reading and writing on a subset of the data item collection.

A sua resposta está correta.
The correct answer is: Allows both reading and writing on a subset of the data item collection.

Question 10
Correct
Mark 1.0 out of 1.0

When we cache data from a remote server on a mobile device, we typically assume that:

Select one:
- E. The cache will speed up write operations.
- D. The cache may speed up read operations.
- F. Both B and D
- C. Read and Write operations can be performed locally.
- G. Both B and E
- A. Certain data items are preloaded in the cache.
- I do not want to answer (no penalty)
- B. The cache may deleted (flushed) at some point and restart from scratch.

A sua resposta está correta.
The correct answer is: F. Both B and D

Question 11
Correct
Mark 1.0 out of 1.0

In standard GPS, why are 4 (and not 3) the minimum number of satellites needed to establish the position of a GPS receiver?

Select one:
- C. Because triangulation always has to be done in relation to an even number of positions.
- A. To account for uncertainty in the satellites' position.
- B. Because the distance at which the satellites orbit the earth is unknown.
- E. Both A and B
- D. To correct errors due to the varying signal propagation speed through the ionosphere.

A sua resposta está correta.
The correct answer is: D. To correct errors due to the varying signal propagation speed through the ionosphere.

Question 12
Correct
Mark 1.0 out of 1.0

Real Time Differential GPS is an to GPS that provides

Users of real time differential GPS receive that were calculated at nearby ground stations.

This system's client devices additional communication hardware to receive the ground station information.

A sua resposta está correta.
The correct answer is:
Real Time Differential GPS is an [extension] to GPS that provides [higher precision].
Users of real time differential GPS receive [error corrections] that were calculated at nearby ground stations.
This system's client devices [require] additional communication hardware to receive the ground station information.

Question 13
Correct
Mark 1.0 out of 1.0

If the GPS system already has ground stations feeding corrections to the sattelite constellation, what is the need for differential GPS?

Select one:
- GPS ground stations are able to communicate with GPS satellites. Differential GPS stations are able to communicate with GPS user devices.
- Differential GPS stations calculate local corrections to the GPS position related to the atmosphere that are more specific than those one would get from GPS ground stations.
- I do not want to answer (no penalty)
- GPS ground stations are not reachable by all devices. Differential GPS provides additional positions on the globe.
- Differential GPS is unrelated to corrections. It provides the difference (distance) between GPS enabled devices.

A sua resposta está correta.
The correct answer is: Differential GPS stations calculate local corrections to the GPS position related to the atmosphere that are more specific than those one would get from GPS ground stations.