

Feedback — Week 4 Quiz

[Help](#)

You submitted this quiz on **Wed 14 Jan 2015 8:09 PM PST**. You got a score of **24.50** out of **29.00**. However, you will not get credit for it, since it was submitted past the deadline.

Question 1

Which of the following are benefits of the AsyncTask framework compared with the HaMeR framework, according to the video:

Your Answer	Score	Explanation
<input checked="" type="checkbox"/> The AsyncTask framework doesn't require concurrent application developers to explicitly manipulate Threads, Handlers, Messages, or Runnables.	✓ 1.00	
<input type="checkbox"/> Users of the AsyncTask framework must have a deep understanding the patterns that guide the structure of and interactions between its classes	✓ 1.00	
<input checked="" type="checkbox"/> The tight integration of classes in the AsyncTask framework simplifies its usability by reducing the "surface area" of its interface.	✓ 1.00	
<input type="checkbox"/> The loose integration of classes in the AsyncTask framework simplifies its usability by reducing the "surface area" of its interface.	✓ 1.00	
Total	4.00 / 4.00	

Question Explanation

Please see video S1-M3-P6 The AsyncTask Framework (Part 1)

Question 2

Which of the following are hook methods invoked by a template method in the AsyncTask framework, according to the video:

Your Answer		Score	Explanation
<input type="checkbox"/> execute()	✓	1.00	
<input checked="" type="checkbox"/> onPostExecute()	✓	1.00	
<input checked="" type="checkbox"/> doInBackground()	✓	1.00	
<input checked="" type="checkbox"/> onCancelled()	✓	1.00	
Total		4.00 / 4.00	

Question Explanation

Please see video S1-M3-P6 The AsyncTask Framework (Part 1)

Question 3

Which of the following patterns are commonly used by black-box frameworks, according to the video:

Your Answer		Score	Explanation
<input type="checkbox"/> Decorator	✗	0.00	
<input type="checkbox"/> Template Method	✓	1.00	
<input checked="" type="checkbox"/> Strategy	✓	1.00	
<input type="checkbox"/> State	✓	1.00	
Total		3.00 / 4.00	

Question Explanation

Please see video S1-M3-P7 The AsyncTask Framework (Part 2)

Question 4

Which of the following are ways in which the AsyncTask framework extends the Template Method pattern, according to the video:

Your Answer	Score	Explanation
<input checked="" type="checkbox"/> It allows hook methods to run in different threads of control	✓ 0.75	
<input checked="" type="checkbox"/> It defers some steps in its concurrent processing algorithm to a subclass	✗ 0.00	
<input checked="" type="checkbox"/> It allows subclasses to override hook methods	✗ 0.00	
<input type="checkbox"/> It decouples interface from implementation so the two can vary independently	✓ 0.75	
Total	1.50 / 3.00	

Question Explanation

Please see video S1-M3-P7 The AsyncTask Framework (Part 2)

Question 5

Which of the following is the default behavior of AsyncTasks in recent versions of Android, according to the video:

Your Answer	Score	Explanation
<input checked="" type="checkbox"/> A single background thread in each process runs the all doInBackground() methods of AsyncTasks	✓ 1.00	
<input type="checkbox"/> A pool of threads run multiple AsyncTasks concurrently within a process to take advantage of multi-core chipsets	✓ 1.00	
Total	2.00 / 2.00	

Question Explanation

Please see video S1-M3-P7 The AsyncTask Framework (Part 2)

Question 6

Which of the following are benefits of white-box frameworks compared to black-box frameworks, according to the video:

Your Answer	Score	Explanation
<input type="checkbox"/> They are easier to configure and use since they are customized via self-contained plugins	✓ 1.00	
<input checked="" type="checkbox"/> They are easier to use since application developers must understand which hook methods to override	✗ 0.00	
<input checked="" type="checkbox"/> They are easier to develop since their their design needn't anticipate a wide range of use cases	✓ 1.00	
<input checked="" type="checkbox"/> They are easier to use since they apply common Gang-of-Four patterns	✗ 0.00	
Total	2.00 / 4.00	

Question Explanation

Please see video S1-M3-P7 The AsyncTask Framework (Part 2)

Question 7

Which of the following are the different ways of concurrently downloading an image shown in this video

Your Answer	Score	Explanation
<input checked="" type="checkbox"/> Posting and processing Runnables	✓ 1.00	
<input type="checkbox"/> Invoking remote method calls via the Binder	✓ 1.00	

<input checked="" type="checkbox"/> Sending and Handling Messages	✓	1.00
<input checked="" type="checkbox"/> Executing AsyncTasks	✓	1.00
Total		4.00 / 4.00

Question Explanation

Please see video S1-M3-P8 Programming with Android Concurrency Frameworks (Part 1)

Question 8

Which of the following are benefits of the AsyncTask framework relative to the HaMeR framework, according to the video:

Your Answer	Score	Explanation
<input checked="" type="checkbox"/> It is easy to use for both simple & complex concurrent applications	✓ 1.00	
<input type="checkbox"/> It enables interactions between multiple background threads	✓ 1.00	
<input checked="" type="checkbox"/> It enables relatively transparent scalability via its use of thread pool Executor	✓ 1.00	
<input type="checkbox"/> It incurs low overhead from synchronization, context switching, and data movement costs	✓ 1.00	
Total	4.00 / 4.00	

Question Explanation

Please see video S1-M3-P9 Programming with Android Concurrency Frameworks (Part 2)