

## Feedback — Week 3 Quiz

[Help](#)

You submitted this quiz on **Tue 13 Jan 2015 8:45 PM PST**. You got a score of **31.00** out of **32.00**. However, you will not get credit for it, since it was submitted past the deadline.

### Question 1

Which of the following are key differences between the HaMeR and AsyncTask frameworks, as discussed in this video:

Your Answer	Score	Explanation
<input checked="" type="checkbox"/> The classes in the HaMeR framework are loosely connected, whereas the classes in the AsyncTask framework are tightly connected.	✓ 1.00	
<input type="checkbox"/> The classes in the HaMeR framework are tightly connected, whereas the classes in the AsyncTask framework are loosely connected.	✓ 1.00	
<input checked="" type="checkbox"/> It's possible to use the AsyncTask framework without manipulating Threads, Handlers, Messages, or Runnables explicitly.	✓ 1.00	
<input type="checkbox"/> It's possible to use the HaMeR framework without manipulating Threads, Handlers, Messages, or Runnables explicitly.	✓ 1.00	
Total	4.00 / 4.00	

#### Question Explanation

Please see video S1-M3-P1 Overview of Android Concurrency Frameworks and Idioms

### Question 2

Which of the following are motivations for Android concurrency frameworks, according to the videos:

Your Answer	Score	Explanation
<input type="checkbox"/> They run short duration operations in background Threads and long duration operations in the UI Thread	✓ 1.00	
<input checked="" type="checkbox"/> They shield developers from tedious and error prone aspects of Android's design constraints	✓ 1.00	
<input type="checkbox"/> They improve application portability on different Java virtual machine implementations	✓ 1.00	
<input checked="" type="checkbox"/> They increase performance by overlapping communication and computation on multi-core platforms	✓ 1.00	
Total	4.00 / 4.00	

#### Question Explanation

Please see video S1-M3-P1 Overview of Android Concurrency Frameworks and Idioms

## Question 3

Which pattern(s) does the Looper apply to ensure there's only one Looper per Thread, according to the video

Your Answer	Score	Explanation
<input type="checkbox"/> The Guarded Suspension pattern	✓ 1.00	
<input type="checkbox"/> The Template Method pattern	✓ 1.00	
<input type="checkbox"/> The Active Object pattern	✓ 1.00	
<input checked="" type="checkbox"/> The Thread-Specific Storage pattern	✓ 1.00	
Total	4.00 / 4.00	

#### Question Explanation

Please see video S1-M3-P2 Android Looper

## Question 4

Which pattern(s) does the HandlerThread class use to create desired handlers by overriding the onLooperPrepared() hook method:

Your Answer	Score	Explanation
<input type="checkbox"/> The Active Object pattern	✓ 1.00	
<input type="checkbox"/> The Thread-Specific Storage pattern	✓ 1.00	
<input checked="" type="checkbox"/> The Template Method pattern	✓ 1.00	
<input type="checkbox"/> The Guarded Suspension pattern	✓ 1.00	
Total	4.00 / 4.00	

### Question Explanation

Please see video S1-M3-P2 Android Looper

## Question 5

Which of the following are capabilities a Handler provides to applications, according to the video

Your Answer	Score	Explanation
<input type="checkbox"/> Execute submitted Runnable tasks either sequentially or in a pool of Threads	✓ 1.00	
<input type="checkbox"/> Start & cancel an asynchronous computation, query to see if the computation is complete, and retrieve the result of the computation	✓ 1.00	
<input checked="" type="checkbox"/> Send Message Objects and/or post Runnable Objects to a Looper in the Handler's Thread	✓ 1.00	

☒ Collaborate with a Looper to serialize the processing of Messages within a Thread with which they are associated ✓ 1.00

Total 4.00 /  
4.00

#### Question Explanation

Please see video S1-M3-P3 Overview of Android Handler

## Question 6

Which of the following are key patterns supported by a Handler, according to the video:

Your Answer	Score	Explanation
<input checked="" type="checkbox"/> Active Object	✓ 1.00	
<input type="checkbox"/> Strategy	✓ 1.00	
<input type="checkbox"/> Guarded Suspension	✓ 1.00	
<input checked="" type="checkbox"/> Command Processor	✓ 1.00	
Total	4.00 / 4.00	

#### Question Explanation

Please see video S1-M3-P3 Overview of Android Handler

## Question 7

Which of the following capabilities of the Command Processor pattern are applied by the Android Handler class, as described in this video:

Your Answer	Score	Explanation
<input type="checkbox"/> Enables the allocation of a Message from a global pool, setting various fields of the Message, as designated by their parameters	✓ 1.00	

<input type="checkbox"/> Enables a Runnable to be processed in a different Thread than the client that posted the Runnable	✗	0.00
<input type="checkbox"/> Enables a Handler's handleMessage() hook method to be dispatched in a different Thread than the client that sent a Message	✓	1.00
<input checked="" type="checkbox"/> Enables a Runnable to be processed at a later time in the same Thread as the client that posted the Runnable	✓	1.00
Total		3.00 / 4.00

**Question Explanation**

Please see video S1-M2-P4 Posting and Processing Runnables with Android Handler

## Question 8

Which of the following are reasons why sending a Message to a Handler is more complicated than posting a Runnable to a Handler, according to the video:

Your Answer	Score	Explanation
<input checked="" type="checkbox"/> The Handler must be extended and its handleMessage() hook method overridden to process Messages it receives	✓ 1.00	
<input type="checkbox"/> The Handler's processing logic is localized at the point where the send() method is invoked	✓ 1.00	
<input type="checkbox"/> The Handler provides methods that allow programs to implement timing related behavior	✓ 1.00	
<input type="checkbox"/> The Handler defines methods that enable programs to use the Message Queue associated with a Thread's Looper.	✓ 1.00	
Total	4.00 / 4.00	

**Question Explanation**

Please see video S1-M2-P5 Sending and Receiving Messages with Android Handler

