Feedback — Week 2 Quiz

Help Center

You submitted this quiz on **Mon 6 Apr 2015 8:44 PM PDT**. You got a score of **32.00** out of **32.00**.

Question 1

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

Your Answer		Score	Explanation
☑ It's possible to use the AsyncTask framework without manipulating Threads, Handlers, Messages, or Runnables explicitly.	✔	1.00	
☐ The classes in the HaMeR framework are tightly connected, whereas the classes in the AsyncTask framework are loosely connected.	✔	1.00	
☐ It's possible to use the HaMeR framework without manipulating Threads, Handlers, Messages, or Runnables explicitly.	✔	1.00	
☑ The classes in the HaMeR framework are loosely connected, whereas the classes in the AsyncTask framework are tightly connected.	✔	1.00	
Total		4.00 / 4.00	

Question Explanation

Please see week #2 video on 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
☐ They run short duration operations in background Threads and long duration operations in the UI Thread	✔	1.00	
☑ They increase performance by overlapping communication and computation on multi-core platforms	✔	1.00	
☐ They improve application portability on different Java virtual machine implementations	✔	1.00	
☑ They shield developers from tedious and error prone aspects of Android's design constraints	✔	1.00	
Total		4.00 / 4.00	

Question Explanation

Please see week #2 video 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
☑ The Thread-Specific Storage pattern	✔	1.00	
☐ The Template Method pattern	✔	1.00	
☐ The Active Object pattern	✔	1.00	
☐ The Guarded Suspension pattern	✔	1.00	
Total		4.00 / 4.00	

Question Explanation

Please see week #2 video 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
☐ The Active Object pattern	✔	1.00	
☑ The Template Method pattern	✔	1.00	
☐ The Thread-Specific Storage pattern	✔	1.00	
☐ The Guarded Suspension pattern	✔	1.00	
Total		4.00 / 4.00	

Question Explanation

Please see week #2 video Android Looper

Question 5

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

Your Answer		Score	Explanation
☑ Collaborate with a Looper to serialize the processing of Messages within a Thread with which they are associated	✔	1.00	
☐ Execute submitted Runnable tasks either sequentially or in a pool of Threads	✔	1.00	
☑ Send Message Objects and/or post Runnable Objects to a Looper in the Handler's Thread	✔	1.00	

☐ Start & cancel an asynchronous computation, query to see if the computation is complete, and retrieve the result of the computation	✔	1.00
Total		4.00 / 4.00

Question Explanation

Please see week #2 video Overview of Android Handler and the HaMeR Framework

Question 6

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

Your Answer		Score	Explanation
☑ Active Object	✔	1.00	
☐ Guarded Suspension	✔	1.00	
☑ Command Processor	✔	1.00	
☐ Strategy	✔	1.00	
Total		4.00 / 4.00	

Question Explanation

Please see week #2 video Overview of Android Handler and the HaMeR Framework

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
☐ Enables the allocation of a Message from a global pool, setting various fields of the Message, as designated by their	✔	1.00	

parameters		
☐ Enables a Handler's handleMessage() hook method to be dispatched in a different Thread than the client that sent a Message	✔	1.00
☑ Enables a Runnable to be processed at a later time in the same Thread as the client that posted the Runnable	✔	1.00
☑ Enables a Runnable to be processed in a different Thread than the client that posted the Runnable	✔	1.00
Total		4.00 / 4.00

Question Explanation

Please see week #2 video 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
☐ The Handler provides methods that allow programs to implement timing related behavior	✔	1.00	
☐ The Handler's processing logic is localized at the point where the send() method is invoked	✔	1.00	
☑ The Handler must be extended and its handleMessage() hook method overridden to process Messages it receives	✔	1.00	
☐ 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 week #2 video Sending and Receiving Messages with Android Handler