

## Feedback — HW5 Quiz: Review

You submitted this quiz on **Fri 26 Jul 2013 7:55 AM SGT (UTC +0800)**. You got a score of **15.60** out of **18.00**. You can [attempt again](#), if you'd like.

### Question 1

The following questions review content in Lectures 1-8, with a particular focus on Lectures 2, 3, 4a, 4b, 7, and 8. The HTML/CSS content from Lecture 6 and the git content from Lecture 7 are treated in separate quizzes.

First question: Which of the following is an example of Infrastructure-as-a-Service (IAAS)?

Your Answer	Score	Explanation
<input type="radio"/> Gravatar		
<input checked="" type="radio"/> AWS	✓ 1.00	
<input type="radio"/> Stripe		
<input type="radio"/> Github		
<input type="radio"/> Heroku		
Total	1.00 / 1.00	

### Question 2

Which of the following is an example of Platform-as-a-Service (PAAS)?

Your Answer	Score	Explanation
<input type="radio"/> Gravatar		
<input type="radio"/> AWS		
<input type="radio"/> Stripe		
<input type="radio"/> Github		
<input checked="" type="radio"/> Heroku	✓ 1.00	

Total

1.00 / 1.00

## Question 3

Which of the following are accurate statements about git vs. Github?

Your Answer	Score	Explanation
<input checked="" type="checkbox"/> You can use git without Github.	✓ 0.20	
<input type="checkbox"/> Github is a command line tool, while git is a cloud service	✓ 0.20	
<input checked="" type="checkbox"/> You can simultaneously use Github and other hosts like Bitbucket or Google Code for your git repositories, due to git's distributed version control model	✓ 0.20	
<input checked="" type="checkbox"/> git is a free open-source project, while Github is a freemium service provided by a technology company	✓ 0.20	
<input checked="" type="checkbox"/> git is a command line tool, while Github is a cloud service	✓ 0.20	
Total	1.00 / 1.00	

## Question 4

Which statements are generally true about IAAS?

Your Answer	Score	Explanation
<input checked="" type="checkbox"/> An IAAS service allows you to provision, tear down, and set up new virtual machines programmatically	✓ 0.20	
<input type="checkbox"/> An IAAS service provides a blackbox deployment API that "just works" to get your site on the web, without giving much access to internal details	✓ 0.20	
<input type="checkbox"/> An IAAS service asks the end user to do less configuration than a PAAS service, at the expense of less flexibility	✓ 0.20	
<input checked="" type="checkbox"/> An IAAS service must provide access to	✗ 0.00	This is not true. Windows

Linux virtual machines in the cloud

Azure provides access to Windows instances, and Linux per se is not a requirement for IAAS.

☒ An IAAS service provides command line and/or root access to its machines. ✓ 0.20

Total 0.80 / 1.00

## Question 5

Which statements are generally true about PAAS?

Your Answer	Score	Explanation
<input checked="" type="checkbox"/> A PAAS service usually stipulates conventions for how your source code should be laid out to facilitate deployment	<span style="color: green;">✓</span> 0.20	
<input checked="" type="checkbox"/> A PAAS service usually provides a blackbox deployment API that "just works" to get your site on the web, without giving much access to internal details	<span style="color: green;">✓</span> 0.20	
<input checked="" type="checkbox"/> A PAAS service asks the end user to do less configuration than a IAAS service, at the expense of less flexibility	<span style="color: green;">✓</span> 0.20	
<input type="checkbox"/> An PAAS service must provide access to Linux virtual machines in the cloud	<span style="color: green;">✓</span> 0.20	
<input type="checkbox"/> A PAAS service encourages low-level control over every aspect of your deployment servers	<span style="color: green;">✓</span> 0.20	
Total	1.00 / 1.00	

## Question 6

What are true statements about Linux and Unix?

Your Answer	Score	Explanation
<input type="checkbox"/> Linux is the same as Berkeley Software Distribution (BSD)	<span style="color: green;">✓</span> 0.20	
<input checked="" type="checkbox"/> Linux is a free, open source operating system	<span style="color: green;">✓</span> 0.20	

<input type="checkbox"/> Linux is a free, open-source operating system	✓	0.20
<input checked="" type="checkbox"/> The Android OS is based on Linux	✓	0.20
<input type="checkbox"/> Linux is a feat of reverse engineering of AT&T's proprietary Unix OS, compliant with the POSIX standard (see <a href="#">here</a> )	✗	0.00
<input checked="" type="checkbox"/> Linux shares no direct code with Unix (as <a href="#">established</a> definitively by the SCO Lawsuit)	✓	0.20
Total		0.80 / 1.00

## Question 7

Which are valid reasons for AWS to use virtual machines for EC2 rather than give direct access to physical servers?

Your Answer	Score	Explanation
<input type="checkbox"/> Primarily historical reasons	✓ 0.20	
<input checked="" type="checkbox"/> Using VMs provides a layer of safety between the physical machine and untrusted user code	✓ 0.20	
<input type="checkbox"/> Virtual machines have better performance than physical servers	✓ 0.20	
<input checked="" type="checkbox"/> VMs can allow partitioning of the same underlying 8-CPU hardware into 1, 2, 4, 8, or possibly more separate instances, thereby increasing utilization	✓ 0.20	
<input checked="" type="checkbox"/> Virtual machines can be more easily wiped and restored	✓ 0.20	
Total	1.00 / 1.00	

## Question 8

What are STDIN, STDOUT, and STDERR?

Your Answer	Score	Explanation
<input type="checkbox"/> Special environmental variables used to configure a Unix command line's behavior	✓ 0.20	

<input type="checkbox"/> Unix programming conventions that are guidelines rather than rules	✓	0.20
<input type="checkbox"/> Unix-specific file formats, like XLS or PDF	✓	0.20
<input checked="" type="checkbox"/> The conventional ways to pipe data into a Unix command line program, to output data, and to output any error messages	✓	0.20
<input checked="" type="checkbox"/> The three standard streams that Unix programs use to receive and send information to their environment	✓	0.20
Total		1.00 / 1.00

## Question 9

What is an advantage of the screen command line tool?

Your Answer	Score	Explanation
<input type="radio"/> It is a powerful tool for on-screen graphics and parallel processing		
<input type="radio"/> It creates a remote terminal which is identical to your local terminal		
<input type="radio"/> It screens incoming connections for bad packets, like a firewall		
<input type="radio"/> It makes copy/pasting of text from a terminal window easier		
<input checked="" type="radio"/> It allows you to edit code on a remote machine, disconnect, and resume where you left off	✓ 1.00	
Total	1.00 / 1.00	

## Question 10

Why is it better to edit code with a text editor like emacs or vim than a WYSIWYG word processor like MS Word?

Your Answer	Score	Explanation
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<input type="checkbox"/> Strong REPL integration in MS Word	✓	0.20
<input checked="" type="checkbox"/> A word processor is primarily intended to produce documents which are read by humans, while a text editor is capable of producing documents that are read by machines	✓	0.20
<input type="checkbox"/> Because emacs and vim are commercial programs supported by large companies, unlike MS Word	✓	0.20
<input type="checkbox"/> Historical convention on the part of programmers	✓	0.20
<input checked="" type="checkbox"/> A word processor will not show you the raw characters which you are editing, but these can be important for computer programming	✓	0.20
Total		1.00 / 1.00

## Question 11

Why do we include "staging" in the dev/staging/production flow?

Your Answer	Score	Explanation
<input type="radio"/> To slow down experienced developers		
<input type="radio"/> Purely historical reasons		
<input type="radio"/> As a staging area for sharing and exchanging code from multiple engineers		
<input checked="" type="radio"/> To be compatible with git's concept of a staging area	✗ 0.00	
<input type="radio"/> Because the dev environment is not exactly the same as the production environment, while staging is		
Total	0.00 / 1.00	

## Question 12

Which of these are disadvantages of editing code directly on a live server, and using the deployment server as the sole source code repository?

Your Answer	Score	Explanation
<input checked="" type="checkbox"/> Inability to do A/B testing	✓ 0.20	
<input checked="" type="checkbox"/> Inability to rollback buggy features	✓ 0.20	
<input type="checkbox"/> Redundancy and duplication of source code	✓ 0.20	
<input checked="" type="checkbox"/> Contention if multiple engineers try to edit the site at the same time	✓ 0.20	
<input checked="" type="checkbox"/> Lack of source code backups	✓ 0.20	
Total	1.00 / 1.00	

## Question 13

Roughly what percentage of the world has smartphones as of June 2013, according to Mary Meeker's Internet Trends presentation?

Your Answer	Score	Explanation
<input type="radio"/> 50%		
<input type="radio"/> 10%		
<input type="radio"/> 70%		
<input checked="" type="radio"/> 20%	✓ 1.00	
<input type="radio"/> 5%		
Total	1.00 / 1.00	

## Question 14

What's Apple's primary monetization channel for mobile devices?

Your Answer	Score	Explanation
<input type="radio"/> iOS developer licensing fees		
<input type="radio"/> iTunes		

<input type="radio"/> iAds		
<input type="radio"/> Hardware sales of iPhones and iPads		
<input checked="" type="radio"/> The App Store	✗	0.00
Total		0.00 / 1.00

## Question 15

What's Google's primary monetization channel for mobile devices?

Your Answer	Score	Explanation
<input type="radio"/> Android developer licensing fees		
<input type="radio"/> Hardware sales of Android devices		
<input type="radio"/> Gmail		
<input checked="" type="radio"/> Mobile advertising	✓	1.00
<input type="radio"/> Google Play		
Total		1.00 / 1.00

## Question 16

Which of the following are true statements about Android and ChromeOS?

Your Answer	Score	Explanation
<input checked="" type="checkbox"/> Android is based on a model of significant native-client-centric computation and storage/state, while ChromeOS is based on an assumption of less powerful clients and cloud-centric computation	✓ 0.20	
<input type="checkbox"/> All Android apps only work online, while ChromeOS apps work offline.	✓ 0.20	
<input checked="" type="checkbox"/> As of mid-2013, there are many more devices running Android than ChromeOS	✓ 0.20	
<input type="checkbox"/> All ChromeOS apps only work online, while Android apps work offline.	✓ 0.20	Some ChromeOS



apps can use local storage for offline mode. See [here](#).

☒ Android apps are written in Java while ChromeOS apps are written in Javascript. ✓ 0.20

Total 1.00 / 1.00

## Question 17

Which of the following are examples of "Internet of Things" technologies?

Your Answer	Score	Explanation
<input checked="" type="checkbox"/> A parking meter which you can pay through a web dashboard	<span style="color: green;">✓</span> 0.20	
<input checked="" type="checkbox"/> A smartphone-controlled lock	<span style="color: green;">✓</span> 0.20	
<input checked="" type="checkbox"/> A self-driving car which receives maps and data from the internet	<span style="color: green;">✓</span> 0.20	
<input checked="" type="checkbox"/> A pressure-sensitive egg tray which reports the numbers of eggs via API (See <a href="#">here</a> . Might actually be useful for large restaurants.)	<span style="color: green;">✓</span> 0.20	
<input checked="" type="checkbox"/> An electronic whiteboard that uploads your drawings to a cloud folder	<span style="color: green;">✓</span> 0.20	
Total	1.00 / 1.00	

## Question 18

Which of the following are examples of "Quantified Self" technologies?

Your Answer	Score	Explanation
<input type="checkbox"/> A qualitative diagnosis by an expert physician	<span style="color: green;">✓</span> 0.20	
<input checked="" type="checkbox"/> An internet-connected blood glucose monitor	<span style="color: green;">✓</span> 0.20	

<input checked="" type="checkbox"/> A scale which uploads your weight to a personal cloud service	✓	0.20
<input checked="" type="checkbox"/> A wearable armband that acts as a sleep tracker and pedometer	✓	0.20
<input checked="" type="checkbox"/> A device which you press to your temple to read and transmit your vital signs	✓	0.20
Total		1.00 / 1.00