Quiz 2

This quiz is closed book, closed notes. You have 50 minutes to complete it.

Your name: ____________________________________________________________

Course: ___ 6.813U ___6.831G

1. (6pts) Which of the following colors have zero saturation? (check all that apply)

   _X_ black
   _X_ gray
   ___ green
   ___ orange
   ___ red
   _X_ white

2. (4pts) Red text on a blue background is a bad color combination because of (check all that apply):

   _X_ chromatic aberration
   ___ color blindness
   ___ the weak response of L cones
   ___ tritanopia

3. (5pts) The white space of a paragraph of text is affected by (check all that apply):

   _X_ justification
   _X_ kerning
   _X_ leading
   ___ m width
   _X_ margins
4. (3pts) When you choose a font like “10-point Times New Roman”, the “10-point” refers to: (choose the best letter)
   ___B___
   A. distance between baselines
   B. distance from the bottom of a descender to the top of an ascender
   C. height of a capital letter
   D. m-width
   E. x-height

5. (5pts) Java layout managers are useful for (check all that apply):
   ___ consistent button sizes throughout an interface
   ___ internationalization
   ___ mouse capture
   ___ portability to other operating systems
   ___ window resizing

6. (5pts) Which of the following are likely reasons why a GUI toolkit like Java Swing does not promise to be threadsafe? (check all that apply)
   ___ automatic layout
   ___ coarse-grained locking
   ___ race conditions
   ___ redraw algorithm
   ___ timers are not accurate

7. (5pts) Designing for accessibility generally includes (check all that apply):
   ___ color choices  (color blindness)
   ___ keyboard shortcuts  (blind users)
   ___ labels for textboxes  (screen readers)
   ___ language translation
   ___ visual layout  (screen readers)

8. (4pts) Ben Bitdiddle has been asked to help internationalize a user interface. He may have to change (check all that apply):
   ___ automatic layout rules
   ___ images containing no text  (e.g. arrows reversed for right-to-left languages)
   ___ images containing text
   ___ menu labels
9. (4pts) Feedback animation in response to a model change should (check all that apply):

___ be at most 100 milliseconds long  
___ be designed to avoid motion blur  
___ be implemented using a timer  
___ have a cancel button  

10. (4pts) Louis Reasoner notices that his user interface intermittently stops responding to the mouse while it’s downloading files in the background. Of the following techniques that he could be using to implement the background task, which could be responsible for this problem? (check all that apply)

___ blocking I/O calls  
___ deadlocking  
___ idle time in the event loop  
___ timers (timers are called in the event loop too)  

11. (5pts) A good heuristic evaluation should generally include (check all that apply):

___ efficiency measurements  
___ estimates of severity  
___ principles of user interface design  
___ screenshots  
___ users from the target user population  

12. (4pts) A good evaluation technique for learnability is (choose best letter):

___ A __
    A. contextual inquiry  
    B. formative user testing  
    C. heuristic evaluation  
    D. KLM  

13. (4pts) A good prototyping technique for evaluating efficiency is (choose best letter):

___ A __
    A. computer prototype  
    B. paper prototype  
    C. scenario  
    D. task analysis  
    E. Wizard of Oz
14. (4pts) Cognitive walkthrough is designed for evaluating (choose best letter):

_D_

- A. accessibility
- B. efficiency
- C. errors
- D. learnability
- E. satisfaction

15. (8pts) Suppose you are designing a board game in which the game pieces are represented by pixel images that the user can drag around. You are trying to decide whether to use GIF (G), PNG (P), or JPEG (J) to store those images. For each of the properties below, write the letters (G, P, and/or J) of all the image formats that would be acceptable for that property.

___G,P______ game pieces are round  (requires transparency)
___P,J_______ game pieces are photos of actual objects  (requires depth of color)
___P________ game pieces have antialiased edges  (requires true alpha channel)
___G________ game pieces show animated feedback when mouse hovers over them

END OF QUIZ