

Name \_\_\_\_\_

# **DMS 103 Spring 2013**

## **MIDTERM**

### **Multiple Choice (2.5pts Each)**

1. Which of the following is FALSE?
  - a. Consistency is one of the six usability goals discussed in class.
  - b. An assumption is when we take something for granted when we shouldn't.
  - c. The user is not always right.
  - d. Paradigms allow designers to leverage the fact that people are used to doing things a certain way.
  - e. None of the above.
  
2. Which of the following is FALSE?
  - a. The main purpose of an error message is to inform about a problem.
  - b. The most common form of triangulation is methodological triangulation.
  - c. The think-aloud technique isn't appropriate for observation in the field.
  - d. Externally visible factors play a central role when creating and choosing design alternatives.
  - e. None of the above.
  
3. Which of the following is NOT one of the four main approaches to interaction design discussed in class?
  - a. Activity-centered design
  - b. User-centered design
  - c. Context-centered design
  - d. Systems design
  - e. All of the above are one of the approaches
  
4. Which of the following methods can we use to aid recall?
  - a. Autofill when someone starts typing something into a search bar.
  - b. Limit the number of menu options.
  - c. Limit the number of tabs at the top of a webpage.
  - d. Provide visual cues.
  - e. None of the above.

## Short Answer

5. (5 pts) What are the two types of evaluation called?
6. (5 pts) What is the difference between a use case and an essential use case?
7. (6 pts) Give two conflicts that could arise between different usability goals.
8. (6 pts) Give two conflicts that could arise between different user experience goals.
9. (6 pts) Give two potential tradeoffs between different design principles.
10. (3 pts) Give an example of when we would want inconsistency.
11. (10 pts) For five of the Gestalt Laws, draw or give an example.
12. (12 pts) You have been hired to make an educational tool for children to teach them about dinosaurs. Explain what types of interfaces and interactions your system would support, and why you chose to use these interfaces and interactions. You must include at least two of each.

13. (7.5 pts) You are testing out a new high-tech scuba suit. You get the following volunteers. What would be your strategy for selecting participants if you decided to do convenience sampling? Let's say you only needed six people. What would be your strategy for selecting them using random sampling? Using stratified sampling?



<http://starwars.wikia.com/wiki/Stormtrooper>,  
<http://kotaku.com/5650591/then-why-we-still-got-ewoks>,  
<http://simplicitymom.blogspot.com/2011/10/fishing-for-wookie.html>

## Long Example

Use the following information for the rest of the problems:



<http://disney.go.com/disneyvideos/animatedfilms/pooh/classics/honeytree.html>

Winnie the Pooh is a bear that lives in the woods and has many woodland friends, including Piglet the piglet, Eeyore the donkey, Kanga the kangaroo, Roo the kangaroo, Rabbit the rabbit, Tigger the tiger, and Owl the owl.

Pooh is a honey-loving bear, but hunting down beehives for honey is a sticky business. He needs your help! Pooh could really use a phone app to help him find beehives and acquire honey.

14. You plan to conduct an interview with Winnie the Pooh to help start developing the requirements for such a product.
  - a. (3 pts) How will you record the interview data? Why? Are there any drawbacks to this/these techniques? If so, what are they?
  - b. (5 pts) Suggest five questions for a semi-structured interview and indicate whether they are open or closed.

15. (9 pts) Pick an activity that Pooh currently performs. It does not have to have anything to do with finding honey. List 3 conflicts based on Engestrom's activity system model, which we discussed in class. (HINT: The diagram for this model is in the form of a triangle.)
16. (7.5 pts) Give an example of a primary, secondary, and tertiary user of your application.
17. (5 pts) To test your application, would you use a low-fidelity or high-fidelity prototype? Give two reasons as to why you would choose to use one over the other.

**Extra Credit**

(+0.5 pts) Draw a picture of Mario.