1. You notice a biker with a disability using a reclining bike. You approach your boss about adding people with disabilities to the study, and they refuse because they believe it will be onerous and expensive. What ethical principle is violated if you agree with your boss?

#### Beneficence

- Value of research higher than risks
- Do no harm

## Respect for Persons

- Fully informed of intent and purpose
- Informed consent
- May opt out at any time, for any reason

### **Justice**

- Equitable, representative selection of participants
- The participant selection is not representative of the population

#### All of the above

- 2. Your boss wants you to create a custom, 3D printed go-pro mount because this will "put you ahead of the curve" (their words, not mine!). However you have some concerns about whether this makes sense. Why is this not as good a solution as bulk manufacturing a mount?
  - Difficult to Model
  - Quality of print
  - Strength of print
  - Durability
- 3. Would you need a **fence or a snapshot** to implement the following? An interface that displays the **current** slope of the hill **based on the bike pedal sensor**: [pedalSensor]
  - Fence
  - Snapshot
- 4. Your boss wants you to run a user study. Your boss really wants to make sure that a lot of people participate and suggests several options.

"Participation in this study is optional, but if you don't participate it may be difficult to draw conclusions about whether bikers want this product". **Is this coercive?** 

- Coercive
- not coercive
- ambiguous
- Something Else

5. Which of the following models of human behavior explain how users might interact with these two keyboard popups. For a reminder, here are the models/"laws" of human behavior:

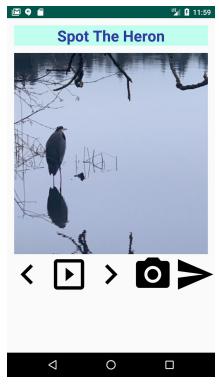




Fitts Law (distance and sized; expert errorless behavior)
Steering Law (distance and size over a path)
Cognitive modeling (expert behavior)

Gestalt Psychology (will they see it at all?)

6. What Application Design Principle is being used in the Spot the Heron interface?



Design Tip #1: Consistency is Critical

Design Tip #2: Use Affordances to minimize errors

Design Tip #3: Make the Conceptual Model Visible

None of them

- 7. Not many users know about the pop up special character menus on the apple or android device keyboards. Is this a problem because of the?
  - Gulf of Execution
  - Gulf of Evaluation
- 8. Which property would have a decreasing effect on the Index of Difficulty (ID) according to Fitts' Law on a phone screen?



- Distance (D)
- Size (W)
- Both
- Neither
- 9. Which one is the correct order for part of the Experiment Design process?
  - Hypothesis, Design, Method, Analysis
  - Hypothesis, Run Study, Analysis, Conclusion
  - Design, Hypothesis, Collect, Analysis
  - Hypothesis, Method, Data, Analysis

# 10-12. Please help me think about 3 fun ones 😜

- 10. Which Zoom "crime" have you committed?
  - Sharing the wrong screen
  - Sending a public message when it was meant to be private (or vice versa)
  - Forgetting to start the recording
  - Forgetting to mute your mic
  - Forgetting to turn off video
- 11. How many times has the word "you" appeared in this Kahoot so far? (Including this question)
  - 10
  - 11
  - 15
  - 17

12.