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Module 4 Quiz

LATEST SUBMISSION GRADE

100%

1. Which description best describes a persona?   `1 / 1 point`

   ⦿ A document that captures the needs, goals and abilities of a specific audience segment.

   ◯ Descriptions and photos of users that are used to show a project is employing "user centered design."

   ◯ A homogenous version of an "average" all user segment.

   > ✓ **Correct**
   > Designs usually don't work when trying to be all things to all people. A good persona document captures the specific needs, goals and abilities of your primary user or audience.

2. Which of the following is true about continuous data?   `1 / 1 point`

   ◯ There's no inherent order to the data.

   ⦿ Continuous data has a potentially infinite set of values.

   ◯ The values cannot be subdivided.

   > ✓ **Correct**
   > Continuous data has a potentially infinite set of values within a range, like temperatures or people's heights.

3. Colin Ware proposed three interlocking feedback loops of visualization. Which one in this list is not one of them?   `1 / 1 point`

   ◯ Problem solving

   ⦿ Color channeling

   ◯ Direct manipulation of graphical objects

   ◯ Exploration and navigation

   > ✓ **Correct**
   > The idea of three interlocking feedback loops - directly manipulating graphical objects, exploration, and problem solving - can be helpful in thinking about how to effectively design interactive visualizations that address each of these levels.

4. What best describes the idea of progressive disclosure in an interactive visualization?   `1 / 1 point`

   ⦿ Showing only the level of data that is needed at a particular part of an analytic process or workflow.

   ◯ Using only a subset of data in a statistical analysis.

   ◯ Real time streaming of data.

   > ✓ **Correct**
   > Showing just the information needed at the right time and place can be crucial in helping people achieve their goals as quickly and easily as possible. Determining the right way to progressively disclose information can be challenging but can really help your visualization designs.

5. What was the visual exaggeration in Florence Nightingales' "rose diagram"?   `1 / 1 point`

   ⦿ The areas of the wedges

   ◯ Line lengths

   ◯ The color choices

   > ✓ **Correct**
   > The areas of the wedges are an artifact of the visualization type and exaggerate the actual differences in the data.

6. Which of the following is not an example of a useful coordinated view approach?   `1 / 1 point`

   ◯ Filtering

   ⦿ Distorting

   ◯ Highlighting

   > ✓ **Correct**
   > Coordinated highlighting and filtering can help viewers more effectively and directly interact with a data set and can provide more perspective about what they are seeing. Distorting the data is something that

7. Which of the following is not true about discrete data?   **1 / 1 point**

   ○ There's no inherent order to the categories.

   ● Discrete data have a potentially infinite set of values.

   ○ The values are not subdivided.

   ✓ **Correct**
   Discrete data fall into defined categories or bins. Think apples and oranges – there's not meaningful range or continuum between the two types of fruit.

8. Which two visual attributes are good for displaying quantitative measures?   **1 / 1 point**

   ● Line length and 2D position

   ○ Color intensity and saturation

   ○ Shape and size

   ✓ **Correct**
   It is relatively easy to make precise quantitative comparisons with line lengths or the position of a dot, but nearly impossible to make a **precise** quantitative assessment with something like color intensity. For example, can a red and a slightly darker red be used effectively to show a precise numerical comparison between two measures?

9. What's a common design problem for direct manipulation of graphical objects?   **1 / 1 point**

   ● A target area for selection is covered up or crowded out by other graphical objects.

   ○ Users tend to preferentially select rectangular shapes.

   ○ Graphical objects may appear closer than they really are.

   ✓ **Correct**
   The ability to directly interact with graphical objects in a visualization can be very useful, but be mindful about potentially creating situations in which users have a difficult or frustrating time selecting the intended object.

10. Why is it generally a good idea to start axes with a zero?   **1 / 1 point**

    ○ Charts look better with axes starting at zero.

    ○ It's always easier to design charts that way.

    ● It avoids distortions in the values being compared.

    ✓ **Correct**
    Without starting at zero, it's all too easy to present incomplete and misleading comparisons among different measure.

11. Which of the following is not generally considered an essential element of a useful Persona description?   **1 / 1 point**

    ○ The persona's needs

    ○ The persona's goals

    ● The persona's pets' names

    ✓ **Correct**
    A key part of the persona description is a list of need and goals. These help set priorities and focus the design. Adding some details like a persona's pet name can, in some instances, be helpful in breathing life into a persona and making them believable and relatable, but typically they are not an essential element.

12. Which visual attribute is good for displaying qualitative measures?   **1 / 1 point**

    ○ 2D Position

    ○ Line length

    ● Color intensity

    ✓ **Correct**
    Color intensity can be very effective at conveying a qualitative sense of activity with a darker, more saturated color indicating higher activity, and a lighter, less saturated color showing lower activity.

13. Which definition best fits the idea of "survivor bias"?   **1 / 1 point**

    ○ A tendency to draw conclusions based on data from biased survivors.

    ○ A tendency to draw conclusions based only on data that survived the ETL process.

    ● A tendency to draw conclusions based on data from what survived a process and overlooking what did not.

    ✓ **Correct**
    It's natural to think about the data collected for things that "survived" a process and overlook the

data for things that did not survive the process.

14. True/False: Tree maps are an example of Geospatial representation? 1 / 1 point

◉ False

○ True

✓ **Correct**
Tree maps are best for showing part-to-whole relationships. They are an abstracted way of showing hierarchies in a compact format.

14. True/False: Tree maps are an example of Geospatial representation? 1 / 1 point

◉ False

○ True

✓ **Correct**
Tree maps are best for showing part-to-whole relationships. They are an abstracted way of showing