

OBJECTIVE

understand game design 1.4

DESIGN THE USER INTERFACE

SCENARIO: Just in Time is a social-causes PC game about pet health. The intent is that players will learn about the needs of their pets and learn to be more responsible pet owners.

The player must feed their pets on schedule, locate missing pets, and transport them to the veterinarian when they need medical attention. The player finds the pets with a special mobile device. The user interface (UI) of the device has multiple screens that allow the player to access information including geographic location, pet needs, and statistics concerning pet health. The intended audience is children between the ages of 5 and 8.

1. What will increase the “unity” of this UI design for navigating between different screens?

- a. Use the same background colors.
- b. Decrease any irrelevant content.
- c. Place the forward and back arrow buttons in the same place on each screen.

2. How can colors be used to enhance the user interface?

- a. Rely only on color to express the most significant information.
- b. Draw light text on a dark background for large amounts of text.
- c. Use different colors to distinguish different content.

3. Which UI feature is best designed for the game’s intended audience?

- a. Display multiple buttons with text per screen.
- b. Use large buttons with picture icons.
- c. Display few buttons and have the player use the keyboard to control the interface instead.

HINT



Children between the ages of 5 and 8 have less-developed hand-eye coordination.

Answers

1. What will increase the “unity” of this UI design for navigating between different screens?
 - c. **Place the forward and back arrow buttons in the same place on each screen.** Using the same background colors increases unity, but it does not affect navigation.
2. How can colors be used to enhance the user interface?
 - c. **Use different colors to distinguish different content.** Relying on color only to distinguish significant content in the user interface can prevent people who are color-blind from receiving the information. Color should be combined with other features for enhancing the user interface.
3. Which UI feature is best designed for the game’s intended audience?
 - b. **Use large buttons with picture icons.** Large buttons allow children to activate them easier, and pictures alleviate the need for text.

Essential details

- The principles of UI design are simplicity, unity, flexibility, intended audience, color, and feedback.
- An asset includes art assets, such as textures, sprites, meshes, effects, and font, and sound assets, such as music or brief sound effects.
- The term **game state** refers to a phase of the game, such as the title screen, loading, pausing, gameplay, and so on.
- Gamer services include a library of code for working with Xbox Live®.
- The term **graphical user interface** (GUI) refers to the use of pictures rather than just words to represent the input and output of a program.
- The term **user interface** includes the aspects of a computer system or program that can be seen or heard or otherwise perceived by the human user, and the commands and mechanisms the user utilizes to control its operation and input data.

FAST TRACK HELP

- **XNA Game Studio:** <http://msdn.microsoft.com/en-us/library/cc178930.aspx>
- **Windows User Experience Interaction Guidelines:** <http://msdn.microsoft.com/en-us/library/windows/desktop/aa511258.aspx>
- **Miles, Rob. *Microsoft XNA Game Studio 4.0: Learn Programming Now!* (Redmond: Microsoft Press, 2011)**

