

# OBJECTIVE

## understand game design 1.6

### CAPTURE USER DATA

**SCENARIO:** Blast Master is a side-scrolling shooter game in which the player pilots a spaceship that is armed with missiles. The game begins with a title screen. The player can select to start a new game or load a saved game using the directional pad on the controller and the Start button. Once the Start button is pressed, the game moves to the gameplay screen. The goal of the game is to get to the end of each level and destroy the level boss. The player uses the directional pad on the controller to move the spaceship, the A button to shoot missiles, and the X button for a temporary speed burst. The spaceship must either avoid or shoot space debris. There are also enemy ships, which will shoot at the player. Whenever debris or an enemy ship gets hit with a missile, a coin or power-up appears. The player can pause the game at any time by pressing the Start button and resume the game by pressing Start. The player can choose to save a game when a level is completed and end the game at any point by pressing the Back button.

1. **What is an example of user data that would be saved in Blast Master?**
  - a. Current level
  - b. Score
  - c. Both
2. **During which state does the player query the controller for only one button input?**
  - a. Gameplay screen state
  - b. Title screen state
  - c. Pause screen state
3. **At what point in the game should user data be restored?**
  - a. When a player loads a saved game
  - b. When a player starts a game for the first time
  - c. When a player ends a game



## Answers

1. What is an example of user data that would be saved in Blast Master?  
**c. Both.** The number of lives would also be important to save.
2. During which state does the player query the controller for only one button input?  
**c. Pause screen state.** The only button input that needs to be queried during the pause screen is whether the Start button has been pressed or not.
3. At what point in the game should user data be restored?  
**a. When a player loads a saved game.**

## Essential details

- User data generally consists of the user's profile and game progress.
- User data is saved and restored so a player can continue where he or she left off.
- User storage is read-write storage supported by the game platform for saving information from the game at run time. The data can be associated with a particular player's profile, or available to all players.
- The game state describes the phase of a game, such as the title screen, loading, pausing, gameplay, and so on.
- A state machine is a design pattern defined by a set of game states and actions that are executed only within those states, where only one state is active at a time.

### FAST TRACK HELP

- **Miles, Rob.** *Microsoft XNA Game Studio 4.0: Learn Programming Now!* (Redmond: Microsoft Press, 2011)
- **Rogers, Scott.** *Level Up: The Guide to Great Video Game Design* (West Sussex, UK: John Wiley & Sons, 2010)
- **Schell, Jesse.** *The Art of Game Design: A Book of Lenses* (Burlington: Morgan Kauffman, 2008)

