

KEY IN-CLASS STUDENT ACTIVITY 3.2A: PLAN FOR GAME STATE

Lesson Objective 3.2:

Plan for game state. *Topics:* understanding games' main loop (input/update/render), understanding the flow of a game, loading, menus, save-load.

Resources, software, and additional files needed for this lesson:

1. A workstation with Microsoft Office® installed
2. Internet access

Guiding questions:

1. **What does game state consist of?** Game state consists of a description of an object at a given point in time in a game.
2. **What are the three main states of game play with XNA®?** Initialize and Load, Update, and Draw.
3. **What is the XNA content pipeline?** The XNA content pipeline is a set of processes applied to a game's art and data assets when the game is built. The process, which starts at build time, takes the original file format and converts it to data that XNA can decipher to make the program run much more quickly.

Student Activity:

Directions to the student:

Read the following scenario. Follow the directions to brainstorm a new game and create a flowchart with a partner. Submit your work to your instructor.

Scenario:

Wingtip Toys is launching a new promotional giveaway to customers who order a minimum of \$50 in video games from their new online store. Customers will receive a free download of the Catapult Wars game if they meet this minimum requirement. However, you would like to make it more profitable for the company by offering several games in the promotion if customers order a minimum of \$100.

It has been decided to create a few simple games that would add to the enticement. You and your teammates have been assigned to plan one of these new games.

Content:

View the video and review the "Designing the Game" article: <http://create.msdn.com/en-US/education/tutorial/2dgame/design>

1. With a partner, plan another simple game. Some examples of different game types to consider:
 - Role-playing
 - Action
 - Puzzle
 - Music
 - Sandbox

- Real-time strategy (RTS)
- Turn-based strategy (TBS)

Answers will vary.

2. Answer these questions about the game you have selected.

- a. What kind of game is it? Answers will vary.
- b. What is the game objective? Answers will vary.
- c. What are the gameplay elements? Answers will vary.
- d. What are the engineering elements? Answers will vary.
- e. What art assets do you need? Answers will vary.

3. With a partner, create a flowchart for this new game that is similar to the flowchart on the website.
Title the flowchart.

Answers will vary.