

IN-CLASS STUDENT ACTIVITY 1.5: UNDERSTAND COMPONENTS

Lesson Objective 1.5:

Understand components. Topics: differentiate between tool creation and game programming, understand artificial intelligence (AI).

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

1. None

Guiding questions:

1. What is the difference between tool creation and game programming?
2. What is AI?

Student activity:

Directions to the student:

Read the following scenario and respond to the situation presented. Verify your answers with the instructor. Request assistance from the instructor as needed. Share your ideas with the class.

Scenario:

Amazing Maze is a game in which the player must avoid being tagged by enemy characters while striving to reach the end of a maze. The designers are hoping to build in many aspects of AI that will make this a blockbuster game.

Content:

Design an AI to control the enemy movement by addressing the following aspects: vision, communication with other enemies, reaction time, searching, and memory. The enemy AI should pose a plausible and surmountable challenge to the player. Consider vision, group communication, reaction time, searching, and memory. Describe the AI involved for each.

Vision:

Group communication:

Reaction time:

Searching:

Memory: