

CISC 3667 F25 Midterm Sample Questions

Part A: Short Answer / Conceptual

- **Four Elements of Games**
 - We discussed the *four elements* that every game has. Name each of these four elements, and give a one-sentence example of how each element shows up in a game you know.
- **Kinds of Fun (LeBlanc / Lazzaro)**
 - List LeBlanc's eight "kinds of fun."
 - Then, pick two of them and for each, describe a game feature (mechanic, interface, narrative twist, etc.) that exemplifies that kind of fun.
- **Space and Time in Games**
 - Explain what it means for space to be *discrete* vs *continuous* in a game. Give an example of a game (or a genre) for each.
 - Likewise, explain discrete time vs continuous time in games, and give an example of each.
- **Rule Layers**
 - The notes talk about different "layers" or types of rules (foundational, operational, behavioral/social). Define each layer, and for a game you choose, give an example of each.
- **Feedback Loops**
 - What is the difference between a *positive feedback loop* and a *negative feedback loop* in a game system? Why would a designer include each? Provide one example of each from existing games.
- **Emergent Behavior and Complexity**
 - What is *emergent behavior* in games? Give a simple rule set (2–3 rules) that could plausibly produce emergent behavior, and briefly explain how.
- **Player Types**
 - Outline the player types in Bartle's taxonomy discussed in the course. For each type, name a kind of game mechanic or feature that is likely to appeal to that type.
- **Meaningful Choice**
 - The notes stress the importance of *meaningful choices*. What is a meaningful choice? Provide an example of a game scenario that *presents* a meaningful choice and one that does *not*, explaining why.

- Explain the difference between *operational rules* and *foundational rules*. Give an example of each.
- What are the “four elements of a game” according to the course notes? Briefly describe each.
- Describe Bartle’s taxonomy of player types (Achiever, Explorer, Socializer, Killer). For each type, name one game mechanic that particularly appeals to them.
- What is a *feedback loop* in game design? Why is it important?
- According to Nicole Lazzaro’s “4 Keys 2 Fun,” what are the four types of fun? Give a short example game (or feature) for each.
- What does it mean for space in a game to be *discrete* vs *continuous*? Give an example of each.
- Why might a game designer deliberately include *chance* in a game?
- What role does *time* play as a mechanic in games? Explain discrete time vs continuous time, and give an example of a game that uses each.

Part B: Multiple Choice / True-False / Matching

- **Which one of the following is *not* one of LeBlanc’s eight kinds of fun?**
 - A. Sensation
 - B. Mastery
 - C. Discovery
 - D. Submission
- **Matching:** Match the rule types (left) with their description (right):

Rule Type	Description
A. Behavioral rules	i. Underlying formal structure (e.g., how state changes)
B. Written rules	ii. Implicit norms/sportsmanship
C. Operational rules	iii. What the players actually do to play
D. Foundational rules	iv. The official documented rules of the game

- **True or False:** A negative feedback loop favors players who are already ahead, amplifying their lead.
- **Which of the following mechanics would best appeal to an *Explorer*-type player?**
 - A. Leaderboards and ranking
 - B. Hidden lore and unlockable secret levels
 - C. Achievements and badges
 - D. PvP combat
- **In a continuous-time game, which of these might be true?**
 - A. Actions happen strictly at fixed intervals (turns)
 - B. The player can pause time
 - C. Time does not matter at all
 - D. The game world advances even if the player is idle

Part C: Case / Diagram / Design Task

Case Study & State Diagram

- Consider the following simple game mechanic: A character in a platformer game can walk, run, jump, and fall. When on the ground, the character can choose to walk or run; if the player presses the jump button, the character transitions to the *jumping* state. If, while in the air, gravity pulls the character downward, it transitions to a *falling* state. Upon landing, it transitions back to *on ground*. Additionally, if the player holds a “sprint button” while on the ground, walking transitions into running.
 - Draw a **state diagram** showing these states (Ground / Walk / Run / Jump / Fall) and transitions (e.g., “press jump,” “land,” “gravity,” “press sprint”)
 - Label at least two transitions with any conditions (e.g., “isOnGround = true”)
 - Suppose you add a *double jump* ability: from *falling*, the character can press jump again (if they haven’t double-jumped yet) and go to a “jump again” state. Extend your diagram accordingly.
 - Discuss how you might represent this behavior in terms of *objects*, *attributes*, and *states*