

topics:

- game play: steps for game development

references:

- <http://www.evl.uic.edu/spiff/class/cs426/>,
by
Prof Jason Leigh, University of Illinois at Chicago (<http://www.evl.uic.edu/spiff/>)
and
Prof Robert Kooima, Louisiana State University (<http://csc.lsu.edu/~kooima/>)

main steps for game development

1. brainstorm the game design using *storyboards*
 2. define game rules and constraints, i.e., *rules of play*
 3. design game objects, i.e., data structures
 4. design *game loop*
 5. design *state machine*
 6. prioritize development steps
 7. build incremental prototype:
 - 7.1. game objects
 - 7.2. sound effects
 - 7.3. play testing
 8. repeat/refine steps as needed, adding features to priority list
- *today we will start brainstorming...*
 - *over the next several weeks, we will discuss each of the steps and implement them in a big project for this unit*

project for unit III

- the project for unit III will be a complete game
- the project will be done in groups of 3
- groups will be assigned randomly (in class today)
- group members will evaluate each others' contributions, so participate!
- game will be written in Blender
- class/lab time will be given for working on the game
- you can design and build a *brand new game*
- or you can *extend* an existing game, in which case you have to make significant changes to the game in some creative ways
- there will be multiple opportunities for me to review your design and give you feedback

sample game: *SandyLand*

- did you ever play *Candy Land* when you were a kid?
 - In this game, you move a gingerbread man along a path of colored tiles.
 - The path leads to Candy Land.
 - The goal of the game is to be the first player to reach Candy Land.
 - You draw cards that have colors on them, and advance your gingerbread man to the next tile whose color matches the color on the card you drew.
 - There are special tiles with characters on them (e.g., sugar plum fairy) and special cards to match.
 - If you draw a special card, then you move to the tile with the matching character—even if that tile is behind you.
- in our modified game, *Sandy Land*, your goal is to move from your flooded house to the nearest Evacuation Shelter.
 - Along the way—the evacuation route—you have to be careful to avoid falling trees and downed power lines.
 - You can pick up bottled water for drinking, which will help increase your health points.