

### Topics in Game Development UNM Spring 2008 ECE 495/595; CS 491/591

What is Gameplay?

#### Very general definition:

It is what makes a game FUN...

And... it is how players play a game.

### Taking one step back: what are games?



- They present player with an overall goal
- Directly involve player
- Contain conflict and competition; opposition of some kind
- Thus include the basic elements of drama
- Are intensely exciting

#### Games also are:



- Experienced as "play"... as fun
- Full of challenges that block way to the overall goal
- Have a structure, rules
- Something you can win or lose (victory condition)

### Gameplay – boiled down

- It consists of the <u>challenges</u> you offer the player and the <u>actions</u> players can take to overcome the challenges
- Also involves:
  - Victory conditions
  - ➤ Rules
  - Stress factors
  - Game balance

### Hierarchy of Challenges

- Players usually face several challenges simultaneously – both small and large:
- <u>"Atomic"</u> lowest of hierarchy: whatever is immediately confronting player
- <u>Sub-mission</u>: various goals of level (may be several in each level)
- Mission: goal of current mission
- Game goal: winning the game --the ultimate challenge and highest point of hierarchy

#### Challenges and game narrative



- Overall goal and major challenges usually established in context of the game's story
- Story gives motivation to player; makes experience richer

## However, Gameplay <u>Always</u> Trumps Story!



- Story can have an important role, but should not dominate
- Gameplay comes first!
- Too much story gets in way of game; players want to <u>act</u>, not <u>watch</u>

## Challenges: Explicit and Implicit

- Explicit: ones that are made clear in game; that player is aware of
  - Victory conditions
  - Major challenges for each level

# Implicit: ones that player discovers in course of playing game

- > Part of the fun lies in figuring them out
- Midlevel challenges often implicit
- > May be more than one way to overcome them
- Ways to overcome: observation, deduction, planning, experimentation

### Competition and Cooperation: 2 Ways to Overcome Challenges



- <u>Competitive</u>: direct conflict; only one winner; must defeat opponent (true of many classic games, including board games)
- <u>Cooperative</u>: players may work together to defeat opponent, though may be opponents in other situations (MMOGs)

### Physical challenges



- Tests players' physical abilities
- Typical of action games, arcade games ("twitch games")
- Calls for quick reflexes, physical coordination, speed, timing
- Also calls for accuracy and precision

### Mental Challenges



- Internal: may require knowledge gained during gameplay (visual clues; pieces of information)
- External: may require knowledge of things outside game (trivia, physics; how things work)
- Intellectual: May require solving of puzzles, pattern recognition, etc.
- Strategic: planning of tactics

#### Economics as a challenge

- The management of resources: acquiring, stealing, creating, storing, expending, destroying
- Resources includes anything of value: money, ammunition, health points, tools, equipment, clothing, property, weapons, real estate, character skills
- An economy adds realism to games

### Exploration as a challenge



Exploration can be its own reward; a form of sightseeing But as a form of gameplay, requires:

- Navigation and spatial awareness – not getting lost
- Opening "locked doors:" barriers that block access
- Avoiding traps

#### Actions:

### Players' response to challenges

The actions are the the player's "verb set"

- game must offer player sufficient actions to overcome each type of challenge in game
- > actions can be combined for greater utility
- Games have fixed number of actions, because each action requires animation – expensive – and also requires more complicated interface
- Common to have large number of challenges, small number of actions
- Different genres offer different types of actions

### Stress factors



- Two major ways to increase stress:
  - Time pressure: make player to overcome challenge within specific time frame
  - Multitasking: make player deal with several challenges at once
  - Maximum stress: combine time pressure and multitasking
- Stress can add excitement, but can also discourage strategic thought

#### Game Balance



#### A game is balanced if:

- players perceive it as fair, consistent
- challenges increase gradually
- more highly skilled players do better than less skilled ones

Symmetry and Asymmetry

If game has symmetry: each player starts with same conditions, abilities

If a game is asymmetrical, different players play by different rules, have different victory conditions (example: World War II games)

### Rules and Gameplay



- Rules determine:
  - What actions are allowed
  - What actions are prohibited
- Gameplay may also allow for optional actions

### Rules and Gameplay, Cont.

Rules are essential in all games, even simple ones

Rules determine victory and loss conditions

### Victory Conditions



- What the player must do to win; overall goal
- Should be clear to player
- May be multiple ways to win, multiple endings
- Some games have no specific victory conditions (sims, puzzle games)

#### Loss (termination) conditions



- Specifies how a player loses
- Explicit loss: avatar dies or world is destroyed (obvious)
- Implicit loss: you are not first player to win; another beats you (could be other player or NPC)

### In sum, gameplay...

- Is made up of challenges player faces and what player does to overcome them (actions, choices)
- Challenges can by physical or mental
- Challenges may also involve game economy, exploration
- Gameplay is governed by rules
- Gameplay is what makes a game fun, exciting, pleasurable