WELCOME TO
CSCE 395: SPECIAL TOPICS IN GAME DEVELOPMENT
WHAT IS A GAME?
REMEMBER AS A KID?

• **Play** is a category of nonessential, recreational activities
• **Pretending** is the mental ability to create an imaginary reality
• **Rules** are instructions for how to play
• **Goals** are objectives you are trying to achieve
• **Games** are a type of play activity, conducted in the context of a pretended reality, in which the participant(s) try to achieve at least one, nontrivial goal by acting in accordance with rules.
ESSENTIAL ELEMENTS OF A GAME

• Play is participatory and interactive
  • Allows freedom and elicits a different experience each time

• Pretended reality is also referred to a magic circle

• Goals don't have to be achievable, e.g., Space Invaders or the Sims

• Goals are defined by the rules
  • Ultimate goal is defined by a victory condition
  • A termination condition ends the game sometimes specifically a loss condition

• Rules establish the object of the game and meaning of activities in the pretended reality
  • Many types exist
  • Should be unambiguous
A GAME IS NOT...

- Conflict or competition
- Entertainment
- Fun
GAMEPLAY

• Loosely "an interesting series of choices"

• Challenges are any task set for the player that is nontrivial to achieve

• Rules define the actions a player can take to overcome a challenge and achieve the goal

• Gameplay consists of
  • The challenges faces by a player
  • The actions permitted to address the challenges
OTHER NOTABLE ASPECTS OF GAMES

• Fairness (or unfairness)
• Symmetry/asymmetry of players
• Competition – players accomplish mutually exclusive goals
• Cooperation – players achieve same goals
VIDEOS GAMES AND THEIR QUALITIES FOR ENTERTAINMENT
VIDEO GAMES

- A video game is a game mediated by a computer
- The machine "hides" the rules
  - Design Rule: Avoid trial and error
- The machine sets the pace
- The machine creates the imaginary world
- The machine can create artificial intelligence
GAMES FOR ENTERTAINMENT

- Design Rule: You can't please everyone
- Design Rule: Gameplay comes first
- Design Rule: Aesthetics are important
- Design Rule: Strive for harmony
GAMES FOR ENTERTAINMENT

• Players become immersed in the game in various ways: tactically, strategically, spatially, narrative

• Games possess emotional resonance
  • Players can experience a myriad of emotions, which do you want them to experience?

• Video games often tell a story
MISCELLANY

- Actions can involve risks
  - Design rule: Risks need rewards
- People enjoy novelty
- Progression is a sequence of challenges planned by the designer
- Games often involve spatial exploration
- Learning is an aspect of playing games

- People love creation and expression
- Enacting a role is essential to most games (not just RPGs)
- Games can be social!
  - Online play
- Games can be serious (Serious games)
  - For education/training, simulation, persuasion, or health/growth
WHAT IS A GENRE?

• A **genre** is a category of game characterized by a particular challenge

• It is not about content

• Sometimes they are further broken into **subgenres** that classify styles of play
SHOOTER GAMES

- Shooter games require the player to perform action at a distance with a ranged weapon
  - Skill is key
  - Can be subdivided into 2D and 3D shooters
ACTION AND ARCADE GAMES

• Action and arcade games include a physical challenge to the game
  • Often include conflict or economic challenges
  • Do not include strategic or conceptual challenges
  • Generally unwinnable, but get harder and harder as you go
  • Two subgenres: platform games and fighting games
**STRATEGY GAMES**

- Strategy games involve tactical challenges requiring planning a series of actions taken against a player's opponents.
  - Typically involves conflict.
  - Subgenres: Turn-based games and real-time strategy.
ROLE-PLAYING GAMES

• Role-playing games allow players to interact with a game world in a wide variety of ways
  • They typically offer a sense of growing from an ordinary person into a customized hero
  • Story, quests, and character growth are essential
SPORT GAMES

• Sports games focus on mimicking real-world sporting events
VEHICLE SIMULATIONS

• Vehicle simulations create the feeling of driving or flying a vehicle
  • Key is aiming for realism
CONSTRUCTION AND SIMULATION GAMES

• Construction and simulation games offer players opportunities to build typically under economic constraints
  • Goal is to create
ADVENTURE GAMES

• Adventure games rely on creating an interactive story about a character the player controls
  • Character growth is dramatic not numeric
PUZZLE GAMES

- Puzzle games require solving challenges (not confrontational or oppositional)
DISCUSSION

• Do games conform to a single genre?
• What is your favorite genre?
  • Favorite game?