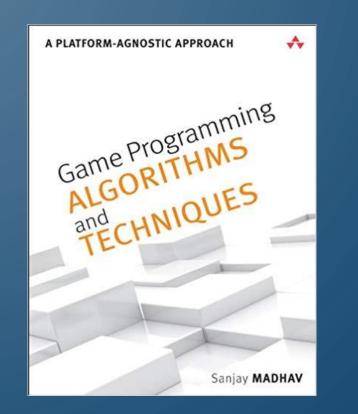
# WELCOME TO CSCE 395: SPECIAL TOPICS IN GAME DEVELOPMENT

#### **SYLLABUS**







#### 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



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.

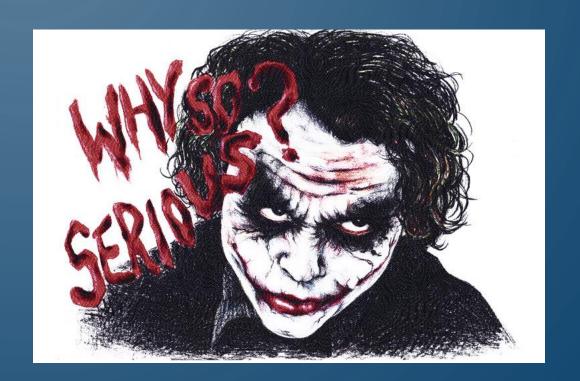
#### ESSENTIAL ELEMENTS OF A GAME

- 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

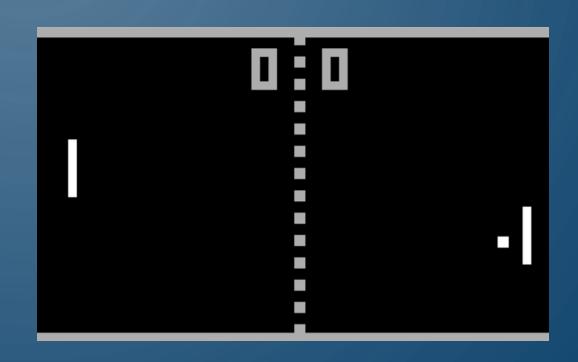
- Fairness (or unfairness)
- Symmetry/asymmetry of players
- Competition players accomplish mutually exclusive goals
- Cooperation players achieve same goals



# 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



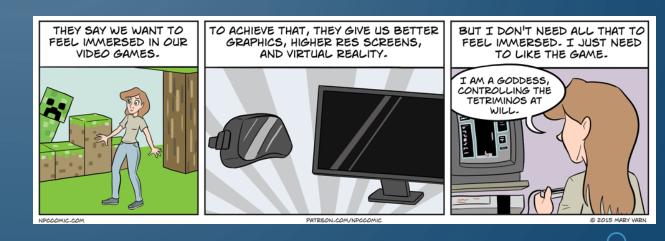
#### GAMES FOR ENTERTAINMENT



- 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



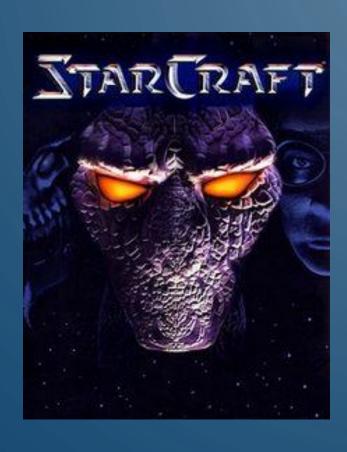
- Shooter games require the player to perform action at a distance with a ranged weapon
  - Skill is key
  - Can be subdivided into 2D and 3D shooters

#### 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



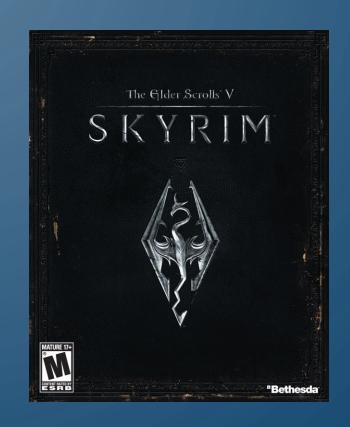
#### STRATEGY GAMES



- Strategy games involve tactical challenges requiring planning a series of actions taken against a players 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



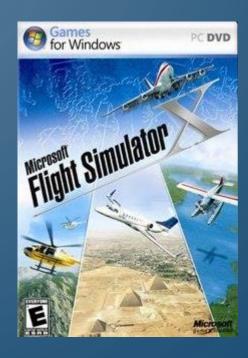
#### SPORT GAMES



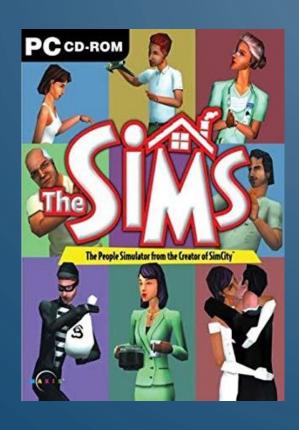
 Sports games focus on mimicking real-world sporting events

#### VEHICLE SIMULATIONS

- Vehicle simulations create the feeling of driving or flying a vehicle
  - Key is aiming for realism



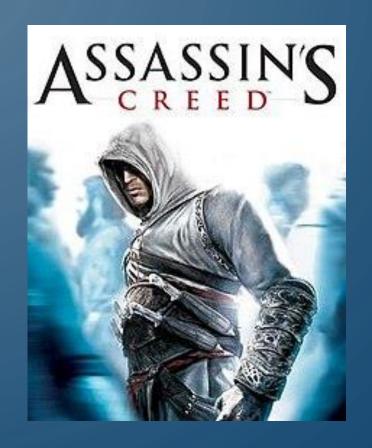
# CONSTRUCTION AND SIMULATION GAMES



- 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?

