Prototyping
Upcoming Deadlines - Pitches

- Thursday, November 6, Saturday, November 8
  - Third game pitches
  - Presentation order now on Piazza

- Note that your third pitch must be a brand new game concept
  - To re-visit a game concept, do this in the second chance pitches

- By Monday, November 10
  - Sign up to give a Second Change Pitch
  - Just need to give your name, and indicate you’re interested

- Thursday, November 13
  - Second Chance Pitches
Upcoming Deadlines

- Friday, November 21
  - Revision 2 of resume
  - First draft of portfolio website

- Sunday, November 30
  - Prototyping assignment due
  - Performed by everyone in the class
  - Do this for your own game, if part of a greenlight team
  - Or, for someone else’s greenlight pitch, if not
    - Your prototype can explore different territory
    - Might express the ideas in a different way
    - Think of it as a way to intern for a team
Blizzard Visit

- November 13
  - Talk in morning
  - Drop-in help with resumes/portfolio during day
  - Information session in afternoon
  - … and participating in the Second Chance Pitches
Prototyping: From pitch to game

- Problems with pitches
  - Really short: can’t convey much information
  - Lack detail
  - Not a good format for conveying information about game systems
  - Can be hard to convey moment to moment gameplay

- Consequences
  - Incomplete game design
  - Easy to imagine elements that are very difficult to realize
  - Internal contradictions/incoherence

- A prototype can address these negative consequences
What is a prototype?

- A prototype is a simplified model of an intended game
  - Simplified model
    - **Simplicity** reduces complexity to permit rapid implementation progress
    - A *model* focuses on a specific part of the game, to answer design questions
  - **Intended game**
    - The vision you have of the game you would like to make
    - Will change over time based on feedback from the prototype
Prototypes answer questions

- Think of your game as a design research project
  - That is, you are performing an active inquiry into the nature of the design of your game

- After a pitch, you have many questions about your game
  - What is the emotional feel of the moment to moment gameplay?
  - Is it feasible to create a novel user interface?
  - What are the game systems, and how do they interact?
  - What parts of the game create an emotional response in players?

- You construct one or more prototypes to quickly provide (partial) answers to these questions
  - They are tools you use to answer the questions
Prototypes persuade and inspire

- By making a game, you’re making entertainment and art
  - So, prototype should be interesting and fun
  - Inspiring!

- Remember, you still need to convince the judges to greenlight
- Then, perhaps harder, you need to convince other students to join your team!
Typical prototype process

1. Develop list of design questions
   - Prioritize this list: which ones are most important?

2. Construct a prototype (either physical or digital)
   - Designed to answer the most important questions

3. Conduct playtest sessions
   - Have friends and class members (or, ideally, representative members of your core audience) play your game, and observe results

4. Analyze results
   - In writing, document what you have learned about the design questions you posed

5. Revise and repeat
   - Based on the analysis, revise the game design, and possibly repeat the playtest using the refined game design.
Physical prototype

- A prototype that is built without writing code.
  - A non-digital prototype

- Goal is to create a model of (some aspect of) the play systems

Experilous blog (Andy Gainey)
experilous.com/1/blog/

Arthur Roszczyk: physical game prototyping in Instanbul
samur.pl/portfolio/works/game-design-workshops-on-physical-game-prototyping-istanbul/
Physical prototyping benefits

- **Fast**
  - Can take as little as a few hours to get a working prototype
  - Many times, within a day you can gather preliminary results

- **Rules**
  - Makes the rules of the game specific and concrete
  - Other people cannot play the game if you cannot describe the rules

- **Systems**
  - Can quickly see how different rule systems interact as people play the game

- **Fun**
  - You quickly see people having fun playing your game. Gratifying!
Physical prototyping pitfalls

- **Turn based**
  - Physical prototypes tend to force you to have a turn-based model of the game
  - May not give you a good sense of how a fast-paced game will feel
  - May be misleading about dynamics

- **Misleading social dynamics**
  - A game might be more fun as a physical game than as a digital game due to the social interactions between players and designers

- **Limited aesthetic feedback**
  - Doesn’t help with art direction, music direction
Physical prototyping sweet spots

- **Good match**
  - Puzzle games
  - Strategy games
  - Stealth games
  - Action/adventure and RPG games

- **Not as good (still some value)**
  - Virtual reality game (might still be able to simulate)
  - Novel UI controller games
  - Games where game feel is important (platformer, shmup)
    - But, still could explore puzzle mechanics and level design ideas on paper
Prototyping supplies we have

- Dice, lots of dice
- Counters and tokens
- Graph and hex paper
- Army men
- Sticks, dowels
- Paper cutters, X-acto knives
- Legos

- Let me know if you would like something else (within reason)
Digital prototypes

- A prototype where you construct a small running piece of code

- Advantages
  - Gives better feedback on moment to moment gameplay
  - Better understanding of dynamics
  - Better understanding of emotional response
  - Can explore visual art and sound design choices
  - Great at communicating a game idea
Digital prototype disadvantages

- **Time**
  - Can take a long time to create, much longer than paper prototype

- **Premature commitment**
  - Many design decisions need to be made to build a prototype
  - Maybe these decisions should be explored on paper first
  - People over commit to the vision in the prototype, instead of viewing it as a work in progress, malleable
  - Early commitment to an technology platform that might not be the most appropriate

- **Places attention on details of programming and implementation**
  - Less emphasis is placed on design decisions, independent of implementation choice