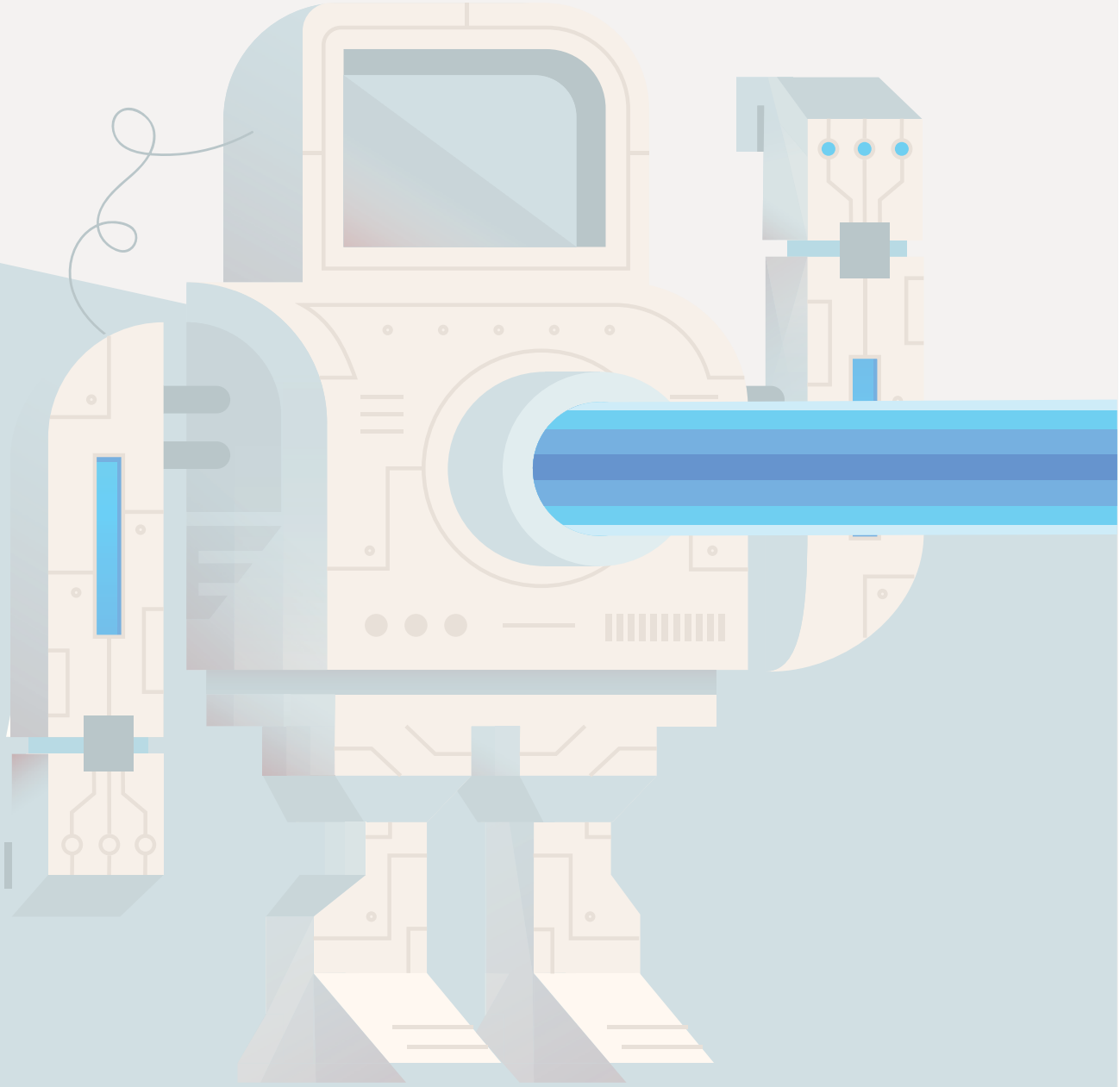
GAME DESIGN

Module 6: Final Project



A URF ACADEMY COURSE | RIOT GAMES

VERSION 1.0

Big Ideas

To conclude their introduction to game design, students will work in groups of 4-6 to design, develop and playtest a paper prototype of a multiplayer game. This final project will be split into five lessons, leveraging the Game Design Framework.

Overview

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TOTAL TIME: 60 MINUTES

Lesson 1

Game Premise

Introduce students to their final project: a paper prototype of a multiplayer game.

- Students develop the premise of their game (E.g., establishing players, goals and opposition) and present an 'elevator pitch' to the class

5 MINUTES

Final Assignment Introduction

INTRODUCE THAT STUDENTS WILL BE WORKING IN GROUPS TO DESIGN AND PLAYTEST A PAPER PROTOTYPE OF A MULTIPLAYER GAME FROM SCRATCH.

1. **Introduce assignment details / constraints:**

   CONSTRAINTS

   - The games must be multiplayer (E.g., designed to support at least 3 players).
   - All the players must be involved until the end of the game.
     - No early elimination of players who have to sit and do nothing.
   - Full game experience should be between 5 and 10 minutes long.

   The constraints exist to ensure that the maximum number of students can participate, and to avoid early elimination, resulting in isolated or bored students within the group.

2. **Have students form into groups of 4-6.**

   Groups should be 4-6 people and games should be designed to support at least 3 players, but not more than 1 fewer than the size of the group. I.e. if the group size is 5, then the game should support 3 or 4 players. This is so that at least one student can 'run' the game for visiting playtesters.

25 MINUTES

Brainstorm Game Premise

BRAINSTORM GAME PREMISE IDEAS: 20 MINUTES

1. **Students brainstorm game premise ideas.**
   Challenge students to brainstorm game premise ideas within their group and be able to explain their game using the template below.

   Each person should try to aim for at least two game premises.

   - Elevator Pitch: You play as **{players}** that want to **{goal}** but they can't because **{opposition}**.
   - Title: **{Title}**
   - Theme: **{Theme}**
   - Types of Fun: **{Types of Fun}**
   - Opposition: **{Opposition}**
   - Game Feeling: **{Game Feeling}**

   To encourage creativity, encourage students to come up with several **very different**, premises for their game. Bias towards interesting characters with understandable goals and suitably challenging, but surmountable opposition.

   Students should start with the "elevator pitch" and then generate the other sections afterwards.

   The premise of the game is the elevator pitch format given to the students ("You play as..." etc.). This is the core of all story/conflict–every story has a character, something they want, and an obstacle in their way.

   EXAMPLES

   Okay: You play as a group of empty plastic bags that want to get put in a garbage can, but you can't find one.

   This premise is okay, but not particularly aspirational or resonant.

   Better: You play as a group of French Resistance restaurant workers during WWII trying to sabotage enemy German soldiers' dinners in the local diner, but you need to avoid getting caught.

GAME PREMISE EXAMPLE BASED ON THE ABOVE:

- **Elevator Pitch:** You play as a group of **empty plastic bags** [player] that want to get **put in a garbage can** [goal], but you **can't find one** [opposition].
- **Title:** Home!
- **Game Feeling:** Triumph, whimsical, collaboration.
- **Types of Fun:** Discovery and Fellowship.
- **Goal:** Reach the garbage can.
- **Opposition:** Winds, society, and no trash cans.
- **Theme:** Big city.

STUDENTS SELECT THEIR BEST GAME PREMISE: 5 MINUTES

2. **Each student should select their "best" game premise and prepare to present it to their group in the next section.**

15 MINUTES

Pitch Premises to the Group

1. **Individuals share with the rest of the group the premise of their game.**
   Refer to the example above.

   By sticking to a short, one sentence elevator pitch, it should help them focus on the broad strokes, rather than getting caught up in lengthy backstories.

15 MINUTES

Create Final Game Premise

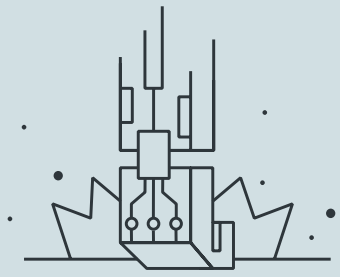
1. **Groups decide on their final game premise.**
   After each person has had an opportunity to pitch their premise, the group should decide together on the premise that they think is the most promising (vote or another equitable method).

   Groups can mix and match sections of their premises or come up with a new premise that combines the aspects that the entire group is excited about.

   For example, a group may not want a game with fellowship, but like the game's thematic. In this case, they would just change the types of fun.

   Groups will be working together on this final premise to create their game.

Trying to capture the idea that the entire group is excited and passionate about will be key.



Homework

Journal Entry

1. Each student should record the 2 completed game premises they came up with in the journal.
    - From the 2 game premises they created, students should document which one was the best and why.
    - Students should list the reasons why the final game premise was chosen by the group.

Final Projects

1. Students will be handing in their final projects as a mixture of group and individual submissions.

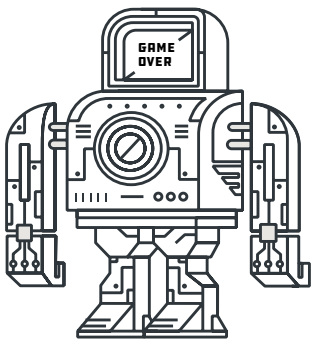
    It will consist of the following elements:

    Lesson 1 (Group)
    - Theme
    - Title
    - Game Premise 1 & 2 (Thematic framing)
    - Types of Fun
    - Game Feeling

    Lesson 2 (Group)
    - Mechanics Brainstorm (on large piece of paper)
        - Evaluation of chosen mechanics pitch based on individual design criteria.

    Lesson 3 (Group)
    - Annotated Rules Sheet
        - Each rule should have a succinct bullet list of why it is present on the sheet.

    Lesson 5 (Individual)
    - Game Post-Mortem
        - Long form response detailing key design decisions.



TOTAL TIME: 60 MINUTES

Lesson 2

Mechanics Brainstorm

Students will develop the mechanics to complement their game premise. This is to prepare a paper prototype version of the game.

Student Objectives

- New mechanics can be created by drawing on the thematic and prior knowledge of the setting.
- Idea spiraling is a technique to create new goals and mechanics from previously created goals and mechanics.
- Backtracking is a method to create new ideas based off of the same goal or idea.

60 MINUTES

Group Activity: Brainstorm Mechanics

By the end of this lesson, students will have developed their game premise to the point that it can be paper prototyped. They will have a rough idea of what mechanics they require and are hopefully excited to start testing their game.

In this lesson, students will develop the following game components and the mechanics associated with them in the same groups:

- Setting
- Player
- Goal
- Opposition

As a group, students will be documenting various “iteration paths” on a large sheet of paper.

Students will be making 2 sets of game mechanics that can be prototyped. (3 for advanced students)

INTRODUCTION: 2 MINUTES

1. **Remind students of what mechanics are.**

   FROM MODULE 5
   What players call rules, designers call mechanics. Mechanics are the actions, behaviors and mechanisms that a designer uses to produce gameplay.

   Mechanics govern "things that the player can and cannot do."

2. **Inform students that we will be taking the game premise and developing enough detail that this game could be paper prototyped.**

   This will give them an idea of where they need to be by the end of the lesson and at points throughout.

   We will be using the plastic bag game as our example for this exercise, as it is an odd premise. This is to illustrate the idea that you can make a decent game out of any game premise.

   - **Elevator Pitch:** You play as a group of **empty plastic bags** [player] that want to get **put in a garbage can** [goal], but **they can't find one** [opposition].
   - **Title:** Home!
   - **Game Feeling:** Triumph, whimsical, and collaboration.
   - **Types of Fun:** Discovery and Fellowship.
   - **Goal:** Reach the garbage can.
   - **Opposition:** Winds, society, and no trash cans.
   - **Theme:** Big city.

3. **Explain and spend the allocated time on each of the following sections:**

   SETTING: 10 MINUTES

   ### Objective: Students should decide on a "physical setting" (or lack of one) for their game.

   There are many different representations for a physical setting in a game. Students should try to piggyback on **what they know** about this setting.

   For example, a bank might be a **set of safes** represented by cards, or a city might be split into sets of **areas with roads** on a game board. A game set in space or based on the stock market may not even have a physical setting.

For our plastic bag example, we might represent the big city with:

- A game board made of square or hexagonal tiles.
    - It could have areas of interest within the game board.
    - The outside tiles of the game board might be special.
    - The tiles themselves could have different properties (E.g., red tiles, blue tiles).
    - The game board might expand/contract over time.
    - What other spins could we put on a game board representation?
- A path based game board.
- A game board made out of random cards that get drawn from a deck.

Example Setting: Let's use a game board of hexagonal tiles for our example.

PLAYER: 10 MINUTES

Objective: Students should then think about how the player interacts with the game.

Perhaps players get to control a character that they move around.

- They could move their piece around by playing cards with movement values on them (E.g., move 2 spaces).
- Their piece could freely move around on their turn.
- You might roll dice to move your piece around.
- Pieces may just move automatically each turn.
- They could move up to 3 spaces per turn.

Alternatively, they might not have a playable character, but instead accumulate currency, victory points, resources or just build up to a goal that results in them winning the game.

- Players might draft cards from a shared pool.
- They might accumulate victory points for meeting certain criteria (E.g., get 3 of a kind).

Students also need to decide whether the game is co-operative or whether individuals can win. Maybe the game has teams.

Example Player: For our plastic bag example, we will use a token to represent our playable character.

GOAL: 10 MINUTES

Students should think about the “mechanical representation” of the goal in this step.

Using what we know about the **player** and **setting** from the previous steps, we want to create a “mechanical representation” of the **goal** (how players win).

The “mechanical representation” of the goal can be anything from:

- Players win when all other players are eliminated.
- Players win when they have eliminated 3 players.
- Players win when they all reach a certain tile.
- Players win when they get to 50 points.
- Players win when they complete the team objective.

We don’t need to know anything about how players are eliminated, how they move around, or how they get points (this comes in the opposition step), but picking a goal and developing the premise around it will allow us to get a playable game that we can then start iterating and building upon.

Example Goal: Let’s use a specific tile on the map to represent the trash can. Players need to get to the trash can to win.

We have 4 players, each with a playable character that needs to make it to the goal tile. The game currently is quite easy and not very compelling or interesting. There’s nothing stopping players from just moving straight to the goal; it lacks opposition.

OPPOSITION : 28 MINUTES

Objective: Students will develop the mechanics of several different types of opposition for their game.

As discussed in Module 3, there are typically many ways to solve a problem, each with their own tradeoffs. In this section, students will need to get creative with brainstorming mechanical solutions for the problems they encounter.

At this point, students have their premise, **setting** (game board), **player** (player token), and **goal** (get to the trash can tile).

Types of Fun	Theme	Game Feeling	Premise
Discovery, Fellowship	Big City	Triumph, Whimsical, Collaboration	You play as a group of plastic bags that want to get to a garbage can, but can't find one.

Setting Where is the game set? How is this represented?	**Player** Who is the player?	**Goals** How can we represent victory?	**Opposition** What are the obstacles? Depth? Type of fun?
Game Board - Tiles - Special Areas - Tiles and Areas	Co-Op Teams Individual 1 vs X	Trash can tile	
No Game Board ✗	Roleplay? ✗		
Cards ✗	No characters		
Other ✗	Play cards? ✗		
Cards make game board ✗	Vanilla Character ✗		
Players make game board ✗	Special character		

> As shown in the diagram above, we know that there is a game board, there are characters and that the game has some co-operative elements. We want to explore the "mechanics" of some ideas that result in a playable game.

Setting Where is the game set? How is this represented?	**Player** Who is the player?	**Goals** How can we represent victory?	**Opposition** What are the obstacles? Depth? Type of fun?
Game Board - Tiles - Special Areas - Tiles and Areas	Co-Op Teams Individual 1 vs X		
No Game Board ✗	Roleplay? ✗	Trash can tile →	Hidden trash can tile - Flip tiles when walking on them. Find trash can tile to win ✗ Too luck based. Need to add skill!
Cards ✗	No characters ✗		
Other ✗	Play cards? ✗		
Cards make game board ✗	Vanilla Character		
Players make game board ✗	Special character		

> Students should start by "exploring" one goal idea until they would be able to prototype it. This is shown above in blue.

CREATING NEW MECHANICS

Coming up with a new game mechanic is difficult.

They can draw on their theme and game premise to create new mechanics. Students should draw inspiration from what they know about the theme and what objects or ideas would be associated with it.

For example, with the big city theme, we could draw inspiration from the following ideas (see how these ideas are represented by game mechanics in the completed mechanics brainstorm at the bottom of this section).

- Cities might be split into areas (E.g., sewers, town, shop).
- Cities might have trash everywhere (E.g., rotting fruits).
- Cities are large; characters might try to hide in and around the city.
- You might collect things from around the city.
- Cities might have winds that blow and disrupt everything. Perhaps the plastic bags could only move around due to the wind and otherwise be unable to move on their own accord.

Many mechanics, especially in board games, take the behavior of an object/idea and translate it into game mechanics.

IDEA "SPIRALING"

When "exploring" certain solutions, it will spiral into more ideas to improve the game.

This is exemplified in the diagram below. These ideas could become their own goal or give students ideas for new goals or types of opposition. Oftentimes, ideas don't come fully formed, but they can be "spiraled" off to create even better ideas.

In the diagram, the idea of players gaining "powerups" spawned the idea of **all players** having powerups (represented by 1). This spawned the new "goal" category of the "trash can" being a playable character (represented by 2) that is on a different team to the plastic bags.

Asking the question "what if?" is very useful for this process. An example flow using "what if" is as follows: "What if you picked up power ups from around the city" > "What if everyone had power ups?" > "What if the trash can had powerups?" > "What if the trash can was a player?"

Setting Where is the game set? How is this represented?	**Player** Who is the player?	**Goals** How can we represent victory?	**Opposition** What are the obstacles? Depth? Type of fun?
Game Board - Tiles - Special Areas - Tiles and Areas	Co-Op Teams Individual 1 vs X		
No Game Board ✗	Roleplay? ✗	Trash can tile	Boss battle at trash can tile - **Players must get stronger by collecting powerups from areas** - Ten turns to get as strong as possible **1**
Cards ✗	No characters ✗		
Other ✗ ✗	Play cards? ✗	Cat & Mouse (One player is the trash can, other play as plastic bags trying to catch them)	**Players have powerup cards (e./g. Make a tile impassable)** - Evade capture for 10 turns **2**
Cards make game board ✗	Vanilla Character		
Players make game board	Special character		

BACKTRACKING

If students decided an iteration path didn't work, they could backtrack either to point 1 or 2.

This is exemplified in the diagram below. There might be an alternative branch off of path 1 that can work!

If they have exhausted options branching off of point 1, they might need to **backtrack** and branch off of point 2, or could even start fresh with a new goal (point 3). If all of these options are exhausted, it might be time to re-evaluate the player or setting (or even the premise!).

Setting Where is the game set? How is this represented?	**Player** Who is the player?	**Goals** How can we represent victory?	**Opposition** What are the obstacles? Depth? Type of fun?
Game Board - Tiles - Special Areas - Tiles and Areas	Co-Op Teams Individual 1 vs X		
No Game Board ✖	Roleplay? ✖	**Find the trash can tile (2)**	**Hidden trash can tile (1)** - Flip tiles when walking on them. Find trash can tile to win ✖ Too luck based. Need to add skill!
Cards ✖	No characters ✖	**NEW GOAL (3)**	
Other ✖	Play cards? ✖		
Cards make game board ✖	Vanilla Character		
Players make game board ✖	Special character		

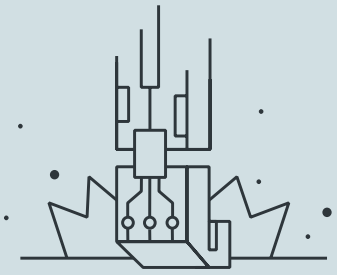
Setting Where is the game set? How is this represented?	**Player** Who is the player?	**Goals** How can we represent victory?	**Opposition** What are the obstacles? Depth? Type of fun?
Game Board - Tiles - Special Areas - Tiles and Areas	Co-Op Teams Individual 1 vs X		Boss battle at trash can tile - Players must get stronger by collecting powerups from areas - Ten turns to get as strong as possible
No Game Board ✗	Roleplay? ✗	Trash can tile →	Hidden trash can tile ✗ *Flip tiles when walking on them. Find trash can tile.* OR - Game board has areas. IF you're in an area, flip a card from that area. Cards are either obstacles, powerups or the trash can - Everyone needs to get to the trashcan once found
Cards ✗	No characters ✗		Complete objectives before going to the trash can - Find four rotten fruits - Turn limit (e.g. 10 turns)
Other ✗	Play cards? ✗	Cat & Mouse (One player is the trash can, other play as plastic bags trying to catch them) →	Players have powerup cards (e.g. Make a tile impassable) - Evade capture for 10 turns
Cards make game board ✗	Vanilla Character		Players have innate abilities (e.g. Green plastic bag has extra movement, Trash can has stronger abilities)
Players make game board ✗	Special character		

Here is a completed iteration path brainstorm using the techniques from the previous page.

By the end of this lesson, each group should have **at least two iteration paths that they want to take to paper prototype phase.**

Advanced students should have **three iteration paths**, including at least **two different goals.**

They will be fully implementing one of these iterations and determining all of the rules of **interaction** in the next lesson.



TOTAL TIME: 60 MINUTES

Lesson 3

Rules and Prototyping

Students are exposed to the idea that mechanics that seem difficult to prototype on paper are possible to prototype with a little creativity.

Student Objectives

- Paper prototypes are fast, cheap tools that game designers use to emulate the game experience.
- Certain game mechanics are easier to prototype than others.
- While paper prototyping, game designers must use creative, alternative approaches to emulate the game experience.

10 MINUTES

Paper Prototype Discussion

Enduring Understanding

- Paper prototypes are fast, cheap options that emulate the game experience for game designers and players.
- While paper prototyping, game designers must use creative approaches to emulate the game experience.

Essential Questions

What are the benefits of paper prototypes?

- A paper prototype is a fast and cheap technique to test whether a game is fun and achieves its design goals.
- A paper prototype is a development tool intended to help game designers test out creative ideas and emulate the game experience without using any technology.
    - For example, in lieu of AI, game designers can ask a friend to play the part of the enemies.

- Instead of beautiful character designs, use any vinyl figures lying around your classroom.
- If you want randomized levels, throw some playing cards on the floor and pretend they're cover for a shooting game paper prototype.

How would you prototype some of these mechanics?

- Leveling up a character?
  Putting counters on a character card to level them up.
- Moving a character on a game board?
  Rolling dice, playing movement cards.
- Randomness?
  Drawing cards off a deck.
  Rolling dice.
  Drawing objects from a bag.
- Character abilities?
  Using custom written character cards.
  Drawing ability cards drawn from a deck.
- Hidden Roles
  Dealing each player a card. An ace might indicate a special role.

How could you paper prototype mechanics from existing games?

- **Escaping the police in *Grand Theft Auto:*** Roll to move on a square grid city map. Stay out of sight of the 1, 2, or 3, police pieces, for a certain amount of time to reduce your wanted level.

  Police pieces move one space toward your position each turn.
- **Planting crops in *Stardew Valley:*** Use a day counter on a piece of paper and provide players with starting money and costs/growing times for seeds.

5 MINUTES

Choose a Mechanics Pitch

Students will take their list of mechanics pitches and select one that they want to prototype first.

Reminder:
*Each group should have at least **two pitches**. Advanced students should have at least **three pitches**, at least two of which have meaningfully different goals.*

1. **Each group chooses one of their designs to prototype.**
2. **While groups are choosing, remind them of some of the design evaluation criteria from the previous modules.**

   Some design evaluation criteria from the first 5 modules that may assist in removing inferior pitches:

   - Innovation
   - Capacity for depth
     - It may be hard to create depth in a game where the outcome is purely determined by luck.
   - Thematic resonance/dissonance
     - Gameplay does/doesn't match thematic.
   - Type of fun and gameplay mismatch
   - Developmental resources
     - Having one hour to create 10 character cards may be infeasible.
   - Complexity
     - A design that has high complexity (E.g., many characters, intricate abilities) may not be appropriate for the target audience (but potentially appropriate for others).

45 MINUTES

Make Rules > Prototype > Playtest Exercise

We have created the premise, thematic, player, goal and opposition of our game and decided on one mechanics pitch we want to prototype. We will now be creating the paper prototype and the **Rules** and **Interaction** components along the way.

By the end of this lesson, each group will have:

- A playable (and unpolished) game ready for another group to playtest in the next lesson.
- A single page of written rules.

TEACHERS WILL CARRY OUT THE FOLLOWING STEPS:

1. **Instruct students to list the core components of their chosen mechanics pitch: 5 minutes**
2. **Demonstrate the make rules > prototype > playtest process: 15 minutes**
    - **Make Rules:**
        - Students make an initial set of rules for their **game premise** (Module 6, Lesson 1) and mechanics pitch (Module 6, Lesson 2).
        - “Make Rules” phase is used to fix problems.
    - **Prototype:**
        - Students make a physical copy of their game.
    - **Playtest:**
        - Students playtest their games to “find problems” and “validate assumptions.”
3. **Students conduct at one cycle of the process and one additional “make rules” iteration: 25 minutes**

Homework: Students finalize their rules sheet, ready for playtesting

SEE THE FOLLOWING PAGE FOR AN IN-DEPTH EXPLORATION OF THIS PROCESS USING THE PLASTIC BAG GAME EXAMPLE.

CORE MECHANICS: 5 MINUTES

1. **Instruct students to list the core components of their chosen mechanics pitch.**

   We will use the mechanics pitch below as an example, due to its simplicity.

Setting Where is the game set? How is this represented?	**Player** Who is the player?	**Goals** How can we represent victory?	**Opposition** What are the obstacles? Depth? Type of fun?
Game Board - Tiles - Special Areas - Tiles and Areas	Co-Op Teams Individual 1 vs X		
No Game Board ✖	Roleplay? ✖	Trash can tile →	
Cards ✖	No characters		Complete objectives before going to the trash can - Find four rotten fruits - Turn limit (e.g. 10 turns)
Other ✖	Play cards? ✖		
Cards make game board ✖	Vanilla Character ✖		
Players make game board ✖	Special character		

The core components of this pitch are:

- A game board with areas.
- Fruit Items (tiles, cards, other).
- Playable characters that need to move to the trash can area once the objective is complete.

EXPLAIN PLAYTEST ITERATION PROCESS: 15 MINUTES

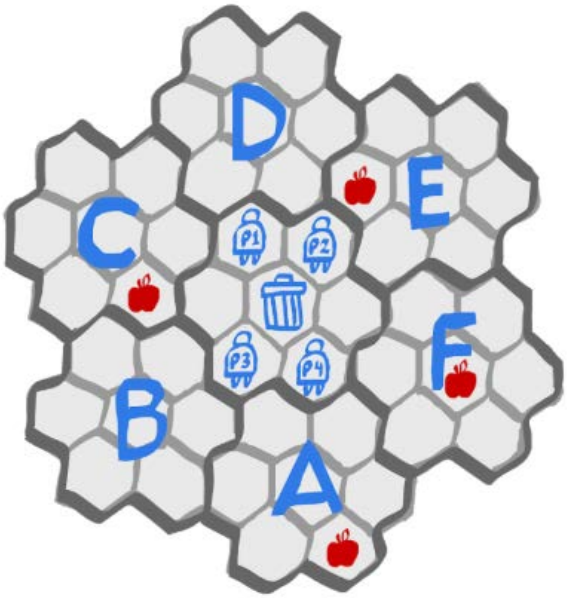
2. Demonstrate the **make rules** (to fix problems) > **prototype** > **playtest** (to discover problems and validate assumptions) process with the instructions below.

- A good way to start is to **paper prototype each component** and make the rules along the way.
- Similar to Lesson 2, it is better to make fast decisions and test them and fix them later, rather than spending a lot of time determining the details now.

Make Rules (Fix Problems)

Let's start by making some quick rules for each component. As noted above, the rules chosen below were made quickly and arbitrarily.

- **A game board with areas**
  - The game board is divided into six areas.
  - Each special area (A, B, C, D, E, F) has 7 hidden tiles, which contain either a fruit or a blank tile.
  - The rest of the tiles do nothing.
- **Playable Characters**
  - Players (1, 2, 3, 4) start in the center.
  - When players step on a hidden tile it is revealed. It may reveal a fruit.
  - Players need to collect all 4 fruits, then stand on the trash can tile to win.
- **Prototype**
  - We might prototype the game board on a large piece of paper, with a marker and the rules above.



Playtest (Find Problems and Validate Assumptions)

Let's try to play the game and surface some problems and opportunities. The "play" phase and "make rules" phase will often happen concurrently.

Finding Problems

Below are some typical problems we might find **with the game above** and its initial ruleset:

- **Rules and Thematic**
  - How do players move?

    Example Solutions:

    - Do they roll a dice?
    - Do they draw movement tiles out of a bag?
    - Do they get to move X number of spaces per turn?

  - Do players have health?

    Would plastic bags have health thematically?

    - Could we represent a plastic bag splitting up with gameplay?
      - Perhaps when players take damage, their character token splits up into multiple playable characters with less health.
      - Players could move any character they own on their turn.
- **Depth**

  The game in its current state is quite boring (lacks depth). Players simply move around the game board until they fortuitously discover the fruit.

  - **How might we increase depth?**
    - The other hidden tiles might interact with the player and interact with each other (in positive or negative ways).
      - E.g., Stepping on a certain tile moves the player two spaces towards the center.
    - Tiles could be in random positions on each different playthrough. The players would need to make different decisions each time they played the game.
    - Players might be able to reveal one tile per game to check if it's a hazard.
- **Flow and Pacing**

  Players are taking too long to take their turns.

  - Could there be a turn timer?
    - Recording information on how long players take to make their turns will be useful for future reference.

  There is insufficient tension; the game doesn't approach a climax.

  - Players could be required to complete all objectives within a certain number of turns.
  - There could be explicit peaks in difficulty at section climaxes.
    - Finding a fruit could increase the number of turns you have to win by one, but being in a special area might have heightened difficulty/danger (E.g., tiles that damage the player).

- **Types of Fun**

  The game is not fulfilling our expectation for the Fellowship type of fun.

  - Could we find ways to make the game more co-operative?
  - Could we require teamwork to explore certain areas?
    - E.g., Standing on this tile disables surrounding tiles.

VALIDATING ASSUMPTIONS

Playtesting can be used to validate assumptions, such as whether a game is too complex, lacks depth, has correct pacing, or verifying if the game is delivering on a certain type of fun.

Make Rules 2

After making more rules (such as those listed above), we would start the cycle again.

STUDENTS CONDUCT PLAYTEST ITERATION PROCESS: 25 MINUTES

3. Students conduct at least one cycle of the process and one additional "make rules" iteration.

A suggested flow:

- Make Rules: 5 minutes
- Prototype: 10 minutes
- Playtest: 5 minutes
- Second Make Rules: 5 minutes

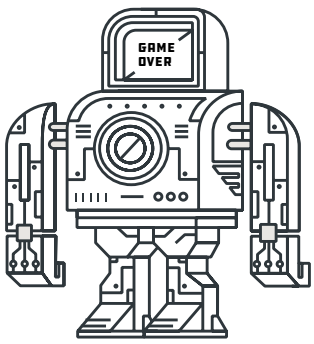
Students should be prepared to cut a playtest short to make a rules iteration or to start the game part-way through to test particular rules and mechanics.

Have each student be in charge of an element. Students can delegate their own tasks, or use the examples below.

- **Rule quality (depth vs complexity) and ensuring the rule sheet is written.**
- **Setting**
  - Assets, design decisions concerning "setting."
- **Player**
  - Assets, design decisions concerning "players."
- **Goals, subgoals, pacing, and flow.**
  - Design decisions.
- **Type of fun and game feeling.**
  - In charge of the holistic experience.

Homework

1. **Students finalize their rules sheet, ready for playtesting.**
   - Students should document each rule on a sheet of paper, to be revised in the next step.
   - Students should revise the list of rules together and ensure that the game is ready for playtesting.
   - When doing the final check, evaluating the game from the perspective of a cheater can be a good way to make sure you have covered everything.
   - Inform students that **the rules for the final game should be short enough to fit on a single piece of paper**.
   - Students will be annotating each rule on the sheet when submitting their final project, detailing the reason for its inclusion.



TOTAL TIME: 60 MINUTES

Lesson 4

Playtesting and Feedback

Students learn about giving good (and bad) feedback, playtest one other group's game, and improve their game based off playtest feedback.

Student Objectives

- Playtesting is conducted to surface feedback to improve the game and to validate assumptions.
- Good feedback is goal-centric and clearly identifies problems and their causes.
- Bad feedback lacks reasoning and proposes solutions, rather than surfacing problems.

10 MINUTES

Playtesting Discussion

Playtesting

The main goals of playtesting are:

- To surface feedback on ways to make the game better in an honest and unbiased manner (identifying problems and opportunities).
- To capture a user's reactions to your game; things that were confusing, unclear or make them happy/unhappy.
- To validate assumptions.

  For example, a designer might say: "I think the cooperative elements in the game make players happy. Do they succeed at this in practice?"

Feedback

GOOD FEEDBACK

Is goal centric.

- E.g., You were trying to make a challenging experience, but it was not challenging.
- Help the designer to validate their goals and challenge their goals, rather than challenging the specific implementation.
- The specific implementation is commonly not the best representation of the goal they were trying to meet.

Clearly identifies problems and why they were problems (E.g., I experienced X and it did not match my expectations because Y).

Is actionable, specific, and values/goals based.

- "This could be better" is neither actionable, nor specific.
- By contrast, "X content piece has Y **clearly actionable problem**, which does not align with Z core value" clearly describes a specific and actionable problem and ties it to an overall goal or value that the designer is attempting to achieve.
- Values or goals in this context will typically be associated with "target audience," "types of fun," "game feeling," etc.

BAD FEEDBACK

I didn't like this.

- Missing the why.

You should do this.

- There are many ways to solve a problem, not just one; especially in game design.
- *Better: I think this is a problem and here is an EXAMPLE solution.*

Personal attacks and generalizing.

- "You **always** make the player feel stupid when they mess up."
- It is easy for feedback to be perceived as a personal attack. Better feedback will leave the designer out of it and critique the design instead.
- *Better: "Players tend to feel stupid when they mess up their character combos."*

GENERAL FEEDBACK TIPS

- What a player feels is not wrong. If a player is angry/happy, it doesn't matter if the game is not meant to make them happy, that is what they are feeling.
- Have testers write what they liked/disliked, initial impressions, what their expectations were, and whether they were met.

General Tips

- Give the tester the minimum amount of information about what they'll be testing beforehand. For the first playtest, it's typically only the rules. For the second playtest, this typically includes test goals to validate (once the testers know what the game is all about).
- Running a playtest puts students in a very vulnerable position. Be respectful of your classmates when delivering feedback to them. Remember, feedback isn't personal criticism, but sometimes can run quite negative; try not to take the feedback too personally.
- Students are going to have differing opinions on the things they playtest and that's okay! Different players are going to enjoy different types of fun and different experiences.

30 MINUTES

Playtest Another Game

Students playtest another group's game and write test goals for their own game.

1. **Groups should write 3 points of feedback they want to collect from other students.**

   EXAMPLES

   - Validate that complexity of game is appropriately low.
   - Test that there is sufficient depth after the halfway point of the game.
   - Ensure that the game is delivering on the Fellowship type of fun.

2. **Each group will designate one group representative to stay behind and send the rest of their students to a neighboring team to playtest their game.**

   GROUP REPRESENTATIVE

   - One student remains behind to take notes on the experience. They should provide the rules sheet to the visiting group and take notes (on things that are confusing, if the game breaks or if pacing is correct), but otherwise not give any help.
   - This will help illuminate where the rules sheet needs more or less clarification.

3. **After the test, the group representative should interview their testers about their experience.**

   GOOD QUESTIONS TO ASK:

   - Did you understand what your goal or win condition was?
   - Did you understand the mechanic?
   - Was there anything that was unclear to begin with?
   - Is there anything you're still unclear about?
   - Would you be interested in playing an improved version in the future?
   - Is there anything you hated?
   - Is there anything you really liked?
   - **If you could change one thing, what would it be?**

4. **Playtest with another group!**

20 MINUTES

Post Playtest Iteration

Students will take their learnings from the playtest and prioritize the things they can fix/improve.

1. **After giving and receiving feedback, students return to their original groups.**
2. **Students should:**
   - Confirm assumptions that were validated.
   - Create a list of things they can improve or want to change.
3. **Prioritize the list of changes in order of most critical to change, to least critical.**
   - Prioritizing feedback is important, because time is limited in game development. Features that seem important to fix might need to be postponed or abandoned, simply because other fixes are higher priority.
   - Compare fixing an issue that prevents players from ending the game (critical), to an issue where the early portions of the game drag out too long (minor).
4. **Groups delegate tasks to fix some of the issues in order of importance.**

TOTAL TIME: 60 MINUTES

Lesson 5

Final Iteration and Playtest

Students make a final iteration, then playtest more games from other groups. They finish the module by writing a game post-mortem.

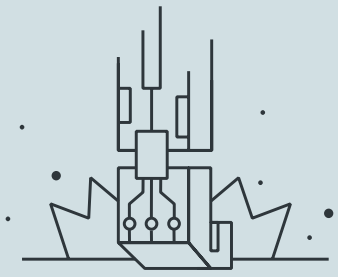
15 MINUTES

Final Tweaks

Students will make final changes to their games and then jump into a full playtest, where students will play each others games.

1. **In their groups, students should make final changes and tests to their games, and be strongly encouraged to lean on their prioritized list of problems from the previous lesson.**
2. **Students should run one last full experience playtest within their own group to test the changes and practice running the game.**

This is a good time to refine the rules sheet, improve the art or decoration, and polish the gameplay (especially pacing). Students should ensure their game works from start to finish.



45 MINUTES

Full Class Playtest

Students playtest each others' games.

1. **Each student in the group takes a turn to be the group representative.**
   - Remind the group representatives that they should be mostly observing and taking notes.
2. **The other students in the group playtest other groups' games.**
   - Attempt to test at least three other groups games.

Homework

Game Post-Mortem

Developers commonly release game post-mortems as a way to document learnings from the development cycle.

The purpose of the game post-mortem for this module is two-fold. Firstly, it should allow students to reflect on their design decisions. Secondly, it will allow the teacher to corroborate an individuals' accounts of the development cycle.

Students will be submitting their post-mortem as part of their assessment.

Deliverable

Students should reflect on:

- **Things that went well.**
- **Things that went poorly.**
- **Things that seemed difficult, but went better than expected.**
- **Things that seemed easy, but were more difficult than expected.**
- **Key design decisions made and why.**
- **Ways we would improve the development process for next time.**

Even experienced developers learn something new every time they make a game, and find something to improve for next time.

The post-mortem should avoid reflecting on personnel issues; E.g., X person didn't manage to get the character designs finished, so my level designs were delayed.