



Game Design

Lecture 5

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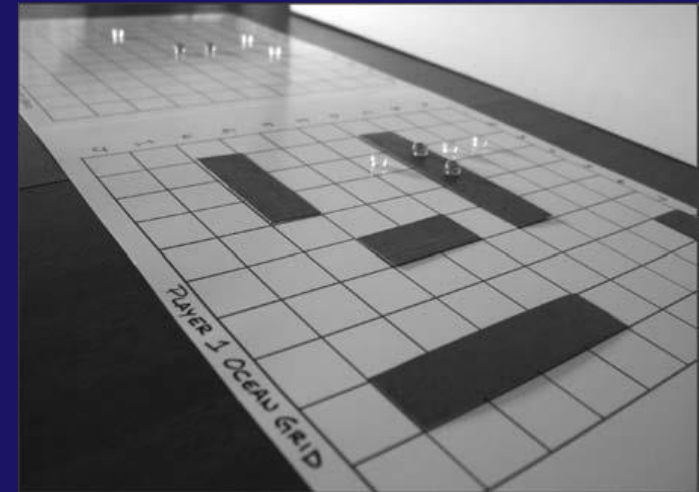
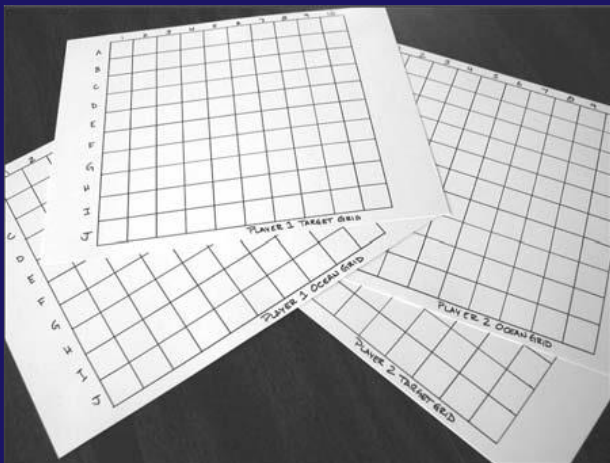
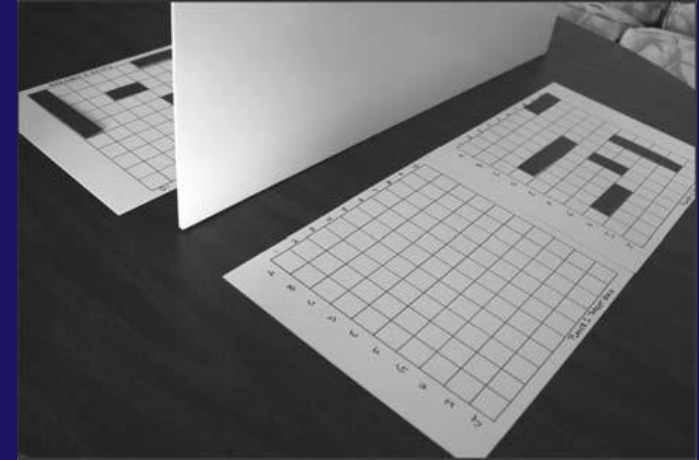
Tasks



01

Practical Prototyping

Battleships Prototype



Questions

Does it accurately represent the game mechanics?

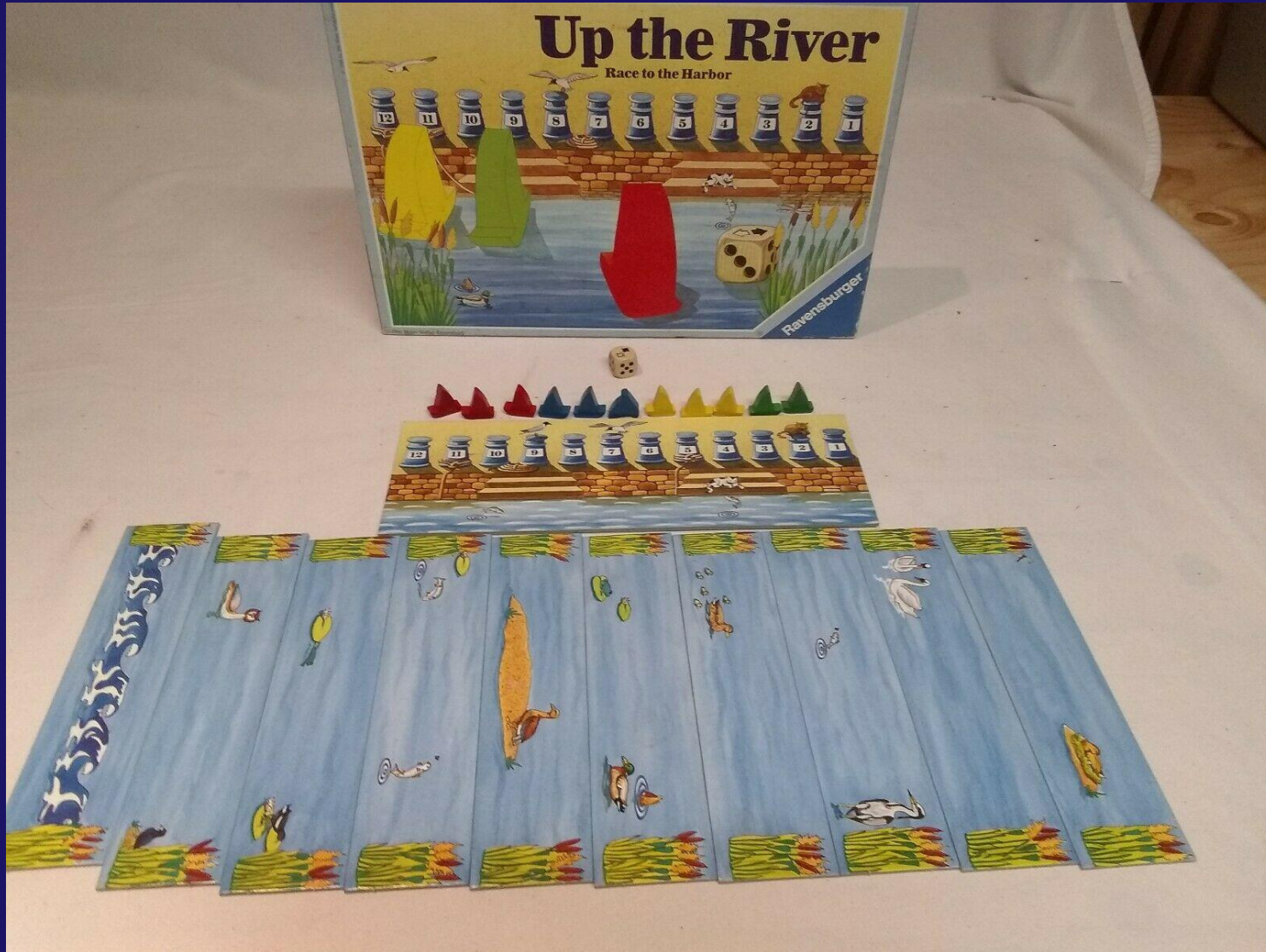
Although the artwork is crude and the rules are rough, do they provide enough of an experience for someone to grasp the game and give feedback?

Exercise

Change 3 things in rules

What changes in prototypes will be needed?

Up the River



Up the River rules

Up to 4 players

1 d6

12 bars – the River

1 Sandbar

1 High Tide

The youngest goes first

Roll a dice -> Move

Sandbar stops movement

High Tide adds 3 extra steps

1) In the end of the turn boats on the last bar are lost

2) 6 is good or bad wind

Formal System

How number of bars and dice are connected?

How number of boats is connected to starting position?

Is starting position of the Sandbar/High Tide important?

What skills are important to play the game?

Why the youngest goes first?

What can we enhance? Exercise

Negotiations

Tactics

Teams with different roles

Shooter Prototype





02

Your Ideas

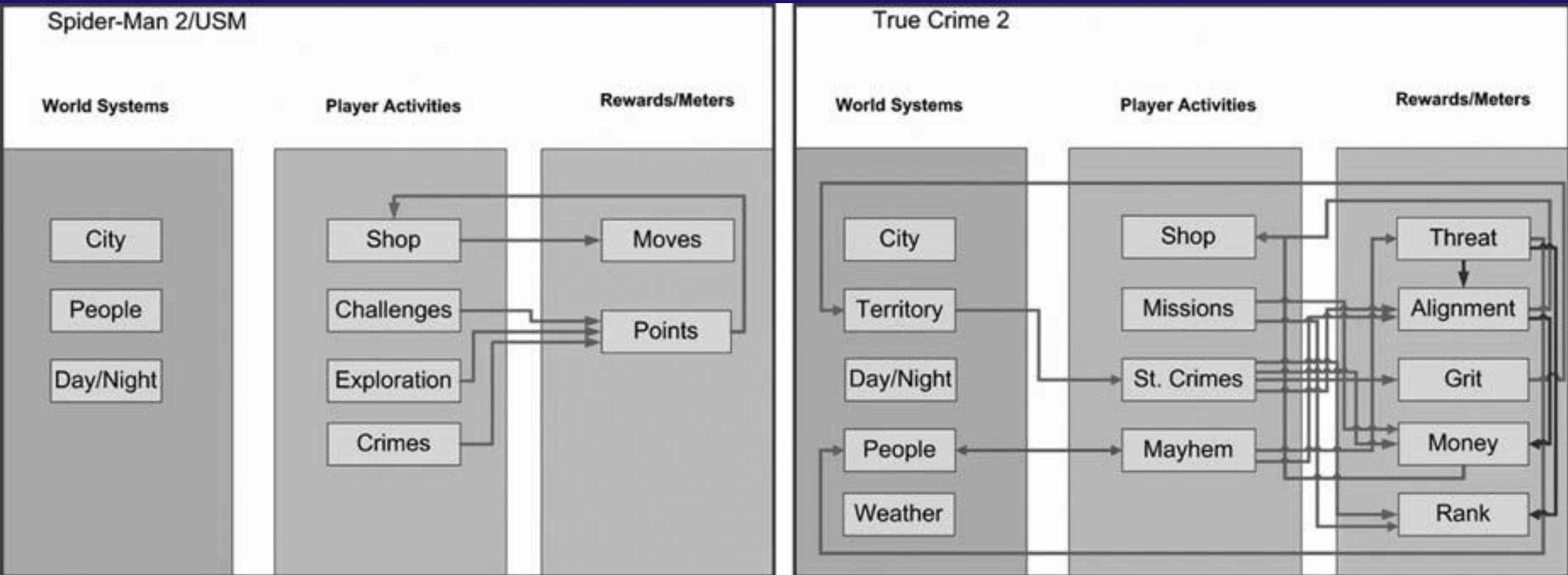
Working on your idea

Visualizing Core Gameplay

Building the Physical Prototype

Refining Your Visualization

Visualizing Core Gameplay



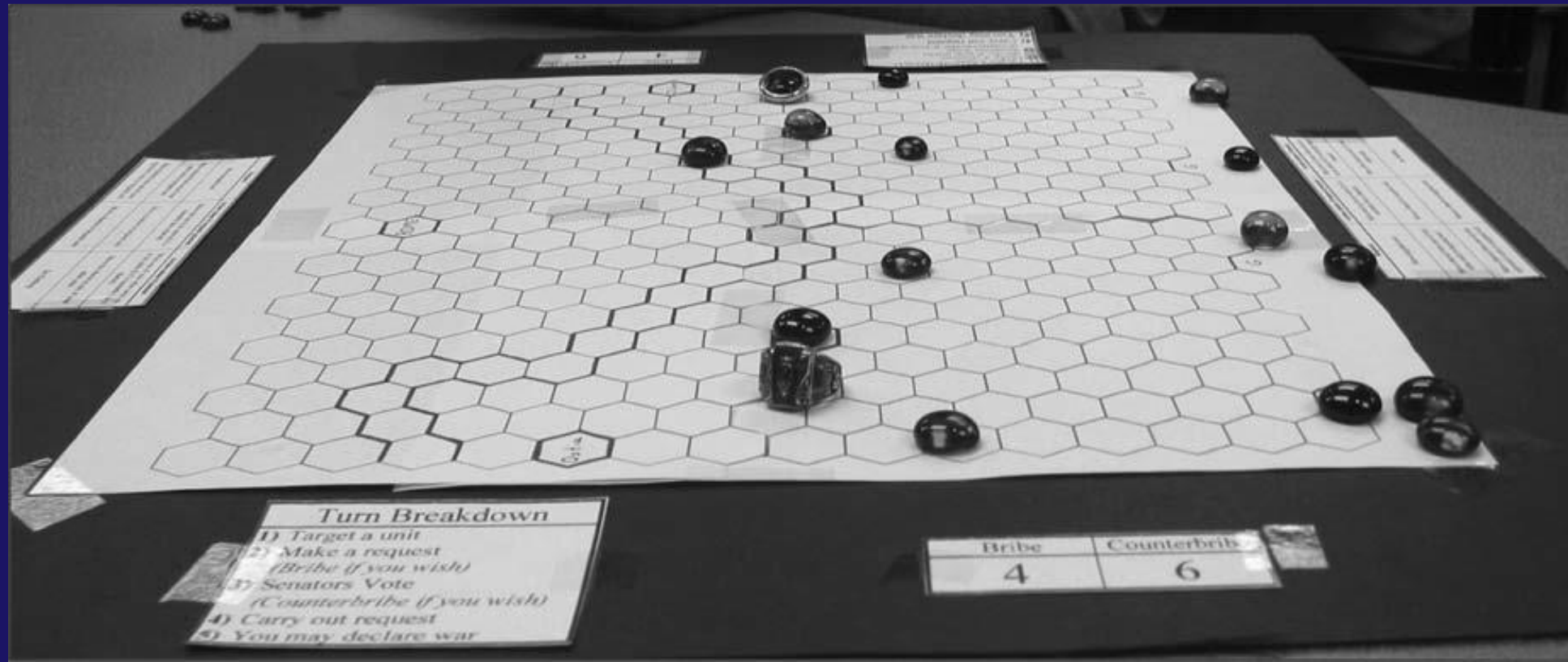
Diagrams courtesy of Activision Central Design (Jeff Chen and Carl Schnurr)

Or write it down

- *WarCraft* : Players build and move units on a map in real time with the intent of opposing units in combat and destroying them.
- *Monopoly*: Players buy and improve properties with the goal of charging rent to other players who land on them in the course of play.
- *Diablo*: Players battle monsters, seek treasure, and explore dungeons in an attempt to amass wealth and become more powerful.
- *Super Mario Bros.*: A player controls Mario (or Luigi), making him walk, run, and jump, while avoiding traps, overcoming obstacles, and gathering treasure.

Building the Physical Prototype

- 1 Foundation (world, basic rules)
- 2 Structure (framework)
- 3 Formal details (smaller rule)
- 4 Refinement



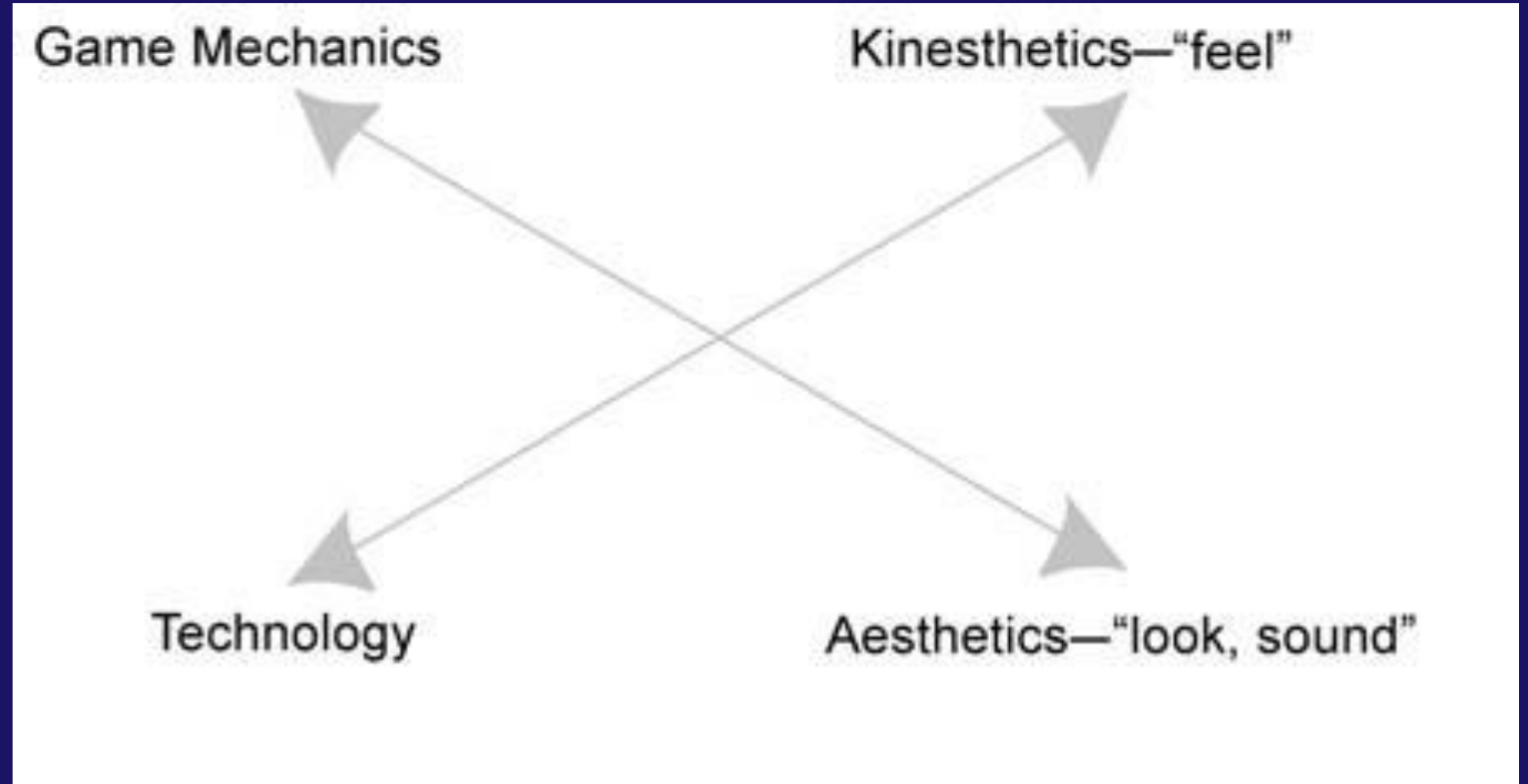


03

Digital Prototypes

What can we prototype?

Game Mechanics
Aesthetics
Kinesthetics
Technology



Game Mechanics

No need for stand-alone app (Spreadsheets, Visual Editing, Mods)

Quick, Parametrized Example

$$total_output = 15 * 2$$

$$total_output = production_rate * num_factories$$

Aesthetics

Storyboards

Concept art

Animation

Interface prototype

Audio sketches

INTRO & MAP SCREEN

01 Dora introduces herself and talks about animals

02 Cut to long shot and Dora talks about getting the jewel

03 map unfolds.

04 Illustrate map in style of show.

05 Dora walks in


06 Game Screen Layout

END SCREEN

07 Dora Enters Room with Magico
note: the area behind dora is a dried up
open which will fill w/ water.

08 Magico pulls out the jewel

09 Magico pulls idol to right.
water starts and pours down hole.

 **Playtime Games**
storyboards

game title: Dora's Pyramid

date: 3/6 version: 1 illustrator: Rob Kohr

01

Kinesthetics

Control scheme

Actual device

Probably, actual tech

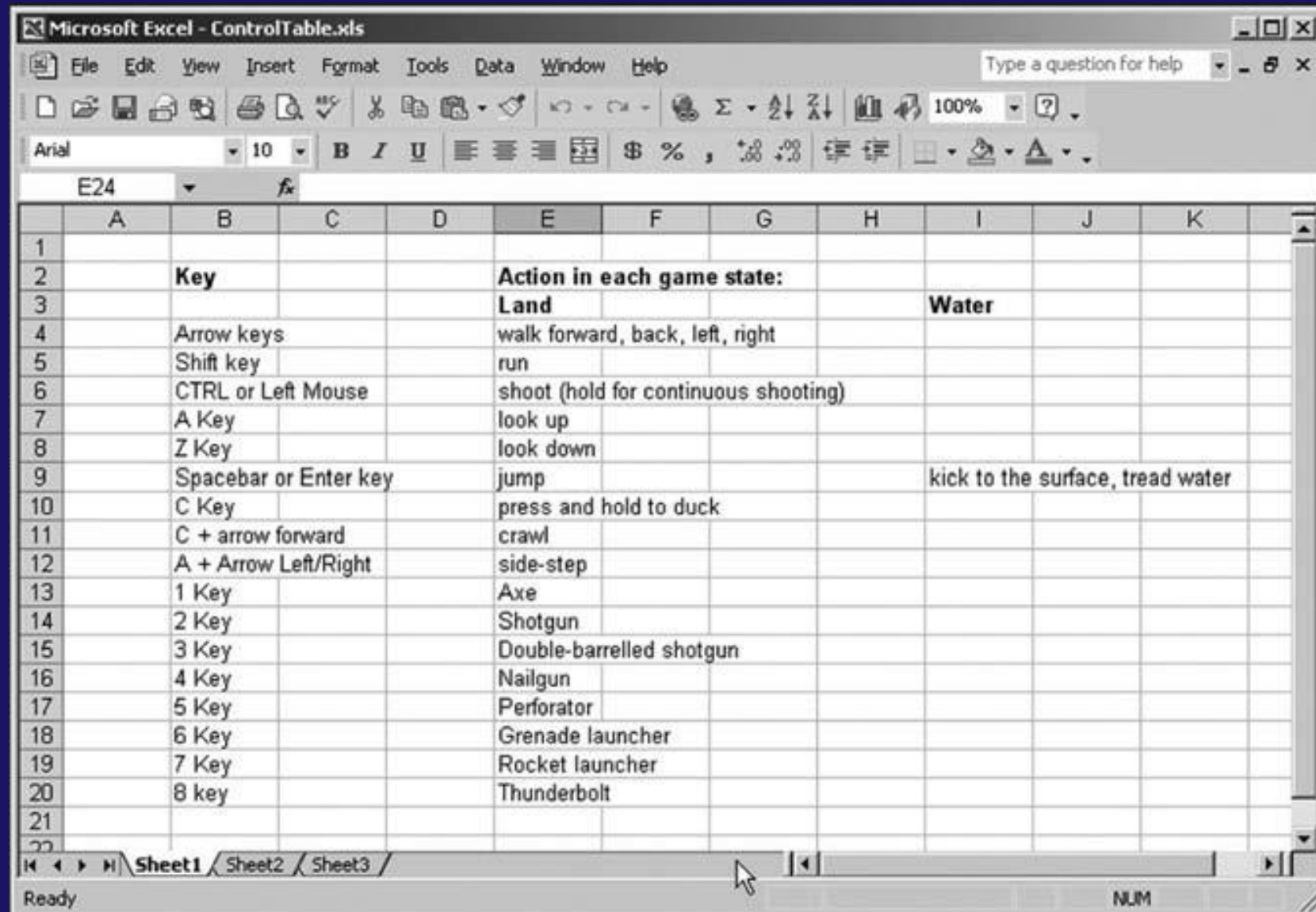
Input->Response



Controls



Control Tables



Microsoft Excel - ControlTable.xls

File Edit View Insert Format Tools Data Window Help

Type a question for help

Arial 10 B I U

E24

	A	B	C	D	E	F	G	H	I	J	K
1											
2		Key			Action in each game state:						
3					Land				Water		
4		Arrow keys			walk forward, back, left, right						
5		Shift key			run						
6		CTRL or Left Mouse			shoot (hold for continuous shooting)						
7		A Key			look up						
8		Z Key			look down						
9		Spacebar or Enter key			jump				kick to the surface, tread water		
10		C Key			press and hold to duck						
11		C + arrow forward			crawl						
12		A + Arrow Left/Right			side-step						
13		1 Key			Axe						
14		2 Key			Shotgun						
15		3 Key			Double-barrelled shotgun						
16		4 Key			Nailgun						
17		5 Key			Perforator						
18		6 Key			Grenade launcher						
19		7 Key			Rocket launcher						
20		8 key			Thunderbolt						
21											
22											

Sheet1 Sheet2 Sheet3

Ready NUM

Technology

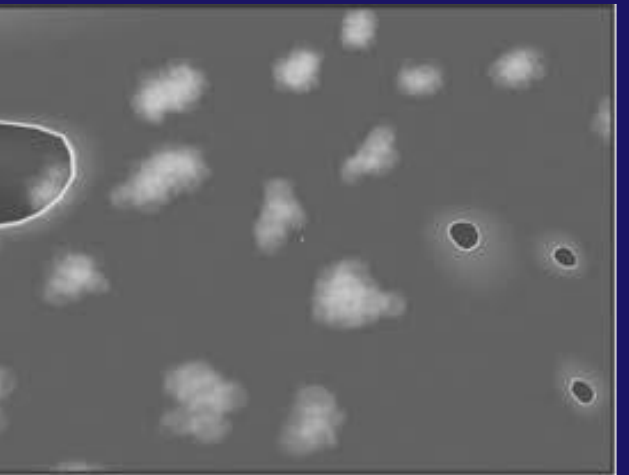
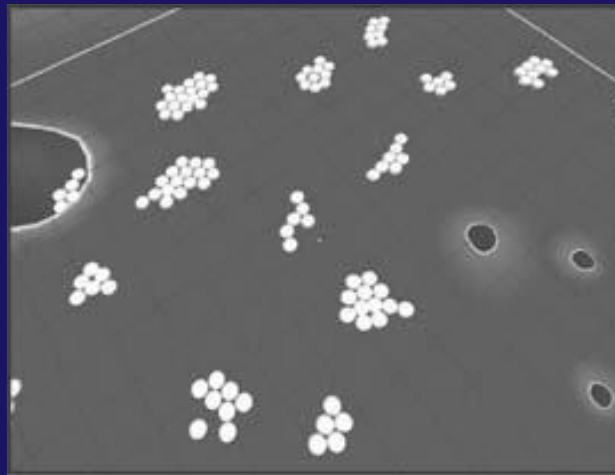
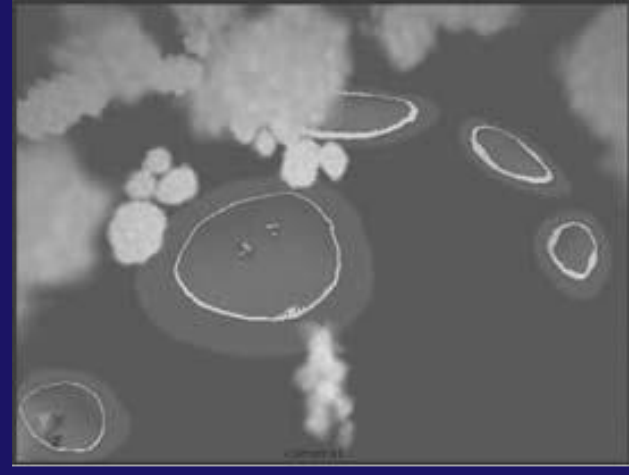
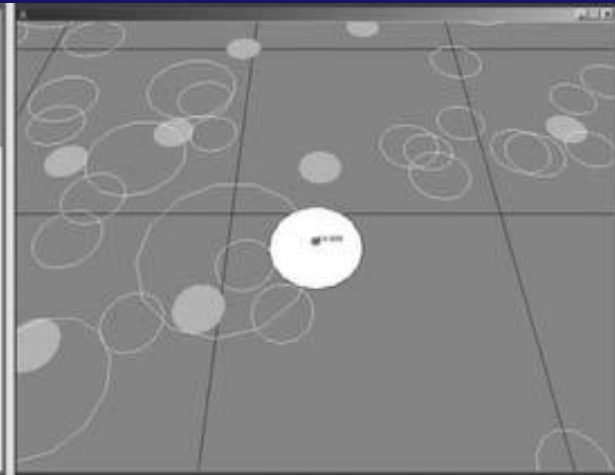
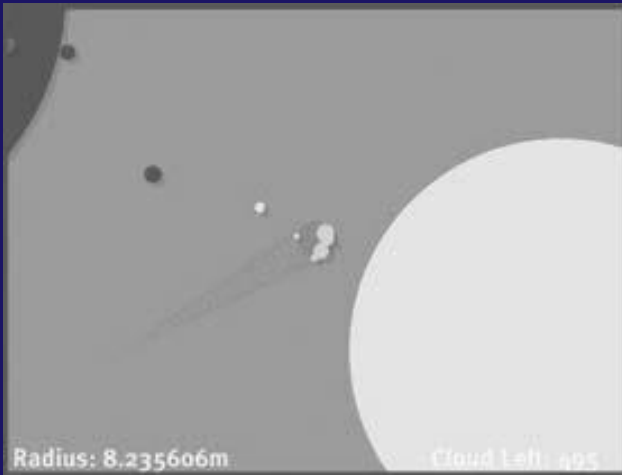
Any language

Priority

Try to keep checking, not creating ideas



Clouds



Views

Overhead

Side View

Isometric View

First Person View

Third Person View

What View?

Camera Position

What emotions?



04

Tasks

What to do?

Sketch a core gameplay of the game you are familiar with

Sketch a core gameplay of your game (teams allowed)

Produce the first prototype

References

Game Design Workshop-A playcentric approach to creating innovative games-2nd Edition