Game Feel CH5-7

I had you read these three chapters because, for P1, Input and Response are key (plus a high level concept of the others, since you want to do these!)

CH5: Beyond Intuition: Metrics for Game Feel

Goal: Compare feel of games meaningfully to each other

* vocabulary, tighter than “floaty”
* don’t have to reinvent the wheel

Soft vs hard metric

 Playtesting is brutal; players never “get it”

 Give you “Soft” feed back: you can tell how they feel, what they think is fun.

 Hard metrics are data: graph output in book

 Need both, and complementary

6 aspects of game feel that can be used as metrics

 Input (physical device)

 Response (ADSR, how input affects the game state over time)

 Context (Collision, level design; give meaning)

 Polish effects (enhance impression of games “reality”)

 Metaphor (representation and treatment affect players expectations)

 Rules (arbitrary relationships between abstracted variables, how

they change player perception of game objects)

Input

 Construction and layout

 Characteristics

 EX: pass around controllers

Response

 Input -> game state

 Infinite number of ways mapping can happen, over time

 EX: give examples of game that maps similar input to similar state in

subtly different way

Context

Constraints define sensation, define challenges

Tetris example

Polish

 Convey physicality of avatar and objects, interactions with world

 Particles, sounds, deformations of meshes, textures, etc

 Burnout: Revenge vs Mario Kart

 All DESIGNED, nothing accidental

Metaphor

 Gives meaning to actions, helps us figure out what to do

RPS example

Rules

 Your rules define values in the game, and thus give meaning to actions

 Provide motivation to try things, challenge

 Multi-scale: big goals, current goals, second-to-second goals

CH 6: Input

 The design of the device affects the feel of the game

 Different devices have different possibility spaces

 Measure the space of input

 Micro: each input (button, joystick, etc)

 Macro: the whole set of inputs (and how they can work together)

 Tactile: how physical construction affects feel

 Micro: Jacob’s paper (future of input devices)

 Type of motion (linear, rotation)

 Type of sensitivity (position vs force)

 Dimensions of motion (1, 2, 3)

 Direct vs indirect (mouse, touchscreen)

 Boundaries on motion (casing on thumbsticks,

mid-motion clicks on triggers)

 Sensitivity (how many states, how precise, etc)

 Signals sent

 Micro: Examples

 Standard button

 On/off. Physical motion, springs, etc change feel

 Trigger button

 Seem to have a few states

 Paddle

 Hard boundary, hundreds of states

 Thumbstick

 Two-axis, auto-center, different “edge designs”

 Mouse

 No boundary

 Macro: combine them.

What’s possible in the device

what’s possible for the player

 Tactile

 Weight, materials, button and spring quality, etc.

CH 7: Response

 Signal comes in, is filtered/interpreted, modulates some parameter in game

 Generally, input might

 Set new position of object

 Set new orientation of object

 Add force or torque

 Modify simulation variable (gravity, friction, etc)

 Play back animation

 Modify looping animation (e.g, change speed, etc)

 Instantaneous filters are not really stateless and instant

 ADSR

 Vary over time (from music, describes the sound wave)

 How long to ramp, where it rests over time, how long

 To go to zero

 Where come from

 Simulation (interaction between variables)

 State changes can change the interactions

 Filtering

 Get input -> apply function -> then modulate

 Thumbstick for turning example

 Gestures

 Other mappings that let different devices do similar

 Things (e.g., WASD and controller buttons)