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)