
Index

■ A

Accelerometer

- Autorotate attribute, 113–114
- clockwise rotation, 110
- counterclockwise rotation, 110
- iPad, portrait mode, 110
- left Movement rule, 109
- meaning, 109
- portrait orientation rule, 111–112
- right movement rule, 111
- upside down orientation rule, 112–113

Actor, Pong game

- attributes
 - color, 43
 - concepts, 42
 - modification, 41, 44–45
 - name, 42
 - Physics/Density, 43
 - Physics/Friction, 43
 - Physics/Moveable, 43
 - restitution attribute, 46
 - size, 43
 - Tags, 43

ball, 54

- Attributes Inspector window, 55
- direction, 55–57
- Expression Editor, 56, 58
- serving rule, 58, 59

behaviors

- Constrain Attribute, 53
- definition, 46
- move behavior, 50
- rule behaviors, 47–49
- types, 46

definition, 39

racket player 1, 51

racket player 2, 53

tags, 61–63

via project editors, 40

via scene editor, 41, 51–52

walls, 60–61

Analog clock, 307. *See also* Device internal clock

Angry Birds, 161, 203

actors scene, 207

blocks

hard actor attributes, 205

soft actor attributes, 205

target, 204

types, 204

blocks replacing, 229–232

camera

fine-tune, 192

screen vs. scene, 184–185

scrolling, 186–187

tracking area, 192

zooming in, 191–192

zooming out, 189–191

collide, 205–206

cool menu

boxes position, 237

- Angry Birds, cool menu (*cont.*)
 - level box, 236–237
 - MaxLevel update, 235–236
 - menu scene, 234–235
 - unlocked levels, 235–237
- custom behavior, 228
- gameplay, 161–162
- gravity, 206–207
 - accelerate and drag, 189
 - apple, 187–188
 - flying and dragging, 188–189
- particle effect
 - behavior, 214–217
 - Color tab, 211–212
 - explosion, colors, 213–217
 - feature, 208
 - Hard Block, 213
 - Image, 212
 - parameters, 208
 - Rotation, 212
 - Size, 210–211
 - Soft Block, 213
 - Spawn Rate tab, 209
 - Velocity/Position, 209–210
- projectile management
 - adding boundaries, 193–194
 - bounce, 194
 - create dummy projectiles, 195–198
 - modification, 198–202
- projectile modification, 232–234
- recycling
 - Hard Block positions, 223–224
 - right Hard Block selection, 222–223
 - rule updation, destruction, 225–227
 - Soft Block actor, 224
 - Target, 225
- sliding effect
 - cameraControl actor, 240–242
 - initial scene, 244–245
 - layers inspector, 239
 - level selection, 242–244
 - touch actor, 238–240
- slingshot system
 - anatomy, 162–166
 - elastic simulation, 175–183
 - keys, 162
 - pullback force, 166–175
- tables
 - creation, 220–222
 - data types, 219
 - editor, 218–219
 - function, 219–220
 - syntax, 220
 - tab view, 217–218
 - target table, 222
- TargetDestroyed, 227–228
- target level updation, 229
- App Store, publish a game, 341
- App ID creation, 342–343
- Distribution Certificate, 343
- Distribution Provisioning Profile, 343–345
- e-mail notification, 369
- in GameSalad, 357
 - file compression, 364
 - link to promotional youtube video, 362
 - overview information, 358–360
 - post score behavior, 357
 - Provisioning Profile, 360–361
 - show Leaderboard behavior, 357
 - targeted platform, 357–358
 - terms and agreement, 362–363
 - uploading screenshots, 362
- on iTunes Connect
 - application rating, 348
 - artwork, 350–352
 - enable Game Center, 352–356
 - enable iAd, 356–357
 - EULA agreement, 350

- game information, 346
 - logging, 345
 - metadata information, 349
 - new App, 346
 - release date and pricing information, 347
 - upload, 364–369
 - version and category information, 347–348
 - sale status notification, 370
- Armv7, 361
- B**
- Ball
- attributes, 92–93
 - rules and behaviours
 - Collide behavior, 99
 - drag and drop, 100
 - horizontal jam, 101
 - initial velocity, 98–99
 - loosing rule, 99–100
 - vertical jam, 101–102
- Bonuses, Break A Wall game
- actors
 - 50 pt cap, 289
 - 100 pt cap, 289–290
 - Auto Bullet, 290
 - Bullet, 290–291
 - rules and behaviors, 291
 - 50 pt cap, 291–292
 - 100 pt cap, 292–293
 - Auto bullet, 293–294
 - Brick1, 295–296
 - Brick2, 296
 - Bullet, 294–295
 - Racket, 296–298
- Break A Wall game, 273
- bonuses (*see* Bonuses, Break A Wall game)
- iAd
- behavior, 305
 - freemium model, 304
 - revenue, 306
- score posting, 300
- Game Center Login, 301
 - Show Leaderboard, 303–304
 - post a score, 302–303
- ScoreDisplay, 283
- actor attributes, 286–287
 - rules and behaviors, 287
- Start Screen (*see* Start Screen)
- Breakout
- accelerometer, 109–114
 - Atari 2600 home version, 88–89
 - basic elements
 - actors, 90–97
 - actors creation, 90
 - attributes, 98
 - Collidable tag, 97
 - project configuration, 90
 - rules and behaviors, 98–106
 - comment, 107–108
 - development, 89
 - features, 88
 - lives and GameOver process
 - attributes, 115
 - ball spawning rule, 117–118
 - display rule, 116–117
 - feature, 119–123
 - losing zone rule, 115–116
 - original game poster, 88
 - pause
 - actor attributes, 120
 - display, 120
 - function, 119
 - Game actor attributes, 122
 - position, 121
 - ResumeGamedisplay, 122
 - rule, 121
 - scene view, 120
 - unpause Game rule, 122–123
 - scene layout, 106–107
- Bullets
- attributes, 132
 - Change Velocity, 139–140

Bullets (*cont.*)

destroy behaviors, 140–141

■ **C**

Camera

features, 184
 fine-tune, 192
 icon, 184
 interpolate, width and size, 190–191
 projectile instance, 190
 screen vs. scene, 184–185
 scrolling
 control behavior, 186–187
 scene attributes, 186
 size, 186
 zone view, 185
 zooming in, 191–192
 zooming out, 189–191

Carrot Invaders, 125

actors

background, 131
 bullets, 132
 enemies, 130
 imported images, 128–129
 inventory, 132–133
 scene editor, 127–128
 spaceship, 131
 wall, 132–133

attributes, 133–134

basic elements, 127

energy bar

action, interpolate, 152–154
 Asteroid updation, 156–157
 attributes, 153
 behaviors, 154
 Collision detection, 157
 color, 154–156
 interpolate behavior, 152
 orange rule, 155
 red rule, 155–156
 scene management, 157–158

features, 143

game project, 127

movements, 143

parametric equations

actor attribute creation, 145–146

GameSalad, 143–144

heart shape, 144–145

invasion, 148

movements group, 147–148

X formula, 146–147

Y formula, 147

rules and behaviors

bullet, 139–141

Carrots, 134–135

scene layout, 142

spaceship, 135–139

shoot 'emup game, 126

Space Monsters, 125–126

spaceship movement, asteroids

attributes, 148–149

Change Velocity, 149–150

position, 151

■ **D, E, F**

Device internal clock

assembling, 317

background and clock hands

button, 313

clock, 311

hours, 312–313

minutes, 312

seconds, 312

mechanisms, rules and behaviors

button, 315

clock, 313–314

hours, 316–317

minutes, 316

seconds, 315, 316

project info, 310

set of attributes, 309

G, H

- Game promotion, 371
 - competition information, 374–376
 - operational tactics
 - Facebook pages, 382–386
 - game reviews, 382
 - press release, 380–381
 - product web pages, 381–382
 - targeted customers, 372
 - population profiling, 372–373
 - purchase decision, 374
 - source of information, 373
 - unique value proposition, 377
 - App store description, 379–380
 - icon search, 378–379
 - name search, 377–378
- GameSalad, 3
 - ball
 - attributes, 92–93
 - rules and behaviors, 98–102
 - breakout
 - attributes, 98
 - Bricks, 91–92
 - Collidable tag, 97
 - display, 96–97
 - elements, 90
 - Horizontal Walls, 94–95
 - Losing Zone, 95–96
 - project configuration, 90
 - racket, 90–91
 - Vertical Walls, 93–94
 - Creator installation, 17–19
 - hardware and software requirements, 3
 - iOS Developer Program
 - registration, 6
 - activation, 13
 - adding to cart, 13
 - agreement, 11
 - Apple ID creation, 9
 - billing information, 12

- experiences, 11
- individual/company
 - subscriptions, 8–9
- new/existing Apple Developer,
 - 7–8
- target market, 10
- verification code, 12
- workflow, 13
- Pro, 5–6
- pong game (*see* Pong game)
- registration, 4–5
- resolution independence, 38
- rules and behaviors
 - brick, 105–106
 - display text, 106
 - racket, 102–105
- tables, 217–220
- Viewer installation, 19, 26–29
 - developer certificate, 20–23
 - piece of code, 19
 - provisioning profile, 23–26
- Xcode installation, 14
 - App Store page, 14
 - Installer page, 15
 - License Agreements, 16
 - steps, 14
 - Welcome page, 17
 - Xcode icon, 15

I, J, K

- iAd
 - behavior, 305
 - freemium model, 304
 - revenue, 306

L

- Labyrinth, 247
 - actors
 - background, 250
 - ball, 249
 - door, 251
 - losing hole, 252

Labyrinth, actors (*cont.*)
 open door, 251–252
 victory hole, 252
 wall, 250

ball
 Collision rules, 256
 down accelerometer rule,
 254–255
 left accelerometer rule, 255–
 256
 right accelerometer rule, 254
 up accelerometer rule, 253–
 256

ball-in-a-maze puzzles, 247–248

door
 false rule, 261–262
 initial Y position value, 260–
 261
 true rule, 261

game project creation, 248

lighting effects, 266–267

open door
 False rule, 257–259
 true rule, 259–260

rules and behaviors
 background, 257
 ball, 253–256
 door, 260–262
 open door, 257–260
 victory hole, 262–263

scene layout
 different sizes, 263
 finished layout, 265
 first wall position, 264
 labyrinth layout, 264–265

sound effects
 import, music/sound, 268
 play sound vs. music, 267
 rule, 268–269
 tabs, 267, 268

■ M, N

Menu page. *See* Start Screen

Metronome, 307, 318
 components
 metronome, 321
 off, 323
 on, 323
 pendulum, 322
 weight, 322

game attributes, 323–324

mechanical, 319

movements, rules and behaviors
 metronome, 324
 off, 326–328
 on, 324–326
 pendulum, 328–332
 weight, 333–338

positioning, 338

project info, 320

Move behavior, 50

■ O

Object-oriented programming (OOP),
 42

■ P, Q

Pong game, 31, 65
 actors (*see* Actor, Pong game)
 arcade version, 32
 artificial intelligence, 81
 Constrain Attribute, 83
 modified serving rule, 84
 movement detection and
 position, 81–82

concepts and rules, 34–35

game/player interaction, 84–85

GameSalad project, 35–39

history, 31

home version, 33

in iOS viewer, 85, 86

limitations, 32

- resolution independence, 38
 - scoring management
 - actor rules and behaviors, 67
 - Ball Detection rule, 68
 - Destroy behavior, 73
 - Display Text behavior, 70
 - fixed rotation, 66
 - memory, 66
 - rules, 65
 - Scene Editor attribute, 66
 - Scene view attribute, 66
 - serving feature, 74–79
 - one ball at a time, 76
 - Point winner, 74
 - touch interface, 79–81
 - Projectile management
 - adding boundaries, 193–194
 - dummy
 - creation, 195–196
 - game attribute attemptleft, 195
 - modification, 197–198
 - position, 196–197
 - modification
 - attributes reset rule, 201
 - change attribute rule, 198–199
 - game resetting, 201–202
 - key resetting, 200–201
 - original position, 199–200
- **R**
- Racket
 - attributes, 91
 - rules and behaviours
 - ball actor rule, 105
 - Collide behavior, 102
 - constrain attribute, 102
 - left movement rule, 103
 - right movement rule, 103–104
 - Resolution Independence, 38
 - Restitution attribute, 46
 - Rule behavior, 47
- **S, T, U, V, W, X, Y, Z**
- Slingshot system
 - anatomy
 - draw, 162
 - foot position, 164
 - frame, 164–166
 - left frame position, 166
 - project file, 163
 - projectile throw, 163
 - right frame position, 165
 - elastic simulation
 - actor attribute, 179–180
 - constrain attribute, 177
 - initial position, 178
 - instance actor name, 176
 - left elastic instance, 182–183
 - real-time position, 177–178
 - right elastic implementation, 181–182
 - theory, 178–179
 - pullback force
 - area, 166
 - Cosinus and Sinus functions, 171
 - HasBeenTouched attribute, 174
 - initial position, 170
 - magnitude function, 167
 - projectile actor attributes, 170
 - throwing rules, 173–175
 - touch rules, 171–173
 - uses, slingshot, 168–169
 - vectorToAngle function, 168
 - Spaceship
 - attributes, 125–126
 - auto fire rule, 138–139
 - Collide wall, 136
 - constrain attribute, 135–136
 - left movement rule, 137–138
 - right movement rule, 136–137

Start Screen, 274

actors, 275

Home attributes, 275–276

Speaker attributes, 276

Start Game attributes, 276

Home scene, 275

instructions, 274

rules and behaviors, 276

Home actor, 277

speaker actor, 280–283

Start Game actor, 277–279

splash screens, 275