

ShadowFlap
-level0background:Image = new Image("res/level-0/background.png") -level1background:Image = new Image("res/level-1/background.png") -level0bird:level1 bird -level1bird:level0 bird - INSTRUCTION_MSG:String = "PRESS SPACE TO START" -GAME_OVER_MSG:String = "GAME OVER!" -CONGRATS_MSG:String = "CONGRATULATIONS!" -SCORE_MSG:String = "SCORE: " - FINAL_SCORE_MSG:String = "FINAL SCORE: " - FONT_SIZE:int= 48 -FONT:Font = new Font("res/font/slksr.ttf", FONT_SIZE) -SCORE_MSG_OFFSET: int =75 - level0pipeSet[15]:PipeSet -level1pipeSet[40]:PipeSet -weaponSet:ArrayList<weapon> -lifebar: ArrayList<Lifebars> - score:int - gameOn:boolean -collision:boolean - win:boolean -destroyed:boolean -timescale:int
+main(args:String[]):void +update(input:Input):void +birdOutOfBound():boolean +renderInstructionScreen(input:Input):void +renderGameOverScreen():void +renderWinScreen():void +detectCollision(birdBox:Rectangle,topPipeBox:Rectangle, bottomPipeBox:Rectangle):boolean +updateScore():void +renderlevelupscreen():void

Weapon
-WeaponImage: Image -range:int -targetType:String -stored:boolean -MAX_Y: double = 500 -MIN_Y:double = 100 -weapon_attack_speed: double = 5 -weapon_move_speed: double = 3 -x: double -y:double
+update():Rectangle +getbox(weapon:Weapon):Rectangle +renderweapon(x:double,y:double):void +detectCollision(weapon:Rectangle):boolean +OutOfRange(distance:double):boolean

<i>Pipes</i>
-PipeImage: Image -PIPE_GAP:int = 168 -Pipe_Speed:int = 3 -ROTATOR: DrawOptions -HIGH-GAP:int = 100 -MID-GAP:int = 300 -LOW-GAP:int = 500 -top_pipe_y:double -bottom_pipe_y:double -pipetype: String
+ <i>renderPipeset</i> (random: int):void + <i>update</i> (timescale: int):void + <i>getTopbox</i> :Rectangle + <i>getBottombox</i> :Rectangle

empty-heart
-emptyheart:Image = new Image("res/level/noLife.png")

Plasticpipes
-plasticimage:Image = new Image("res/level/plasticPipe.png")
+destory(pipe:pipes):boolean

Rock
-rockimage:Image = new Image("res/level-1/rock.png")

Level1 bird
-wingupimage:Image = new Image("res/level-1/birdWingUp.png") -wingdownimage:Image= new Image("res/level-1/birdWingDown.png")

Level0 bird
-wingupimage:Image = new Image("res/level-0/birdWingUp.png") -wingdownimage:Image= new Image("res/level-0/birdWingDown.png")

Lifebars
-LifebarImage: Image -initialx:double = 100 -initialy:double = -15 -heartgap:double = 50
+update():void +renderheart(x:double):void

full-heart
-fullheart:Image = new Image("res/level/fullLife.png")

Steelpipes
-steelpipe:Image = new Image("res/level-1/steelPipe.png") -image: Flame
+destory(pipe:Pipes):boolean

Flame
-flameimage:Image= new Image("res/level-1/flame.png")

Bomb
-bombimage:Image = new Image("res/level-1/bomb.png")

Bird
-WingupImage: Image -WingDownImage: Image -FLYSIZE: double= 6 -FALLSIZE:double = 0.4 -INITIALY: double = 350 -TERMINAIFALL:double = 10 -framecount: int -X: double= 200 -y:double -yVelocity:double -boundingBox:Rectangle
+update(other:Input): Rectangle

