<http://www.playmycode.com/build/edit/360>

catImage = new Image( "catFace.jpg" )

catSound = new Sound( "cat-meow2.mp3" )

gameState = "title"

theGUI = new GUI()

// The code inside this do block is run each frame

onEachFrame() do

fill( 0, 0, 0 )

if( gameState == "title" )

theGUI.drawHeadline()

theGUI.drawSubtitle()

gameState = keyToChangeState( gameState, "space", "init" )

else if( gameState == "init" )

reactionTest = new ReactionTest( catImage, catSound )

gameState = "game"

else if( gameState == "game" )

if( reactionTest.checkTime() )

reactionTest.drawReactionTest()

end

reactionTest.getReactionTime()

theGUI.setSubtitle( "Press space when the image appears..." )

theGUI.drawSubtitle()

gameState = keyToChangeState( gameState, "space", "tryAgain" )

else if( gameState == "tryAgain" )

//if the player hasn't pressed too soon...

if( reactionTest.getScore() > 0 )

theGUI.drawScore(reactionTest.getScore())

theGUI.setHeadline( "Reaction Time:" )

theGUI.setSubtitle( "Have another go! Press space." )

else

theGUI.setHeadline( "FOUL!" )

theGUI.setSubtitle( "You pressed too soon! Space to try again." )

end

theGUI.drawHeadline()

theGUI.drawSubtitle()

gameState = keyToChangeState( gameState, "space", "init" )

end

end

class ReactionTest

def new( image, sound )

@image = image

@sound = sound

@currentTime = getTime() //get the time now

@reactionRandom = rand(5000) //up to 5 seconds

@reactionBase = 3000 //our reaction img won't appear for at least 3 secs

@reactionTime = 0 //the time it takes the person to react

@finalScore = 0

@imageShown = false

@showImageAt = @currentTime + @reactionRandom + @reactionBase

// @sound.setRepeating( false )

end

//get the time now (as the game progresses)

def checkTime()

if( getTime() > @showImageAt )

return true

end

end

def getReactionTime()

controls = getControls()

if controls.isKeyPressed( "space" )

@reactionTime = getTime()

end

@score = @reactionTime - ( @currentTime + @reactionRandom + @reactionBase )

end

def drawReactionTest()

if @imageShown == false

@sound.play()

@imageShown = true

end

setColor( 255,255,255 )

drawImage( @image, 0, 0 )

end

//so we can give the score as a number to the GUI

def getScore()

return @score

end

end

//This is for title/game over messages, displaying the score etc

class GUI

def new()

//Headline is for Title/Game Over messages

@headlineX = getScreenWidth() / 2

@headlineY = 140

@headlineText = "Reaction Test"

//Message is for "try again"-type messages

@subtitleX = getScreenWidth() / 2

@subtitleY = 300

@messageText = "Press space to play."

//The score co-ords

@scoreX = getScreenWidth() / 2

@scoreY = 230

//Finally, the colour of our text- an array

@colour = [ 240, 240, 240 ]

end

def setHeadline( text )

@headlineText = text

end

def setSubtitle( text )

@messageText = text

end

def drawHeadline()

/\*

If you want to change font or colour you have to set these again

\*/

setFont( 'Helvetica, arial, sans-serif', 60, 'bold' )

setColor( @colour[0], @colour[1], @colour[2] )

/\*

The "true" parameter makes it handle text from its centre.

\*/

fillText( @headlineText, @headlineX, @headlineY, true )

end

def drawSubtitle()

setFont( 'Helvetica, arial, sans-serif', 25 )

setColor( @colour[0], @colour[1], @colour[2] )

fillText( @messageText, @headlineX, @subtitleY, true )

end

def drawScore( score )

setFont( 'Helvetica, arial, sans-serif', 100, 'bold' )

setColor( @colour[0], @colour[1], @colour[2] )

fillText( score.round() + "ms", @scoreX, @scoreY, true )

end

end

def keyToChangeState( current, key, next )

if getControls().isKeyPressed( key )

return next

else

return current

end

end