AppGameKit

COMMAND REFERENCE GUIDE

Core Commands

Display

ClearDepthBuffer()
ClearScreen()
EnableClearColor(clear)
EnableClearDepth(clear)
integer GetDeviceDPI()
integer GetDeviceHeight()
integer GetDeviceWidth()
float GetDisplayAspect()
integer GetMaxDeviceHeight()
integer GetMaxDeviceWidth()
integer GetOrientation()
integer GetPaused()
integer GetPolygonsDrawn()
integer GetResumed()
float GetScreenBoundsBottom()
float GetScreenBoundsLeft()
float GetScreenBoundsRight()
float GetScreenBoundsTop()
integer GetVerticesProcessed()
float GetViewOffsetX()
float GetViewOffsetY()
float GetViewZoom()
integer GetVirtualHeight()
integer GetVirtualWidth()
integer IsSupportedDepthTexture()
MinimizeApp()
Render()
Render2DBack( )
Render2DFront( )
Render3D( )
RestoreApp()
float ScreenFPS()
float ScreenToWorldX(x)
float ScreenToWorldY(y)
SetBorderColor(red, green, blue)
SetClearColor(red, green, blue)
SetDisplayAspect(aspect)
SetImmersiveMode(mode)
SetIntendedDeviceSize(width, height)
SetOrientationAllowed(portrait, portrait2, landscape, landscape2)
SetRenderToImage(colorImage, depthImage)
SetRenderToScreen()
SetResolutionMode(mode)
SetScissor(x, y, x2, y2)
SetScreenResolution(width, height)
SetSyncRate(fps, mode)
SetTransitionMode(mode)
SetVSync(mode)
SetViewOffset(x, y)
SetViewZoom(zoom)
SetViewZoomMode(mode)
SetVirtualResolution(iWidth, iHeight)
SetWindowAllowResize(mode)
SetWindowPosition(x, y)
SetWindowSize(width, height, fullscreen)
Swap()
Sync()
UpdateDeviceSize(w, h)
float WorldToScreenX(x)
float WorldToScreenY(y)

Strings

integer Asc(strin)
string Bin(i)
string Chr(asciivalue)
integer CompareString(str, str2)
integer CompareString(str, str2, ignoreCase, maxChars)
integer CountStringTokens(str, delimiters)
integer CountStringTokens2(str, delimiter)
integer FindString(str, findStr)
integer FindString(str, findStr, ignoreCase, start)
integer FindStringCount(str, findStr)
integer FindStringCount(str, findStr, ignoreCase, start)
integer FindStringReverse(str, findStr, ignoreCase, start)
integer FindStringReverse(str, findStr)
string GetStringToken(str, delimiters, token)
string GetStringToken2(str, delimiter, token)
string Hex(i)
string HexToBase64(input)
string Left(strin, count)
integer Len(strin)
string Lower(strin)
string Mid(strin, position, length)
string ReplaceString(str, find, replace, qty)
string Right(strin, count)
string Spaces(length)
string Str(valueFloat)
string Str(valueFloat, decimals)
string Str(valueInt)
string StringToBase64(input)
string StripString(str, chars)
string TrimString(str, chars)
string TruncateString(str, character)
string Upper(strin)
integer Val(str)
integer Val(str, base)
float ValFloat(str)

Maths

float ACos(a)
float ACosRad(a)
float ASin(a)
float ASinRad(a)
float ATan(a)
float ATan2(y, x)
float ATan2Rad(y, x)
float ATanFull(x, y)
float ATanFullRad(x, y)
float ATanRad(a)
float Abs(a)

Maths (Continued)

integer Ceil(a)
float Cos(a)
float CosRad(a)
float FMod(a, b)
integer Floor(a)
float Log(a)
Log(szMessage)
integer Mod(a, b)
float Pow(a, b)
integer Random( )
integer Random(from, to)
integer Random2( )
integer Random2(from, to)
integer RandomSign(value)
integer Round(a)
SetRandomSeed(seed)
SetRandomSeed2(seed)
float Sin(a)
float SinRad(a)
float Sqrt(a)
float Tan(a)
float TanRad(a)
integer Trunc(a)

General

StepPhysics(time)
Update(time)
Update2D(time)
Update3D(time)

Misc

DownloadExpansionFile()
string GetAppName( )
string GetAppPackageName()
string GetDeviceBaseName()
string GetDeviceID()
string GetDeviceLanguage( )
string GetDeviceName( )
integer GetDevicePlatform()
string GetDeviceType()
float GetExpansionFileProgress()
integer GetExpansionFileState()
float GetFrameTime()
integer GetMilliseconds()
integer GetNumProcessors()
integer GetSeconds()
Message(msg)
ResetTimer()
SetAntialiasMode(mode)
SetDefaultMagFilter(filter)
SetDefaultMinFilter(filter)
SetDefaultWrapU(mode)
SetDefaultWrapV(mode)
SetExpansionFileKey(key)
SetExpansionFileVersion(int version)
SetGenerateMipmaps(generate)
SetSleepMode(mode)
SetSortCreated(sort)
SetSortDepth(sort)
SetSortTextures(sort)
SetSortTransparentDepth(sort)
SetWindowTitle(szTitle)
string Sha1(str)
string Sha256(str)
string Sha512(str)
Sleep(milliseconds)
float Timer()

External Apps

integer GetAppRunning(appID)
integer RunApp(szFilename, szParameters)
ShareImage(szFilename)
ShareText(szText)
TerminateApp(appID)
ViewFile(szFilename)

Drawing

DrawBox(x, y, x2, y2, color1, color2, color3, color4, filled)
DrawEllipse(x, y, radiusx, radiusy, color1, color2, filled)
DrawLine(x, y, x2, y2, red, green, blue)
DrawLine(x, y, x2, y2, color1, color2)
integer GetColorBlue(color)
integer GetColorGreen(color)
integer GetColorRed(color)
integer MakeColor(red, green, blue)

Image Commands

General

CopyImage(newImage, fromImage, x, y, width, height)
integer CopyImage(fromImage, x, y, width, height)
CreateImageColor(imageID, red, green, blue, alpha)
integer CreateImageColor(red, green, blue, alpha)
integer CreateRenderImage(width, height, format, mipmap)
CreateRenderImage(imageID, width, height, format, mipmap)
DeleteAllImages()
DeleteImage(iImageIndex)
integer GetImage(x, y, width, height)
GetImage(imageID, x, y, width, height)
integer GetImageExists(iImageIndex)
LoadImage(ID, sImageFilename)
LoadImage(iImageIndex, sImageFilename, bBlackToAlpha)
integer LoadImage(sImageFilename, bBlackToAlpha)
integer LoadImage(sImageFilename)
integer LoadImageResized(szFilename, scaleX, scaleY, cache)
LoadImageResized(iImageID, szFilename, scaleX, scaleY, cache)
integer LoadSubImage (iParentIndex, sImageFilename)
LoadSubImage (iImageIndex, iParentIndex, sImageFilename)
PrintImage(image, size)
SaveImage(iImageIndex, filename)

Choose
integer GetChosenImage()
integer IsChoosingImage()
integer ShowChooseImageScreen()

Properties
string GetImageFilename(imageID)
float GetImageHeight(iImageIndex)
float GetImageWidth(iImageIndex)
SetImageMagFilter(iImageIndex, mode)
SetImageMinFilter(iImageIndex, mode)
SetImageWrapU(iImageIndex, mode)
SetImageWrapV(iImageIndex, mode)

Capture
integer GetCapturedImage()
integer GetDeviceCameraType(cameraID)
integer GetNumDeviceCameras()
integer IsCapturingImage()
integer SetDeviceCameraToImage(cameraID, imageID)
integer ShowImageCaptureScreen()

QR
string DecodeQRCode(image)
integer EncodeQRCode(text, errormode)

Modify
ResizeImage(imageID, width, height)
SetImageMask(iDstImage, iSrcImage, dst, src, x, y)
SetImageTransparentColor(iImage, r, g, b)

Text Commands

Creation
integer CreateText(string)
CreateText (iTextIndex, string)
DeleteText(iTextIndex)

Properties
FixTextToScreen(iTextIndex, mode)
float GetTextCharAngle(iTextIndex, iCharIndex)
float GetTextCharAngleRad(iTextIndex, iCharIndex)
integer GetTextCharColorAlpha(iTextIndex, iCharIndex)
integer GetTextCharColorBlue(iTextIndex, iCharIndex)
integer GetTextCharColorGreen(iTextIndex, iCharIndex)
integer GetTextCharColorRed(iTextIndex, iCharIndex)
float GetTextCharX(iTextIndex, iCharIndex)
float GetTextCharY(iTextIndex, iCharIndex)
integer GetTextColorAlpha(iTextIndex)
integer GetTextColorBlue(iTextIndex)
integer GetTextColorGreen(iTextIndex)
integer GetTextColorRed(iTextIndex)
integer GetTextDepth(iTextIndex)
integer GetTextExists(iTextIndex)
integer GetTextHitTest(iTextIndex, x, y)
integer GetTextLength(iTextIndex)
float GetTextLineSpacing(iTextIndex)
float GetTextSize(iTextIndex)
float GetTextSpacing(iTextIndex)
string GetTextString(iTextIndex)
float GetTextTotalHeight(iTextIndex)
float GetTextTotalWidth(iTextIndex)
integer GetTextVisible(iTextIndex)
float GetTextX(iTextIndex)
float GetTextY(iTextIndex)
Print(f)
Print(i)
Print(szString)
PrintC(i)
PrintC(szString)
PrintC(f)
SetPrintColor(iRed, iGreen, iBlue)
SetPrintColor(iRed, iGreen, iBlue, iAlpha)
SetPrintSize(fSize)
SetPrintSpacing(fSpacing)
SetTextAlignment(iTextIndex, iMode)
SetTextCharAngle(iTextIndex, iCharIndex, angle)
SetTextCharAngleRad(iTextIndex, iCharIndex, angle)
SetTextCharColor(iTextIndex, iCharIndex, red, green, blue, alpha)
SetTextCharColorAlpha(iTextIndex, iCharIndex, alpha)
SetTextCharColorBlue(iTextIndex, iCharIndex, blue)
SetTextCharColorGreen(iTextIndex, iCharIndex, green)
SetTextCharColorRed(iTextIndex, iCharIndex, red)
SetTextCharPosition(iTextIndex, iCharIndex, x, y)
SetTextCharX(iTextIndex, iCharIndex, x)
SetTextCharY(iTextIndex, iCharIndex, y)
SetTextColor(iTextIndex, iRed, iGreen, iBlue, iAlpha)
SetTextColorAlpha(iTextIndex, iAlpha)
SetTextColorBlue(iTextIndex, iBlue)
SetTextColorGreen(iTextIndex, iGreen)
SetTextColorRed(iTextIndex, iRed)
SetTextDefaultExtendedFontImage(iImageID)
SetTextDefaultFontImage(iImageID)
SetTextDefaultMagFilter(mode)
SetTextDefaultMinFilter(mode)
SetTextDepth(iTextIndex, iDepth)
SetTextExtendedFontImage(iTextIndex, iImageID)
SetTextFontImage(iTextIndex, iImageID)
SetTextLineSpacing(iTextIndex, fSpacing)
SetTextMaxWidth(iTextIndex, width)
SetTextPosition(iTextIndex, fX, fY)
SetTextScissor(iTextIndex, x, y, x2, y2)
SetTextSize(iTextIndex, fSize)
SetTextSpacing(iTextIndex, fSpacing)
SetTextString(iTextIndex, string)
SetTextTransparency(iTextIndex, mode)
SetTextVisible(iTextIndex, bVisible)
SetTextX(iTextIndex, fX)
SetTextY(iTextIndex, fY)

Sprites Commands

Animation

AddSpriteAnimationFrame(iSpriteIndex, iImageIndex)
ClearSpriteAnimationFrames(iSpriteIndex)
integer GetSpriteCurrentFrame(iSpriteIndex)
integer GetSpriteFrameCount(iSpriteIndex)
integer GetSpritePlaying(iSpriteIndex)
PlaySprite(iSpriteIndex)
PlaySprite(iSpriteIndex, fFps)
PlaySprite(iSpriteIndex, fFps, iLoop)
PlaySprite(iSpriteIndex, fFps, iLoop, iFromFrame, iToFrame)
ResumeSprite(iSpriteIndex)
SetSpriteAnimation(iSpriteIndex, iFrameWidth, iFrameHeight, iFrameCount)
SetSpriteFrame(iSpriteIndex, iFrame)
SetSpriteSpeed(iSpriteIndex, fFps)
StopSprite(iSpriteIndex)

Physics

AddSpriteShapeBox(iSpriteIndex, x, y, x2, y2, angle)
AddSpriteShapeCircle(iSpriteIndex, x, y, radius)
AddSpriteShapePolygon(iSpriteIndex, numPoints, index, x, y)
CalculateSpritePhysicsCOM(iSpriteIndex)
ClearSpriteShapes(iSpriteIndex)
integer GetPhysicsCollision(iSprite1, iSprite2)
float GetPhysicsCollisionWorldX( )
float GetPhysicsCollisionWorldY( )
float GetPhysicsCollisionX( )
float GetPhysicsCollisionY( )
float GetSpritePhysicsAngularVelocity(iSpriteIndex)
float GetSpritePhysicsMass(iSpriteIndex)
float GetSpritePhysicsVelocityX(iSpriteIndex)
float GetSpritePhysicsVelocityY(iSpriteIndex)
SetSpriteCategoryBit(iSpriteIndex, category, flag)
SetSpriteCategoryBits(iSpriteIndex, categories)
SetSpriteCollideBit(iSpriteIndex, category, flag)
SetSpriteCollideBits(iSpriteIndex, mask)
SetSpriteGroup(iSpriteIndex, group)
SetSpritePhysicsAngularDamping(iSpriteIndex, damp)
SetSpritePhysicsAngularImpulse(iSpriteIndex, impulse)
SetSpritePhysicsAngularVelocity(iSpriteIndex, va)
SetSpritePhysicsCOM(iSpriteIndex, x, y)
SetSpritePhysicsCanRotate(iSpriteIndex, rotate)
SetSpritePhysicsDamping(iSpriteIndex, damp)
SetSpritePhysicsDelete(iSpriteIndex)
SetSpritePhysicsForce(iSpriteIndex, x, y, vx, vy)
SetSpritePhysicsFriction(iSpriteIndex, friction)
SetSpritePhysicsImpulse(iSpriteIndex, x, y, vx, vy)
SetSpritePhysicsIsBullet(iSpriteIndex, bullet)
SetSpritePhysicsIsSensor(iSpriteIndex, sensor)
SetSpritePhysicsMass(iSpriteIndex, mass)
SetSpritePhysicsOff(iSpriteIndex)
SetSpritePhysicsOn(iSpriteIndex, mode)
SetSpritePhysicsRestitution(iSpriteIndex, restitution)
SetSpritePhysicsTorque(iSpriteIndex, torque)
SetSpritePhysicsVelocity(iSpriteIndex, vx, vy)
SetSpriteShape(iSpriteIndex, shape)
SetSpriteShapeBox(iSpriteIndex, x, y, x2, y2, angle)
SetSpriteShapeCircle(iSpriteIndex, x, y, radius)
SetSpriteShapePolygon(iSpriteIndex, numPoints, index, x, y)

Collision

integer GetSpriteCollision(iSprite1, iSprite2)
float GetSpriteDistance(iSprite1, iSprite2)
float GetSpriteDistancePoint1X( )
float GetSpriteDistancePoint1Y( )
float GetSpriteDistancePoint2X( )
float GetSpriteDistancePoint2Y( )
integer GetSpriteInBox(iSprite, x1, y1, x2, y2)
integer GetSpriteInCircle(iSprite, x1, y1, radius)

Properties

DrawSprite(iSpriteIndex)
FixSpriteToScreen(iSpriteIndex, mode)
integer GetSpriteActive(iSpriteIndex)
float GetSpriteAngle(iSpriteIndex)
float GetSpriteAngleRad(iSpriteIndex)
integer GetSpriteColorAlpha(iSpriteIndex)
integer GetSpriteColorBlue(iSpriteIndex)
integer GetSpriteColorGreen(iSpriteIndex)
integer GetSpriteColorRed(iSpriteIndex)
integer GetSpriteDepth(iSpriteIndex)
integer GetSpriteExists(iSpriteIndex)
integer GetSpriteGroup(iSpriteIndex)
float GetSpriteHeight(iSpriteIndex)
integer GetSpriteHit(x, y)
integer GetSpriteHitCategory(categories, x, y)
integer GetSpriteHitGroup(group, x, y)
integer GetSpriteHitTest (iSpriteIndex, x, y)
integer GetSpriteImageID(iSpriteIndex)
float GetSpriteOffsetY(iSpriteIndex)
float GetSpriteOffsetX(iSpriteIndex)
integer GetSpritePixelFromX(iSpriteIndex, x)
integer GetSpritePixelFromY(iSpriteIndex, y)
float GetSpriteScaleX(iSpriteIndex)
float GetSpriteScaleY(iSpriteIndex)
integer GetSpriteVisible(iSpriteIndex)
float GetSpriteWidth(iSpriteIndex)
float GetSpriteX(iSpriteIndex)
float GetSpriteXByOffset(iSpriteIndex)
float GetSpriteXFromPixel(iSpriteIndex, x)
float GetSpriteXFromWorld(iSpriteIndex, x, y)
float GetSpriteY(iSpriteIndex)
float GetSpriteYByOffset(iSpriteIndex)
float GetSpriteYFromPixel(iSpriteIndex, y)
float GetSpriteYFromWorld(iSpriteIndex, x, y)
float GetWorldXFromSprite(iSpriteIndex, x, y)
float GetWorldYFromSprite(iSpriteIndex, x, y)
ResetSpriteUV(iSpriteIndex)
SetSpriteActive (iSpriteIndex, bActive)
SetSpriteAdditionalImage (iSpriteIndex, iImageIndex, iStage)
SetSpriteAngle(iSpriteIndex, fAng)
SetSpriteAngleRad(iSpriteIndex, fAng)
SetSpriteColor(iSpriteIndex, iRed, iGreen, iBlue, iAlpha)

Properties (Continued)

SetSpriteColorAlpha(iSpriteIndex, iAlpha)
SetSpriteColorBlue(iSpriteIndex, iBlue)
SetSpriteColorGreen(iSpriteIndex, iGreen)
SetSpriteColorRed(iSpriteIndex, iRed)
SetSpriteDepth (iSpriteIndex, iDepth)
SetSpriteFlip (iSpriteIndex, horz, vert)
SetSpriteImage (iSpriteIndex, iImageIndex, bUpdateShape)
SetSpriteImage (iSpriteIndex, iImageIndex)
SetSpriteOffset(iSpriteIndex, x, y)
SetSpritePosition(iSpriteIndex, fX, fY)
SetSpritePositionByOffset(iSpriteIndex, fX, fY)
SetSpriteScale(iSpriteIndex, x, y)
SetSpriteScaleByOffset(iSpriteIndex, x, y)
SetSpriteScissor(iSpriteIndex, x, y, x2, y2)
SetSpriteSize(iSpriteIndex, width, height)
SetSpriteSnap (iSpriteIndex, snap)
SetSpriteTransparency(iSpriteIndex, mode)
SetSpriteUV (iSpriteIndex, u1, v1, u2, v2, u3, v3, u4, v4)
SetSpriteUVBorder(iSpriteIndex, border)
SetSpriteUVOffset(iSpriteIndex, u, v)
SetSpriteUVScale(iSpriteIndex, scaleU, scaleV)
SetSpriteVisible (iSpriteIndex, bVisible)
SetSpriteX (iSpriteIndex, fX)
SetSpriteY (iSpriteIndex, fY)

Creation

CloneSprite(iSpriteIndex, iOtherSprite)
integer CloneSprite(iOtherSprite)
CreateDummySprite(iSpriteIndex)
integer CreateDummySprite( )
integer CreateSprite(iImageIndex)
CreateSprite(iSpriteIndex, iImageIndex)
DeleteAllSprites()
DeleteAllText()
DeleteSprite(iSpriteIndex)
integer LoadSprite(imagefile)
LoadSprite(iSpriteIndex, imagefile)

Particles

Creation

integer CreateParticles(x, y)
CreateParticles(ID, x, y)
DeleteParticles(ID)

Properties

AddParticlesColorKeyFrame(ID, time, red, green, blue, alpha)
AddParticlesForce(ID, starttime, endtime, x, y)
AddParticlesScaleKeyFrame(ID, time, scale)
ClearParticlesColors(ID)
ClearParticlesForces(ID)
ClearParticlesScales(ID)
FixParticlesToScreen(ID, mode)
integer GetParticlesActive(ID)
float GetParticlesAngle(ID)
float GetParticlesAngleRad(ID)
integer GetParticlesDepth(ID)
float GetParticlesDirectionX(ID)
float GetParticlesDirectionY(ID)
integer GetParticlesExists(ID)
float GetParticlesFrequency(ID)
float GetParticlesLife(ID)
integer GetParticlesMaxReached(ID)
float GetParticlesSize(ID)
integer GetParticlesVisible(ID)
float GetParticlesX(ID)
float GetParticlesY(ID)
OffsetParticles(ID, x, y)
ResetParticleCount(ID)
SetParticlesActive(ID, active)
SetParticlesAngle(ID, angle)
SetParticlesAngleRad(ID, angle)
SetParticlesColorInterpolation(ID, mode)
SetParticlesDepth(ID, depth)
SetParticlesDirection(ID, vx, vy)
SetParticlesFaceDirection(ID, mode)
SetParticlesFrequency(ID, freq)
SetParticlesImage(ID, imageID)
SetParticlesLife(ID, time)
SetParticlesMax(ID, max)
SetParticlesPosition(ID, x, y)
SetParticlesRotationRange(ID, angle1, angle2)
SetParticlesRotationRangeRad(ID, angle1, angle2)
SetParticlesSize(ID, size)
SetParticlesStartZone(ID, x1, y1, x2, y2)
SetParticlesTransparency(ID, active)
SetParticlesVelocityRange(ID, v1, v2)
SetParticlesVisible(ID, visible)
UpdateParticles(ID, time)

2D Physics Commands

Debug

integer GetPhysicsIslandCount()
float GetPhysicsSolveTime()
SetPhysicsCCD(mode)
SetPhysicsDebugOff()
SetPhysicsDebugOn()
SetPhysicsSleeping(mode)
SetPhysicsThreading(threads)

Forces

integer CreatePhysicsForce(x, y, power, limit, range, fade)
DeletePhysicsForce(iForceIndex)
SetPhysicsForcePosition(iForceIndex, x, y)
SetPhysicsForcePower(iForceIndex, power)
SetPhysicsForceRange(iForceIndex, range)

General

SetPhysicsGravity(x, y)
SetPhysicsMaxPolygonPoints(points)
SetPhysicsScale(scale)
SetPhysicsWallBottom(mode)
SetPhysicsWallLeft(mode)

General (Continued)

SetPhysicsWallRight(mode)
SetPhysicsWallTop(mode)

Contacts

integer GetContactSpriteID1()
integer GetContactSpriteID2()
float GetContactWorldX()
float GetContactWorldY()
integer GetFirstContact()
integer GetNextContact()
integer GetSpriteContactSpriteID2( )
float GetSpriteContactWorldX( )
float GetSpriteContactWorldY( )
integer GetSpriteFirstContact(iSprite1)
integer GetSpriteNextContact( )

RayCast

float GetRayCastFraction()
float GetRayCastNormalX()
float GetRayCastNormalY()
integer GetRayCastSpriteID( )
float GetRayCastX()
float GetRayCastY()
integer PhysicsRayCast(x, y, x2, y2)
integer PhysicsRayCastCategory(category, x, y, x2, y2)
integer PhysicsRayCastGroup(group, x, y, x2, y2)
integer SpriteRayCast(x, y, x2, y2)
integer SpriteRayCastCategory(category, x, y, x2, y2)
integer SpriteRayCastGroup(group, x, y, x2, y2)
integer SpriteRayCastSingle(sprite, x, y, x2, y2)

Joints

CreateDistanceJoint(iJointIndex, iSpriteIndex1, iSpriteIndex2, x, y, x2, y2, colConnected)
integer CreateDistanceJoint(iSpriteIndex1, iSpriteIndex2, x, y, x2, y2, colConnected)
integer CreateGearJoint(iJoint1, iJoint2, ratio)
CreateGearJoint(iJointIndex, iJoint1, iJoint2, ratio)
CreateLineJoint(iJointIndex, iSpriteIndex1, iSpriteIndex2, x, y, vx, vy, colConnected)
integer CreateLineJoint(iSpriteIndex1, iSpriteIndex2, x, y, vx, vy, colConnected)
CreateMouseJoint(iJointIndex, iSpriteIndex, x, y, maxForce)
integer CreateMouseJoint(iSpriteIndex, x, y, maxForce)
CreatePrismaticJoint(iJointIndex, iSpriteIndex1, iSpriteIndex2, x, y, vx, vy, colConnected)
integer CreatePrismaticJoint(iSpriteIndex1, iSpriteIndex2, x, y, vx, vy, colConnected)
CreatePulleyJoint(iJointIndex, iSpriteIndex1, iSpriteIndex2, gnd1x, gnd1y, gnd2x, gnd2y, a1x, a1y, a2x, a2y, ratio, colConnected)
CreatePulleyJoint2(iSpriteIndex1, iSpriteIndex2, ratio, colConnected)
CreateRevoluteJoint(iJointIndex, iSpriteIndex1, iSpriteIndex2, x, y, colConnected)
integer CreateRevoluteJoint(iSpriteIndex1, iSpriteIndex2, x, y, colConnected)
integer CreateWeldJoint(iSpriteIndex1, iSpriteIndex2, x, y, colConnected)
CreateWeldJoint(iJointIndex, iSpriteIndex1, iSpriteIndex2, x, y, colConnected)
DeleteJoint(iJointIndex)
integer FinishPulleyJoint(gnd1x, gnd1y, gnd2x, gnd2y, a1x, a1y, a2x, a2y)
integer GetJointExists(iJointIndex)
float GetJointReactionForceX(iJointIndex)
float GetJointReactionForceY(iJointIndex)
float GetJointReactionTorque(iJointIndex)
SetJointLimitOff(iJointIndex)
SetJointLimitOn(iJointIndex, lowerLimit, upperLimit)
SetJointMotorOff(iJointIndex)
SetJointMotorOn(iJointIndex, speed, maxForce)
SetJointMouseTarget(iJointIndex, x, y)

Skeletal Commands

2D

integer CreateSkeleton2D()
CreateSkeleton2D(iSkeleton)
DeleteSkeleton2D(iSkeleton)
FixSkeleton2DToScreen(iSkeleton, mode)
float GetSkeleton2DAngle(iSkeleton)
float GetSkeleton2DAnimationTime(iSkeleton, anim)
integer GetSkeleton2DBone(iSkeleton, name)
float GetSkeleton2DBoneAngle(iSkeleton, bone)
float GetSkeleton2DBoneCurrAngle(iSkeleton, bone)
float GetSkeleton2DBoneCurrX(iSkeleton, bone)
float GetSkeleton2DBoneCurrY(iSkeleton, bone)
integer GetSkeleton2DBoneParent(iSkeleton, bone)
float GetSkeleton2DBoneX(iSkeleton, bone)
float GetSkeleton2DBoneY(iSkeleton, bone)
float GetSkeleton2DCurrentTime(iSkeleton)
integer GetSkeleton2DExists(iSkeleton)
integer GetSkeleton2DIsAnimating(iSkeleton)
integer GetSkeleton2DIsTweening(iSkeleton)
float GetSkeleton2DX(iSkeleton)
float GetSkeleton2DY(iSkeleton)
integer LoadSkeleton2DFromSpineFile(filename, scale, atlasImage, loadAnim)
LoadSkeleton2DFromSpineFile(iSkeleton, filename, scale, atlasImage, loadAnim)
integer LoadSkeleton2DFromSpriterFile(filename, scale, atlasImage)
LoadSkeleton2DFromSpriterFile(iSkeleton, filename, scale, atlasImage)
PlaySkeleton2DAnimation(iSkeleton, anim, starttime, loop, tweentime)
SetSkeleton2DAnimationFrame(iSkeleton, anim, time, tweentime)
SetSkeleton2DAnimationSpeed(iSkeleton, speed)
SetSkeleton2DBoneAngle(iSkeleton, bone, r)
SetSkeleton2DBoneMode(iSkeleton, bone, mode)

2D (Continued)

SetSkeleton2DBonePosition(iSkeleton, bone, x, y)
SetSkeleton2DBoneScale(iSkeleton, bone, sx, sy)
SetSkeleton2DDepth(iSkeleton, depth)
SetSkeleton2DFlip(iSkeleton, flipH, flipV)
SetSkeleton2DPosition(iSkeleton, x, y)
SetSkeleton2DRotation(iSkeleton, r)
SetSkeleton2DVisible(iSkeleton, mode)
StopSkeleton2DAnimation(iSkeleton)

Tweening Commands

Chains

AddTweenChainCamera(chainID, tweenID, cameraID, delay)
AddTweenChainChar(chainID, tweenID, textID, charID, delay)
AddTweenChainCustom(chainID, tweenID, delay)
AddTweenChainObject(chainID, tweenID, objectID, delay)
AddTweenChainSprite(chainID, tweenID, spriteID, delay)
AddTweenChainText(chainID, tweenID, textID, delay)
ClearTweenChain(chainID)
integer CreateTweenChain()
CreateTweenChain(chainID)
DeleteTweenChain(chainID)
float GetTweenChainEndTime(chainID)
integer GetTweenChainPlaying(chainID)
PauseTweenChain(chainID)
PlayTweenChain(chainID)
SetTweenChainTime(chainID, time)
StopTweenChain(chainID)

Objects

integer CreateTweenObject(duration)
CreateTweenObject(tweenID, duration)
integer GetTweenObjectExists(tweenID)
integer GetTweenObjectPlaying(tweenID, objectID)
PlayTweenObject(tweenID, objectID, delay)
SetTweenObjectAlpha(tweenID, beginA, endA, interpolation)
SetTweenObjectAngleX(tweenID, beginAX, endAX, interpolation)
SetTweenObjectAngleY(tweenID, beginAY, endAY, interpolation)
SetTweenObjectAngleZ(tweenID, beginAZ, endAZ, interpolation)
SetTweenObjectBlue(tweenID, beginB, endB, interpolation)
SetTweenObjectGreen(tweenID, beginG, endG, interpolation)
SetTweenObjectRed(tweenID, beginR, endR, interpolation)
SetTweenObjectScaleX(tweenID, beginSX, endSX, interpolation)
SetTweenObjectScaleY(tweenID, beginSY, endSY, interpolation)
SetTweenObjectScaleZ(tweenID, beginSZ, endSZ, interpolation)
SetTweenObjectX(tweenID, beginX, endX, interpolation)
SetTweenObjectY(tweenID, beginY, endY, interpolation)
SetTweenObjectZ(tweenID, beginZ, endZ, interpolation)
StopTweenObject(tweenID, objectID)

Char

integer CreateTweenChar(duration)
CreateTweenChar(tweenID, duration)
integer GetTweenCharExists(tweenID)
integer GetTweenCharPlaying(tweenID, textID, charID)
PlayTweenChar(tweenID, textID, charID, delay)
SetTweenCharAlpha(tweenID, beginA, endA, interpolation)
SetTweenCharAngle(tweenID, beginA, endA, interpolation)
SetTweenCharBlue(tweenID, beginB, endB, interpolation)
SetTweenCharGreen(tweenID, beginG, endG, interpolation)
SetTweenCharRed(tweenID, beginR, endR, interpolation)
SetTweenCharX(tweenID, beginX, endX, interpolation)
SetTweenCharY(tweenID, beginY, endY, interpolation)
StopTweenChar(tweenID, textID, charID)

General

DeleteTween(tweenID)
integer GetTweenExists(tweenID)
SetTweenDuration(tweenID, duration)
UpdateAllTweens(fTime)
UpdateTweenCamera(tweenID, cameraID, fTime)
UpdateTweenChain(chainID, fTime)
UpdateTweenChar(tweenID, textID, charID, fTime)
UpdateTweenCustom(tweenID, fTime)
UpdateTweenObject(tweenID, objectID, fTime)
UpdateTweenSprite(tweenID, spriteID, fTime)
UpdateTweenText(tweenID, textID, fTime)

Cameras

integer CreateTweenCamera(duration)
CreateTweenCamera(tweenID, duration)
integer GetTweenCameraExists(tweenID)
integer GetTweenCameraPlaying(tweenID, cameraID)
PlayTweenCamera(tweenID, cameraID, delay)
SetTweenCameraAngleX(tweenID, beginAX, endAX, interpolation)
SetTweenCameraAngleY(tweenID, beginAY, endAY, interpolation)
SetTweenCameraAngleZ(tweenID, beginAZ, endAZ, interpolation)
SetTweenCameraFOV(tweenID, beginF, endF, interpolation)
SetTweenCameraX(tweenID, beginX, endX, interpolation)
SetTweenCameraY(tweenID, beginY, endY, interpolation)
SetTweenCameraZ(tweenID, beginZ, endZ, interpolation)
StopTweenCamera(tweenID, cameraID)

Custom

integer CreateTweenCustom(duration)
CreateTweenCustom(tweenID, duration)
integer GetTweenCustomExists(tweenID)
float GetTweenCustomFloat1(tweenID)
float GetTweenCustomFloat2(tweenID)
float GetTweenCustomFloat3(tweenID)
float GetTweenCustomFloat4(tweenID)
integer GetTweenCustomInteger1(tweenID)
integer GetTweenCustomInteger2(tweenID)
integer GetTweenCustomInteger3(tweenID)
integer GetTweenCustomInteger4(tweenID)
integer GetTweenCustomPlaying(tweenID)

Custom (Continued)

PlayTweenCustom(tweenID, delay)
SetTweenCustomFloat1(tweenID, begin, end, interpolation)
SetTweenCustomFloat2(tweenID, begin, end, interpolation)
SetTweenCustomFloat3(tweenID, begin, end, interpolation)
SetTweenCustomFloat4(tweenID, begin, end, interpolation)
SetTweenCustomInteger1(tweenID, begin, end, interpolation)
SetTweenCustomInteger2(tweenID, begin, end, interpolation)
SetTweenCustomInteger3(tweenID, begin, end, interpolation)
SetTweenCustomInteger4(tweenID, begin, end, interpolation)
StopTweenCustom(tweenID)

Interpolation

integer TweenBounce()
integer TweenEaseIn1()
integer TweenEaseIn2()
integer TweenEaseOut1()
integer TweenEaseOut2()
integer TweenLinear()
integer TweenOvershoot()
integer TweenSmooth1()
integer TweenSmooth2()

Text

integer CreateTweenText(duration)
CreateTweenText(tweenID, duration)
integer GetTweenTextExists(tweenID)
integer GetTweenSpriteExists(tweenID)
integer GetTweenTextPlaying(tweenID, textID)
PlayTweenText(tweenID, textID, delay)
SetTweenTextAlpha(tweenID, beginA, endA, interpolation)
SetTweenTextAngle(tweenID, beginA, endA, interpolation)
SetTweenTextBlue(tweenID, beginB, endB, interpolation)
SetTweenTextGreen(tweenID, beginG, endG, interpolation)
SetTweenTextLineSpacing(tweenID, beginLSP, endLSP, interpolation)
SetTweenTextRed(tweenID, beginR, endR, interpolation)
SetTweenTextSize(tweenID, beginS, endS, interpolation)
SetTweenTextSpacing(tweenID, beginSP, endSP, interpolation)
SetTweenTextX(tweenID, beginX, endX, interpolation)
SetTweenTextY(tweenID, beginY, endY, interpolation)
StopTweenText(tweenID, textID)

Sprites

integer CreateTweenSprite(duration)
CreateTweenSprite(tweenID, duration)
integer GetTweenSpritePlaying(tweenID, spriteID)
PlayTweenSprite(tweenID, spriteID, delay)
SetTweenSpriteAlpha(tweenID, beginA, endA, interpolation)
SetTweenSpriteAngle(tweenID, beginA, endA, interpolation)
SetTweenSpriteBlue(tweenID, beginB, endB, interpolation)
SetTweenSpriteGreen(tweenID, beginG, endG, interpolation)
SetTweenSpriteRed(tweenID, beginR, endR, interpolation)
SetTweenSpriteSizeX(tweenID, beginSX, endSX, interpolation)
SetTweenSpriteSizeY(tweenID, beginSY, endSY, interpolation)
SetTweenSpriteX(tweenID, beginX, endX, interpolation)
SetTweenSpriteXByOffset(tweenID, beginX, endX, interpolation)
SetTweenSpriteY(tweenID, beginY, endY, interpolation)
SetTweenSpriteYByOffset(tweenID, beginY, endY, interpolation)
StopTweenSprite(tweenID, spriteID)

3D Commands

Bones

float GetObjectBoneAngleX(objID, boneIndex)
float GetObjectBoneAngleY(objID, boneIndex)
float GetObjectBoneAngleZ(objID, boneIndex)
integer GetObjectBoneByName(objID, name)
string GetObjectBoneName(objID, boneIndex)
float GetObjectBoneQuatW(objID, boneIndex)
float GetObjectBoneQuatX(objID, boneIndex)
float GetObjectBoneQuatY(objID, boneIndex)
float GetObjectBoneQuatZ(objID, boneIndex)
float GetObjectBoneWorldAngleX(objID, boneIndex)
float GetObjectBoneWorldAngleY(objID, boneIndex)
float GetObjectBoneWorldAngleZ(objID, boneIndex)
float GetObjectBoneWorldQuatW(objID, boneIndex)
float GetObjectBoneWorldQuatX(objID, boneIndex)
float GetObjectBoneWorldQuatY(objID, boneIndex)
float GetObjectBoneWorldQuatZ(objID, boneIndex)
float GetObjectBoneWorldX(objID, boneIndex)
float GetObjectBoneWorldY(objID, boneIndex)
float GetObjectBoneWorldZ(objID, boneIndex)
float GetObjectBoneX(objID, boneIndex)
float GetObjectBoneY(objID, boneIndex)
float GetObjectBoneZ(objID, boneIndex)
integer GetObjectNumBones(objID)
RotateObjectBoneLocalX(objID, boneIndex, amount)
RotateObjectBoneLocalY(objID, boneIndex, amount)
RotateObjectBoneLocalZ(objID, boneIndex, amount)
SetObjectBoneCanAnimate(objID, boneIndex, animate)
SetObjectBoneLookAt(objID, boneIndex, x, y, z, roll)
SetObjectBonePosition(objID, boneIndex, x, y, z)
SetObjectBoneRotation(objID, boneIndex, angx, angy, angz)
SetObjectBoneRotationQuat(objID, boneIndex, w, x, y, z)

SkyBox

SetSkyBoxHorizonColor(red, green, blue)
SetSkyBoxHorizonSize(size, height)
SetSkyBoxSkyColor(red, green, blue)
SetSkyBoxSunColor(red, green, blue)
SetSkyBoxSunSize(sun, halo)
SetSkyBoxSunVisible(visible)
SetSkyBoxVisible(active)

Shaders

integer LoadFullScreenShader(szPixelFile)
LoadFullScreenShader(shaderID, szPixelFile)
LoadShader(shaderID, szVertexFile, szPixelFile)
integer LoadShader(szVertexFile, szPixelFile)
LoadSpriteShader(shaderID, szPixelFile)
integer LoadSpriteShader(szPixelFile)
SetShaderConstantArrayByName(shaderID, szName, arrayIndex, value1, value2, value3, value4)

Shaders (Continued)

SetShaderConstantByName(shaderID, szName, value1, value2, value3, value4)

General

SetGlobal3DDepth(depth)

Lights

ClearPointLights()
CreatePointLight(lightID, x, y, z, radius, red, green, blue)
DeletePointLight(lightID)
integer GetPointLightExists(lightID)
SetAmbientColor(red, green, blue)
SetPointLightColor(lightID, red, green, blue)
SetPointLightMode(lightID, mode)
SetPointLightPosition(lightID, x, y, z)
SetPointLightRadius(lightID, radius)
SetSunActive(active)
SetSunColor(red, green, blue)
SetSunDirection(vx, vy, vz)

Objects

integer CloneObject(objID)
CloneObject(newobjID, objID)
CreateObjectBox(objID, width, height, length)
integer CreateObjectBox(width, height, length)
integer CreateObjectCapsule(diameter, height, axis)
CreateObjectCapsule(objID, diameter, height, axis)
CreateObjectCone(objID, height, diameter, segments)
integer CreateObjectCone(height, diameter, segments)
integer CreateObjectCylinder(height, diameter, segments)
CreateObjectCylinder(objID, height, diameter, segments)
CreateObjectFromHeightMap(objID, szImageFile, width, height, length, smoothing, split)
integer CreateObjectFromHeightMap(szImageFile, width, height, length, smoothing, split)
CreateObjectFromObjectMesh(objID, fromObjID, meshIndex)
integer CreateObjectFromObjectMesh(fromObjID, meshIndex)
integer CreateObjectPlane(width, height)
CreateObjectPlane(objID, width, height)
integer CreateObjectQuad()
CreateObjectQuad(objID)
CreateObjectSphere(objID, diameter, rows, columns)
integer CreateObjectSphere(diameter, rows, columns)
DeleteAllObjects()
DeleteObject(objID)
DeleteObjectWithChildren(objID)
DrawObject(objID)
FixObjectPivot(objID)
FixObjectToBone(objID, toObjID, toBoneIndex)
FixObjectToObject(objID, toObjID)
float Get3DVectorXFromScreen(x, y)
float Get3DVectorYFromScreen(x, y)
float Get3DVectorZFromScreen(x, y)
float GetObjectAngleX(objID)
float GetObjectAngleY(objID)
float GetObjectAngleZ(objID)
float GetObjectAnimationDuration(objID, animName)
string GetObjectAnimationName(objID, index)
float GetObjectAnimationTime(objID)
integer GetObjectChildID(objID, childIndex)
integer GetObjectCullMode(objID)
float GetObjectDepthBias(objID)
integer GetObjectDepthReadMode(objID)
integer GetObjectDepthWrite(objID)
integer GetObjectExists(objID)
float GetObjectHeightMapHeight(objID, x, z)
integer GetObjectInScreen(objID)
integer GetObjectIsAnimating(objID)
integer GetObjectIsTweening(objID)
float GetObjectMeshSizeMaxX(objID, meshIndex)
float GetObjectMeshSizeMaxY(objID, meshIndex)
float GetObjectMeshSizeMaxZ(objID, meshIndex)
float GetObjectMeshSizeMinX(objID, meshIndex)
float GetObjectMeshSizeMinY(objID, meshIndex)
float GetObjectMeshSizeMinZ(objID, meshIndex)
integer GetObjectNumAnimations(objID)
integer GetObjectNumChildren(objID)
float GetObjectQuatW(objID)
float GetObjectQuatX(objID)
float GetObjectQuatY(objID)
float GetObjectQuatZ(objID)
float GetObjectRayCastBounceX(index)
float GetObjectRayCastBounceY(index)
float GetObjectRayCastBounceZ(index)
float GetObjectRayCastDistance(index)
integer GetObjectRayCastHitID(index)
float GetObjectRayCastNormalX(index)
float GetObjectRayCastNormalY(index)
float GetObjectRayCastNormalZ(index)
integer GetObjectRayCastNumHits()
float GetObjectRayCastSlideX(index)
float GetObjectRayCastSlideY(index)
float GetObjectRayCastSlideZ(index)
float GetObjectRayCastX(index)
float GetObjectRayCastY(index)
float GetObjectRayCastZ(index)
float GetObjectSizeMaxX(objID)
float GetObjectSizeMaxY(objID)
float GetObjectSizeMaxZ(objID)
float GetObjectSizeMinX(objID)
float GetObjectSizeMinY(objID)
float GetObjectSizeMinZ(objID)
integer GetObjectTransparency(objID)
integer GetObjectVisible(objID)
float GetObjectWorldAngleX(objID)
float GetObjectWorldAngleY(objID)
float GetObjectWorldAngleZ(objID)
float GetObjectWorldQuatW(objID)
float GetObjectWorldQuatX(objID)
float GetObjectWorldQuatY(objID)
float GetObjectWorldQuatZ(objID)

Objects (Continued)

float GetObjectWorldX(objID)
float GetObjectWorldY(objID)
float GetObjectWorldZ(objID)
float GetObjectX(objID)
float GetObjectY(objID)
float GetObjectZ(objID)
float GetScreenXFrom3D(x, y, z)
float GetScreenYFrom3D(x, y, z)
InstanceObject(newobjID, objID)
integer InstanceObject(objID)
LoadObject(objID, szFilename, height)
integer LoadObject(szFilename, height)
LoadObject(objID, szFilename)
integer LoadObject(szFilename)
LoadObjectWithChildren(objID, szFilename)
integer LoadObjectWithChildren(szFilename)
MoveObjectLocalX(objID, amount)
MoveObjectLocalY(objID, amount)
MoveObjectLocalZ(objID, amount)
integer ObjectRayCast(objID, oldx, oldy, oldz, newx, newy, newz)
integer ObjectSphereCast(objID, oldx, oldy, oldz, newx, newy, newz, radius)
integer ObjectSphereSlide(objID, oldx, oldy, oldz, newx, newy, newz, radius)
PlayObjectAnimation(objID, animName, starttime, endtime, loop, tweentime)
ResetObjectAnimation(objID)
RotateObjectGlobalX(objID, amount)
RotateObjectGlobalY(objID, amount)
RotateObjectGlobalZ(objID, amount)
RotateObjectLocalX(objID, amount)
RotateObjectLocalY(objID, amount)
RotateObjectLocalZ(objID, amount)
SaveObject(objID, szFilename)
SetObjectAlphaMask(objID, mode)
SetObjectAnimationFrame(UINT objID, animName, time, tweentime)
SetObjectAnimationSpeed(objID, speed)
SetObjectCollisionMode(objID, mode)
SetObjectColor(objID, red, green, blue, alpha)
SetObjectColorEmissive(objID, red, green, blue)
SetObjectCullMode(objID, mode)
SetObjectDepthBias(objID, bias)
SetObjectDepthRange(objID, zNear, zFar)
SetObjectDepthReadMode(objID, mode)
SetObjectDepthWrite(objID, mode)
SetObjectFogMode(objID, mode)
SetObjectImage(objID, imageID, texStage)
SetObjectLightMap(objID, imageID)
SetObjectLightMode(objID, mode)
SetObjectLookAt(objID, x, y, z, roll)
SetObjectMeshUVOffset(objID, meshIndex, textureStage, offsetU, offsetV)
SetObjectMeshUVScale(objID, meshIndex, textureStage, scaleU, scaleV)
SetObjectPosition(objID, x, y, z)
SetObjectRotation(objID, angx, angy, angz)
SetObjectRotationQuat(objID, w, x, y, z)
SetObjectScale(objID, x, y, z)
SetObjectScalePermanent(objID, x, y, z)
SetObjectScreenCulling(objID, mode)
SetObjectShader(objID, shaderID)
SetObjectShaderConstantArrayByName(objID, szName, arrayIndex, value1, value2, value3, value4)
SetObjectShaderConstantByName(objID, szName, value1, value2, value3, value4)
SetObjectShaderConstantDefault(objID, szName)
SetObjectTransparency(objID, mode)
SetObjectUVOffset(objID, textureStage, offsetU, offsetV)
SetObjectUVScale(objID, textureStage, scaleU, scaleV)
SetObjectVisible(objID, mode)
SetSpriteShader(spriteID, shaderID)
StopObjectAnimation(objID)

Cameras

float GetCameraAngleX(cameraID)
float GetCameraAngleY(cameraID)
float GetCameraAngleZ(cameraID)
float GetCameraFOV(cameraID)
float GetCameraQuatW(cameraID)
float GetCameraQuatX(cameraID)
float GetCameraQuatY(cameraID)
float GetCameraQuatZ(cameraID)
float GetCameraX(cameraID)
float GetCameraY(cameraID)
float GetCameraZ(cameraID)
MoveCameraLocalX(cameraID, amount)
MoveCameraLocalY(cameraID, amount)
MoveCameraLocalZ(cameraID, amount)
RotateCameraGlobalX(cameraID, amount)
RotateCameraGlobalY(cameraID, amount)
RotateCameraGlobalZ(cameraID, amount)
RotateCameraLocalX(cameraID, amount)
RotateCameraLocalY(cameraID, amount)
RotateCameraLocalZ(cameraID, amount)
SetCameraAspect(cameraID, aspect)
SetCameraFOV(cameraID, fov)
SetCameraLookAt(cameraID, x, y, z, roll)
SetCameraOrthoWidth(cameraID, width)
SetCameraPosition(cameraID, x, y, z)
SetCameraRange(cameraID, fNear, fFar)
SetCameraRotation(cameraID, angx, angy, angz)
SetCameraRotationQuat(cameraID, w, x, y, z)

Meshes

string GetObjectMeshName(objID, meshIndex)
string GetObjectMeshPSSource(objID, meshIndex)
string GetObjectMeshVSSource(objID, meshIndex)
integer GetObjectNumMeshes(objID)
SetObjectMeshImage(objID, meshIndex, imageID, textureStage)
SetObjectMeshLightMap(objID, meshIndex, imageID)
SetObjectMeshShader(objID, meshIndex, shaderID)

Fog

integer GetFogMode()
SetFogColor(red, green, blue)
SetFogMode(mode)
SetFogRange(minDist, maxDist)
SetFogSunColor(red, green, blue)

3D Physics Commands

Compound Collision Shapes

AddObjectShapeBox(objID, positionVec3, rotationVec3, sizeVec3)
AddObjectShapeCapsule(objID, positionVec3, rotationVec3, sizeVec3, axis)
AddObjectShapeCone(objID, positionVec3, rotationVec3, sizeVec3, axis)
AddObjectShapeCylinder(objID, positionVec3, rotationVec3, sizeVec3, axis)
AddObjectShapeSphere(objID, positionVec3, diameter)

World

Create3DPhysicsWorld(scaleFactor)
Create3DPhysicsWorld()
Debug3DPhysicsWorld()
Delete3DPhysicsWorld()
integer Get3DPhysicsActiveObjects()
integer Get3DPhysicsTotalJoints()
integer Get3DPhysicsTotalObjects()
Reset3DPhysicsWorld()
Set3DPhysicsGravity(x, y, z)
Set3DPhysicsGravity(vectorID)
Step3DPhysicsWorld()

Collision Shapes

SetObjectShapeBox(objID, sizeX, sizeY, sizeZ)
SetObjectShapeBox(objID, vectorID)
SetObjectShapeBox(objID)
SetObjectShapeCapsule(objID, axis, sizeX, sizeY, sizeZ)
SetObjectShapeCapsule(objID, axis)
SetObjectShapeCapsule(objID, axis, vectorID)
SetObjectShapeCompound(objID)
SetObjectShapeCone(objID, axis, height, diameter)
SetObjectShapeCone(objID, axis)
SetObjectShapeConvexHull(objID)
SetObjectShapeCylinder(objID, axis)
SetObjectShapeCylinder(objID, axis, height, diameter)
SetObjectShapeStaticPolygon(objID)
SetObjectShapeSphere(objID)
SetObjectShapeSphere(objID, diameter)

Saving And Loading

integer LoadObjectShape(objID, fileName)
integer SaveObjectShape(objID, fileName)

Character Controller

Create3DPhysicsCharacterController(objID, axis, objOffsetVec3, objOrientationVec3, crouchScale)
Crouch3DPhysicsCharacterController(objID)
Debug3DPhysicsCharacterController(objID, isDebug)
Delete3DPhysicsCharacterController(objID)
integer Get3DPhysicsCharacterControllerExists(objID)
float Get3DPhysicsCharacterControllerGravity(objID)
float Get3DPhysicsCharacterControllerMaxSlope(objID)
Jump3DPhysicsCharacterController(objID)
Move3DPhysicsCharacterController(objID, direction, velocity)
Rotate3DPhysicsCharacterController(objID, angle)
Set3DPhysicsCharacterControllerFallSpeed(objID, fallSpeed)
Set3DPhysicsCharacterControllerGravity(objID, gravity)
Set3DPhysicsCharacterControllerJumpSpeed(objID, jumpSpeed)
Set3DPhysicsCharacterControllerMaxSlope(objID, maxSlopeDegress)
Set3DPhysicsCharacterControllerPosition(objID, posX, posY, posZ)
Set3DPhysicsCharacterControllerStepHeight(objID, stepHeight)
Stand3DPhysicsCharacterController(objID)

Ragdoll

integer Add3DPhysicsRagDollBone(startBoneID, endBoneID, diameter, collisionGroup, collisionMask)
Add3DPhysicsRagDollHingeJoint(boneAID, boneBID, objBoneID, jointRotationVec3, minLimit, maxLimit)
Add3DPhysicsRagDollTwistJoint(boneAID, boneBID, objBoneID, jointRotationVec3, limitsVec3)
AssignTo3DPhysicsRagDollBoneObjectBone(ragdollBoneID, objBoneID)
Create3DPhysicsRagDoll(objID, objTotalWeight)
Delete3DPhysicsRagdoll(objID)
Finalize3DPhysicsRagDoll()
integer Get3DPhysicsRagdollExist(objID)
integer Get3DPhysicsRagdollFromBoneObject(objID)
integer Is3dPhysicsRagdollStatic(objID)
Set3DPhysicsRadollBonesVisible(objID, isVisible)
Set3DPhysicsRagdollDamping(linear, angular)
Set3DPhysicsRagdollDeactivation(objID, isDisabled)
Set3DPhysicsRagdollDeactivationTime(time)
Set3DPhysicsRagdollSleepingThresholds(linear, angular)
Set3DphysicsRagdollStatic(objID, isStatic)

Ray Cast

integer Create3DPhysicsRay()
Delete3DPhysicsRay(rayID)
integer Get3DPhysicsRayCastClosestContactPosition(rayID, outVec3ID)
integer Get3DPhysicsRayCastClosestObjectHit(rayID)
integer Get3DPhysicsRayCastContactPosition(rayID, fractionIndex, outVec3ID)
float Get3DPhysicsRayCastFraction(rayID)
Get3DPhysicsRayCastNormalVector(rayID, returnVec3ID)
integer Get3DPhysicsRayCastNumHits(rayID)
integer Get3DPhysicsRayCastObjectHit(rayID, fractionIndex)
integer Ray3DPhysicsExist(rayID)
RayCast3DPhysics(rayID, fromVec3ID, toVec3ID, allOrClosest)
integer RayCast3DPhysicsObject(objID, rayID, fromVec3ID, toVec3ID, allOrClosest)

Ray Cast (Continued)

integer SphereCast3DPhysicsObject(objID, rayID, fromVec3ID, toVec3ID, radius)
SphereCast3DPhysics(rayID, fromVec3ID, toVec3ID, radius)

Joints

integer Create3DPhysics6DOFJoint(objA, objB, positionVec3, rotationVec3)
integer Create3DPhysicsConeTwistJoint(objA, objB, positionVec3, rotationVec3, disableCollisions)
integer Create3DPhysicsFixedJoint(objA, objB, positionVec3)
integer Create3DPhysicsHingeJoint(objA, objB, positionVec3, rotationVec3, disableCollisions)
integer Create3DPhysicsPickJoint(objID, positionVec3)
integer Create3DPhysicsSliderJoint(objA, objB, positionVec3, rotationVec3)
Delete3DPhysicsJoint(jointID)
Delete3DPhysicsPickJoint(jointID)
integer Get3DPhysicsJointEnabled(jointID)
integer Get3DPhysicsJointPositionVector(jointID)
integer Get3DPhysicsJointRotationVector(jointID)
Set3DPhysicsHingeJointMaxMotorImpluse(jointID, maxImpluse)
Set3DPhysicsHingeJointMotorIsEnabled(jointID, isEnabled)
Set3DPhysicsHingeJointMotorVelocity(jointID, targetVelocity)
Set3DPhysicsJointBreakingThreshold(jointID, breakThreshold)
Set3DPhysicsJointConeTwistLimits(jointID, swingSpan1, swingSpan2, twistSpan)
Set3DPhysicsJointEnabled(jointID, isEnabled)
Set3DPhysicsJointHingeLimits(jointID, minAng, maxAng)
Set3DPhysicsJointSliderAngularLimits(jointID, lowerLimit, upperLimit)
Set3DPhysicsJointSliderLinearLimits(jointID, lowerLimit, upperLimit)
Set3DPhysicsSliderJointMaxLinearMotorForce(jointID, maxLinearForce)
Set3DPhysicsSliderJointPoweredLinearMotorIsEnabled(jointID, isEnabled)
Set3DPhysicsSliderJointTargetLinearMotorVelocity(jointID, linearMotorVelocity)
Set3DPhysicsTwistJointMotorIsEnabled(jointID, isEnabled)
Set3DPhysicsTwistJointMaxMotorImpluse(jointID, maxImpluse)
Set3DPhysicsTwistJointMotorRotationTarget(jointID, rotationVec3ID)
Update3DPhysicsPickJoint(jointID, positionVec3)

Rigid Bodies

Create3DPhysicsDynamicBody(objID)
Create3DPhysicsKinematicBody(objID)
Create3DPhysicsStaticBody(objID)
integer Create3DPhysicsStaticPlane(normlX, normalY, normalZ, offsetPosition)
Delete3DPhysicsBody(objID)
Delete3DPhysicsStaticPlane(planeID)
float GetObject3DPhysicsAngularDamp(objID)
float GetObject3DPhysicsAngularSleepingThreshold(objID)
float GetObject3DPhysicsAngularVelocityX(objID)
float GetObject3DPhysicsAngularVelocityY(objID)
float GetObject3DPhysicsAngularVelocityZ(objID)
float GetObject3DPhysicsFriction(objID)
integer GetObject3DPhysicsGroup(objID)
float GetObject3DPhysicsLinearDamp(objID)
float GetObject3DPhysicsLinearSleepingThreshold(objID)
float GetObject3DPhysicsLinearVelocityX(objID)
float GetObject3DPhysicsLinearVelocityY(objID)
float GetObject3DPhysicsLinearVelocityZ(objID)
integer GetObject3DPhysicsMask(objID)
float GetObject3DPhysicsMass(objID)
float GetObject3DPhysicsRestitution(objID)
float GetObject3DPhysicsRollingFriction(objID)
Set3DPhysicsStaticPlanePosition(planeID, posX, posY, posZ)
Set3DPhysicsStaticPlaneRotation(planeID, angX, angY, angZ)
SetObject3DPhysicsAngularVelocity(objID, angX, angY, angZ, initialSpeed)
SetObject3DPhysicsAngularVelocity(objID, vectorID, initialSpeed)
SetObject3DPhysicsAnisotropicFriction(objID, type)
SetObject3DPhysicsCanSleep(objID, canSleep)
SetObject3DPhysicsDamping(objID, linearDamp, angularDamp)
SetObject3DPhysicsDeactivationTime(objID, time)
SetObject3DPhysicsFriction(objID, friction)
SetObject3DPhysicsGroupAndMask(objID, group, mask)
SetObject3DPhysicsLinearVelocity(objID, dirX, dirY, dirZ, initialSpeed)
SetObject3DPhysicsLinearVelocity(objID, vectorID, initialSpeed)
SetObject3DPhysicsMass(objID, mass)
SetObject3DPhysicsMaxLinearVelocity(objID, maxLinearVelocity)
SetObject3DPhysicsRestitution(objID, friction)
SetObject3DPhysicsRollingFriction(objID, friction)
SetObject3DPhysicsSleepingThreshold(objID, angular, linear)

Contact Reports

integer GetObject3DPhysicsContactObjectB()
integer GetObject3DPhysicsContactVector(int outPosVec3)
float GetObject3DPhysicsContactX()
float GetObject3DPhysicsContactY()
float GetObject3DPhysicsContactZ()
integer GetObject3DPhysicsFirstContact(objID)
integer GetObject3DPhysicsNextContact()
integer GetObjects3DPhysicsContactPositionVector(objA, objB, outPosVec3)

Sound Commands

Creation

DeleteSound(iID)
integer LoadSound(sFilename)
LoadSound(iID, sFilename)
LoadSoundOGG(iID, sFilename)
integer LoadSoundOGG(sFilename)
integer PlaySound(iID, iVol)
integer PlaySound(iID, iVol, iLoop)

Creation (Continued)
integer PlaySound(iID, iVol, iLoop, iPriority)
integer PlaySound(iID)
SaveSound(iID, sFilename)
StopSound(iID)

Recording
integer IsSoundRecording()
RecordSound(szFilename)
StopSoundRecording()

Properties
integer GetSoundExists(iID)
integer GetSoundInstanceLoopCount(iID)
integer GetSoundInstancePlaying(iID)
float GetSoundInstanceRate(iID)
integer GetSoundInstanceVolume(iID)
integer GetSoundInstances(iID)
float GetSoundMaxRate()
float GetSoundMinRate()
integer GetSoundsPlaying(iID)
SetSoundInstanceBalance(iID, balance)
SetSoundInstanceRate(iID, rate)
SetSoundInstanceVolume(iID, vol)
SetSoundSystemVolume(iVol)
StopSoundInstance(iID)

Music Commands

OGG
DeleteMusicOGG(musicID)
float GetMusicDurationOGG(musicID)
integer GetMusicExistsOGG(musicID)
integer GetMusicLoopCountOGG(musicID)
integer GetMusicPlayingOGG(musicID)
float GetMusicPositionOGG(musicID)
LoadMusicOGG(musicID, sFile)
integer LoadMusicOGG(sFile)
PauseMusicOGG(musicID)
PlayMusicOGG(musicID, iLoop)
PlayMusicOGG(musicID)
ResumeMusicOGG(musicID)
SeekMusicOGG(musicID, seconds, mode)
SetMusicLoopCountOGG(UINT musicID, loop)
SetMusicLoopTimesOGG(UINT musicID, startTime, endTime)
SetMusicSystemVolumeOGG(vol)
SetMusicVolumeOGG(musicID, vol)
StopMusicOGG(musicID)

Multiplayer Commands

Setup
CloseNetwork(iNetID)
integer HostNetwork(szNetworkName, szMyName, port)
integer IsNetworkActive(iNetID)
integer JoinNetwork(szIP, port, szMyName)
integer JoinNetwork(szNetworkName, szMyName)
SetNetworkLatency(iNetID, latency)
SetNetworkNoMoreClients(iNetID)

Properties
DeleteNetworkClient(iNetID, client)
string GetDeviceIP()
integer GetNetworkClientDisconnected(iNetID, client)
float GetNetworkClientFloat(iNetID, client, name)
integer GetNetworkClientInteger(iNetID, client, name)
string GetNetworkClientName(iNetID, client)
float GetNetworkClientPing(iNetID, client)
integer GetNetworkClientUserData(iNetID, client, index)
integer GetNetworkFirstClient(iNetID)
integer GetNetworkMyClientID(iNetID)
integer GetNetworkNextClient(iNetID)
integer GetNetworkNumClients(iNetID)
integer GetNetworkServerID(iNetID)
SetNetworkClientUserData(iNetID, client, index, value)
SetNetworkLocalFloat(iNetID, name, f, mode)
SetNetworkLocalFloat(iNetID, name, f)
SetNetworkLocalInteger(iNetID, name, i)
SetNetworkLocalInteger(iNetID, name, i, mode)

Broadcast
integer CreateBroadcastListener(port)
DeleteBroadcastListener(iID)
integer GetBroadcastMessage(iID)

Sockets
integer ConnectSocket(socketID, szIP, port, timeout)
integer ConnectSocket(szIP, port, timeout)
DeleteSocket(socketID)
integer FlushSocket(socketID)
integer GetSocketByte(socketID)
integer GetSocketBytesAvailable(socketID)
integer GetSocketConnected(socketID)
integer GetSocketExists(socketID)
float GetSocketFloat(socketID)
integer GetSocketInteger(socketID)
string GetSocketRemoteIP(socketID)
string GetSocketString(socketID)
integer SendSocketByte(socketID, value)
integer SendSocketFloat(socketID, value)
integer SendSocketInteger(socketID, value)
integer SendSocketString(socketID, value)

Messages
AddNetworkMessageFloat(iMsgID, value)
AddNetworkMessageInteger(iMsgID, value)
AddNetworkMessageString(iMsgID, value)
integer CreateNetworkMessage( )
DeleteNetworkMessage(iMsgID)
integer GetNetworkMessage(iNetID)
float GetNetworkMessageFloat(iMsgID)
integer GetNetworkMessageFromClient(iMsgID)
string GetNetworkMessageFromIP(iMsgID)
integer GetNetworkMessageInteger(iMsgID)

Messages (Continued)
string GetNetworkMessageString(iMsgID)
SendNetworkMessage(iNetID, toClient, iMsgID)

Socket Listener
integer CreateSocketListener(listenerID, szIP, port)
integer CreateSocketListener(szIP, port)
DeleteSocketListener(listenerID)
integer GetSocketListnerConnection(listenerID)

Video Commands

General
DeleteVideo()
float GetVideoDuration()
float GetVideoHeight()
integer GetVideoPlaying()
float GetVideoPosition()
float GetVideoWidth()
integer LoadVideo(szFilename)
PauseVideo()
PlayVideo()
PlayVideoToImage(imageID)
SetVideoDimensions(x, y, width, height)
SetVideoPosition(seconds)
SetVideoVolume(volume)
StopVideo()

File Commands

Zip
AddZipEntry(zipID, path, zipPath)
CloseZip(zipID)
integer CreateZip(filename)
CreateZip(zipID, filename)
ExtractZip(zipfilename, path)

Read
integer FileEOF(iFileID)
OpenToRead(ID, szFile)
integer OpenToRead(szFile)
integer ReadByte(iFileID)
float ReadFloat(iFileID)
integer ReadInteger(iFileID)
string ReadLine(iFileID)
string ReadString(iFileID)
string ReadString2(iFileID)

Write
OpenToWrite(ID, szFile)
integer OpenToWrite(szFile, append)
integer OpenToWrite(szFile)
OpenToWrite(ID, szFile, append)
WriteByte(iFileID, b)
WriteFloat(iFileID, f)
WriteInteger(iFileID, i)
WriteLine(iFileID, str)
WriteString(iFileID, str)
WriteString2(iFileID, str)

Directory
DeleteFolder(szName)
string GetCurrentDir()
integer GetFileCount()
string GetFirstFile()
string GetFirstFolder()
string GetFolder()
integer GetFolderCount()
string GetNextFile()
string GetNextFolder()
integer MakeFolder(szName)
integer SetCurrentDir(szPath)
integer SetFolder(str)

Access
string ChooseRawFile(ext)
CloseFile(iFileID)
DeleteFile(szFile)
integer FileIsOpen(iFileID)
string GetDocumentsPath()
integer GetFileExists(szFile)
integer GetFilePos(iFileID)
integer GetFileSize(iFileID)
string GetReadPath()
string GetWritePath()
SetFilePos(iFileID, pos)
SetRawWritePath(str)

Input Commands

Pointer
integer GetPointerPressed()
integer GetPointerReleased()
integer GetPointerState()
float GetPointerX()
float GetPointerY()

Virtual Joystick
AddVirtualJoystick(index, x, y, size)
DeleteVirtualJoystick(index)
integer GetVirtualJoystickExists(index)
float GetVirtualJoystickX(index)
float GetVirtualJoystickY(index)
SetVirtualJoystickActive(index, active)
SetVirtualJoystickAlpha(index, alpha1, alpha2)
SetVirtualJoystickDeadZone(threshold)
SetVirtualJoystickImageInner(index, imageID)
SetVirtualJoystickImageOuter(index, imageID)
SetVirtualJoystickPosition(index, x, y)
SetVirtualJoystickSize(index, size)
SetVirtualJoystickVisible(index, visible)

Accelerometer
float GetDirectionAngle()
float GetDirectionSpeed()
float GetDirectionX()
float GetDirectionY()

Text Input
integer GetLastChar()
string GetTextInput()
integer GetTextInputCancelled()
integer GetTextInputCompleted()
integer GetTextInputState()
SetCursorBlinkTime(seconds)
SetTextInputMaxChars(max)
StartTextInput(initial)
StartTextInput( )
StopTextInput( )

Button
integer GetButtonPressed(index)
integer GetButtonReleased(index)
integer GetButtonState(index)
SetButtonScreenPosition(index, x, y, size)

Edit Box
integer CreateEditBox()
CreateEditBox(index)
DeleteEditBox(index)
FixEditBoxToScreen(index, fix)
integer GetCurrentEditBox()
integer GetEditBoxActive(index)
integer GetEditBoxChanged(index)
integer GetEditBoxCursorPosition(index)
integer GetEditBoxExists(index)
integer GetEditBoxHasFocus(index)
float GetEditBoxHeight(index)
integer GetEditBoxLines(index)
string GetEditBoxText(index)
integer GetEditBoxVisible(index)
float GetEditBoxWidth(index)
float GetEditBoxX(index)
float GetEditBoxY(index)
SetEditBoxActive(index, active)
SetEditBoxBackgroundColor(index, red, green, blue, alpha)
SetEditBoxBackgroundImage(index, image)
SetEditBoxBorderColor(index, red, green, blue, alpha)
SetEditBoxBorderImage(index, image)
SetEditBoxBorderSize(index, size)
SetEditBoxCursorBlinkTime(index, time)
SetEditBoxCursorColor(index, red, green, blue)
SetEditBoxCursorPosition(index, pos)
SetEditBoxCursorWidth(index, width)
SetEditBoxDepth(index, depth)
SetEditBoxExtendedFontImage(index, image)
SetEditBoxFocus(index, focus)
SetEditBoxFontImage(index, image)
SetEditBoxMaxChars(index, max)
SetEditBoxMaxLines(index, max)
SetEditBoxMultiLine(index, multiline)
SetEditBoxPasswordMode(index, mode)
SetEditBoxPosition(index, x, y)
SetEditBoxScissor(index, x, y, x2, y2)
SetEditBoxSize(index, width, height)
SetEditBoxText(index, str)
SetEditBoxTextColor(index, red, green, blue)
SetEditBoxTextSize(index, size)
SetEditBoxUseAlternateInput(index, mode)
SetEditBoxVisible(index, visible)
SetEditBoxWrapMode(index, mode)

Joystick
float GetJoystickX()
float GetJoystickY()
SetJoystickDeadZone(threshold)
SetJoystickScreenPosition(x, y, size)

Virtual Button
AddVirtualButton(index, x, y, size)
DeleteVirtualButton(index)
integer GetVirtualButtonExists(index)
integer GetVirtualButtonPressed(index)
integer GetVirtualButtonReleased(index)
integer GetVirtualButtonState(index)
SetVirtualButtonActive(index, active)
SetVirtualButtonAlpha(index, alpha)
SetVirtualButtonColor(index, red, green, blue)
SetVirtualButtonImageDown(index, imageID)
SetVirtualButtonImageUp(index, imageID)
SetVirtualButtonPosition(index, x, y)
SetVirtualButtonSize(index, size)
SetVirtualButtonText(index, str)
SetVirtualButtonVisible(index, visible)

Raw Input Commands

Multitouch
integer GetRawFirstTouchEvent(bIncludeUnknown)
integer GetRawNextTouchEvent( )
integer GetRawTouchCount(bIncludeUnknown)
float GetRawTouchCurrentX(iIndex)
float GetRawTouchCurrentY(iIndex)
float GetRawTouchLastX(iIndex)
float GetRawTouchLastY(iIndex)
integer GetRawTouchReleased(iIndex)
float GetRawTouchStartX(iIndex)
float GetRawTouchStartY(iIndex)
float GetRawTouchTime(iIndex)
integer GetRawTouchType(iIndex)
integer GetRawTouchValue(iIndex)
SetRawTouchValue(iIndex, value)

Joysticks
CompleteRawJoystickDetection()
integer GetRawJoystickButtonPressed(index, button)

Joysticks (Continued)

integer GetRawJoystickButtonReleased(index, button)
integer GetRawJoystickButtonState(index, button)
integer GetRawJoystickConnected(index)
integer GetRawJoystickExists(index)
float GetRawJoystickRX(index)
float GetRawJoystickRY(index)
float GetRawJoystickRZ(index)
float GetRawJoystickX(index)
float GetRawJoystickY(index)
float GetRawJoystickZ(index)
SetRawJoystickDeadZone(threshold)

Sensors

float GetRawAccelX()
float GetRawAccelY()
float GetRawAccelZ()
float GetRawGPSAltitude()
float GetRawGPSLatitude()
float GetRawGPSLongitude()
float GetRawGyroVelocityX()
float GetRawGyroVelocityY()
float GetRawGyroVelocityZ()
float GetRawLightLevel()
float GetRawMagneticX()
float GetRawMagneticY()
float GetRawMagneticZ()
float GetRawProximityDistance()
float GetRawRotationVectorW()
float GetRawRotationVectorW2()
float GetRawRotationVectorX()
float GetRawRotationVectorX2()
float GetRawRotationVectorY()
float GetRawRotationVectorY2()
float GetRawRotationVectorZ()
float GetRawRotationVectorZ2()
StartGPSTracking()
StopGPSTracking()

Mouse

integer GetRawMouseLeftPressed()
integer GetRawMouseLeftReleased()
integer GetRawMouseLeftState()
integer GetRawMouseMiddlePressed()
integer GetRawMouseMiddleReleased()
integer GetRawMouseMiddleState()
integer GetRawMouseRightPressed()
integer GetRawMouseRightReleased()
integer GetRawMouseRightState()
float GetRawMouseWheel()
float GetRawMouseWheelDelta()
float GetRawMouseX()
float GetRawMouseY()
SetRawMousePosition(x, y)
SetRawMouseVisible(visible)

Existence

integer GetAccelerometerExists()
integer GetCameraExists()
integer GetGPSSensorExists()
integer GetGyroSensorExists()
integer GetJoystickExists()
integer GetKeyboardExists()
integer GetLightSensorExists()
integer GetMagneticSensorExists()
integer GetMouseExists()
integer GetMultiTouchExists()
integer GetNFCExists()
integer GetProximitySensorExists()
integer GetRotationVectorSensorExists()

Keyboard

integer GetRawKeyPressed(key)
integer GetRawKeyReleased(key)
integer GetRawKeyState(key)
integer GetRawLastKey( )

Memblock Commands

Sound

integer CreateMemblockFromSound(soundID)
CreateMemblockFromSound(memID, soundID)
integer CreateSoundFromMemblock(memID)
CreateSoundFromMemblock(soundID, memID)

General

CopyMemblock(memSrcID, memDstID, srcOffset, dstOffset, size)
CreateMemblock(memID, size)
integer CreateMemblock(size)
DeleteMemblock(memID)
integer GetMemblockByte(memID, offset)
integer GetMemblockByteSigned(memID, offset)
integer GetMemblockExists(memID)
float GetMemblockFloat(memID, offset)
integer GetMemblockInt(memID, offset)
integer GetMemblockShort(memID, offset)
integer GetMemblockSize(memID)
string GetMemblockString(memID, offset, length)
SetMemblockByte(memID, offset, value)
SetMemblockByteSigned(memID, offset, value)
SetMemblockFloat(memID, offset, value)
SetMemblockInt(memID, offset, value)
SetMemblockShort(memID, offset, value)
SetMemblockString(memID, offset, value)

File

CreateFileFromMemblock(filename, memID)
integer CreateMemblockFromFile(filename)
CreateMemblockFromFile(memID, filename)

Image

CreateImageFromMemblock(imageID, memID)
integer CreateImageFromMemblock(memID)
integer CreateMemblockFromImage(imageID)
CreateMemblockFromImage(memID, imageID)

Mesh

AddObjectMeshFromMemblock(objID, memID)
integer CreateMemblockFromObjectMesh(objID, meshIndex)
CreateMemblockFromObjectMesh(memID, objID, meshIndex)
CreateObjectFromMeshMemblock(objID, memID)
integer CreateObjectFromMeshMemblock(memID)
float GetMeshMemblockVertexNormalX(memID, vertexIndex)
float GetMeshMemblockVertexNormalY(memID, vertexIndex)
float GetMeshMemblockVertexNormalZ(memID, vertexIndex)
float GetMeshMemblockVertexU(memID, vertexIndex)
float GetMeshMemblockVertexV(memID, vertexIndex)
float GetMeshMemblockVertexX(memID, vertexIndex)
float GetMeshMemblockVertexY(memID, vertexIndex)
float GetMeshMemblockVertexZ(memID, vertexIndex)
SetMeshMemblockVertexNormal(memID, vertexIndex, x, y, z)
SetMeshMemblockVertexPosition(memID, vertexIndex, x, y, z)
SetMeshMemblockVertexUV(memID, vertexIndex, u, v)
SetObjectMeshFromMemblock(objID, meshIndex, memID)

Math Vector Commands

Vectors

integer CreateVector3(x, y, z)
integer CreateVector3()
DeleteVector3(vectorID)
GetVector3Add(resultVec, addVec)
GetVector3Cross(resultVec, vectorU, vectorV)
float GetVector3Distance(vectorU, vectorV)
float GetVector3Dot(vectorU, vectorV)
float GetVector3Length(vectorID)
GetVector3Multiply(resultVec, multiplier)
float GetVector3X(vectorID)
float GetVector3Y(vectorID)
float GetVector3Z(vectorID)
SetVector3(vectorID, x, y, z)

Time Commands

General

string GetCurrentDate()
string GetCurrentTime()
integer GetDayOfWeek()
integer GetDaysFromUnix(unixtime)
integer GetHoursFromUnix(unixtime)
integer GetLeapYear(year)
integer GetMinutesFromUnix(unixtime)
integer GetMonthFromUnix(unixtime)
integer GetSecondsFromUnix(unixtime)
integer GetUnixFromDate(year, month, days, hours, minutes, seconds)
integer GetUnixTime()
integer GetYearFromUnix(unixtime)

HTTP Commands

Encoding

string HTTPDecode(str)
string HTTPEncode(str)

General

CloseHTTPConnection(iHTTP)
integer CreateHTTPConnection()
DeleteHTTPConnection(iHTTP)
integer GetHTTPFile(iHTTP, szServerFile, szLocalFile, szPostData)
integer GetHTTPFile(iHTTP, szServerFile, szLocalFile)
integer GetHTTPFileComplete(iHTTP)
float GetHTTPFileProgress(iHTTP)
string GetHTTPResponse(iHTTP)
integer GetHTTPResponseReady(iHTTP)
integer GetInternetState()
OpenBrowser(url)
integer SendHTTPFile(iHTTP, szServerFile, szPostData, szLocalFile)
string SendHTTPRequest(iHTTP, szServerFile)
string SendHTTPRequest(iHTTP, szServerFile, szPostData)
integer SendHTTPRequestASync(iHTTP, szServerFile)
integer SendHTTPRequestASync(iHTTP, szServerFile, szPostData)
integer SetHTTPHost(iHTTP, szHost, iSecure)
integer SetHTTPHost(iHTTP, szHost, iSecure, szUser, szPass)
SetHTTPTimeout(iHTTP, milliseconds)
SetHTTPVerifyCertificate(iHTTP, mode)

Advert Commands

General

CreateAdvert(type, horz, vert, test)
CreateAdvertEx(type, horz, vert, test, offsetx, offsety)
CreateFullscreenAdvert()
DeleteAdvert()
RequestAdvertRefresh()
SetAdvertLocation(horz, vert, width)
SetAdvertLocationEx(horz, vert, offsetx, offsety, width)
SetAdvertPosition(x, y, width)
SetAdvertVisible (iVisible)

Inneractive

SetInneractiveDetails(szCode)

AdMob

integer GetFullscreenAdvertLoadedAdMob()
integer GetFullscreenAdvertLoadedAmazon()
integer GetFullscreenAdvertLoadedChartboost()
SetAdMobDetails (szID)
SetAmazonAdDetails (szKey)
SetAmazonAdTesting (mode)
ShowFullscreenAdvertAdMob()

Chartboost
SetChartboostDetails (szKey1, szKey2)
ShowFullscreenAdvertChartboost()

Amazon
ShowFullscreenAdvertAmazon()

Benchmarking Commands

General
float GetDrawingSetupTime()
float GetDrawingTime()
integer GetLoadedImages()
integer GetManagedSpriteCount()
integer GetManagedSpriteDrawCalls()
integer GetManagedSpriteDrawnCount()
integer GetManagedSpriteSortedCount()
integer GetParticleDrawnPointCount()
integer GetParticleDrawnQuadCount()
float GetPhysicsTime()
integer GetPixelsDrawn()
string GetUnassignedImageFileName(index)
integer GetUnassignedImages()
float GetUpdateTime()

Error Commands

General
integer GetErrorOccurred()
string GetLastError()
SetErrorMode(mode)

Extra Commands

GameCenter
GameCenterAchievementsReset ( )
GameCenterAchievementsShow ( )
GameCenterLogin()
GameCenterSetup()
GameCenterShowLeaderBoard (szBoardID)
GameCenterSubmitAchievement (szAchievementID, iPercentageComplete)
GameCenterSubmitScore(iScore, szBoardID)
integer GetGameCenterExists()
integer GetGameCenterLoggedIn()

Shared Variables
DeleteSharedVariable(varName)
string LoadSharedVariable(varName, defaultValue)
SaveSharedVariable(varName, varValue)
SetSharedVariableAppGroup(group)

LocalNotifications
CancelLocalNotification(iID)
integer GetLocalNotificationExists(iID)
string GetLocalNotificationMessage(iID)
integer GetLocalNotificationTime(iID)
SetLocalNotification(iID, datetime, szMessage)

Firebase
FirebaseLogEvent(event_name)
FirebaseSetup()

Facebook
FacebookDestroyLikeButton()
FacebookDownloadFriendsPhoto (iIndex)
string FacebookGetAccessToken()
FacebookGetFriends()
integer FacebookGetFriendsCount()
string FacebookGetFriendsID (iIndex)
string FacebookGetFriendsName (iIndex)
integer FacebookGetFriendsState()
string FacebookGetUserID()
string FacebookGetUserName()
FacebookInviteFriend (szID, szMessage)
FacebookLogin()
FacebookLogout()
FacebookPostOnFriendsWall (szID, szLink, szPicture, szName, szCaption, szDescription)
FacebookPostOnMyWall (szLink, szPicture, szName, szCaption, szDescription)
FacebookSetup (szID)
FacebookShowLikeButton (szURL, iX, iY, iWidth, iHeight)
string GetFacebookDownloadFile()
integer GetFacebookDownloadState()
integer GetFacebookLoggedIn()

In App Purchase
integer GetInAppPurchaseAvailable (iID)
string GetInAppPurchaseDescription (iID)
string GetInAppPurchaseLocalPrice (iID)
integer GetInAppPurchaseState()
InAppPurchaseActivate (iID)
InAppPurchaseAddProductID (szID, type)
InAppPurchaseRestore()
InAppPurchaseSetKeys (szData1, szData2)
InAppPurchaseSetTitle (szTitle)
InAppPurchaseSetup()

Ratings
RateApp (szID, szTitle)
RateApp (szID, szTitle, szMessage)
RateApp (szID)

PushNotifications
string GetPushNotificationToken()
integer PushNotificationSetup()
SetPushNotificationKeys(data1, reserved)

Language

Declaration
#include
#insert
#constant
#option_explicit
#company_name
rem
remstart
remend
dim
global

Control
end
goto
gosub
return
function
exitfunction
endfunction

Loops
do
loop
repeat
until
while
endwhile
for
step
next
exit
continue

Conditionals
if
else
elseif
endif
select
case
case default
endcase
endselect

Other
inc
dec

Scan Codes

A listing of scan codes for dealing with keyboard input:

KEY	Value
KEY_BACK	8
KEY_TAB	9
KEY_ENTER	13
KEY_SHIFT	16
KEY_CONTROL	17
KEY_ESCAPE	27
KEY_SPACE	32
KEY_PAGEUP	33
KEY_PAGEDOWN	34
KEY_END	35
KEY_HOME	36
KEY_LEFT	37
KEY_UP	38
KEY_RIGHT	39
KEY_DOWN	40
KEY_INSERT	45
KEY_DELETE	46
KEY_0	48
KEY_1	49
KEY_2	50
KEY_3	51
KEY_4	52
KEY_5	53
KEY_6	54
KEY_7	55
KEY_8	56
KEY_9	57
KEY_A	65
KEY_B	66
KEY_C	67
KEY_D	68
KEY_E	69
KEY_F	70
KEY_G	71
KEY_H	72
KEY_I	73
KEY_J	74
KEY_K	75
KEY_L	76
KEY_M	77
KEY_N	78
KEY_O	79
KEY_P	80
KEY_Q	81
KEY_R	82
KEY_S	83
KEY_T	84
KEY_U	85
KEY_V	86
KEY_W	87
KEY_X	88
KEY_Y	89
KEY_Z	90
KEY_F1	112
KEY_F2	113
KEY_F3	114
KEY_F4	115
KEY_F5	116
KEY_F6	117
KEY_F7	118
KEY_F8	119
;	186
=	187
,	188
-	189
.	190
/	191
‘	192
[	219
\	220
]	221
#	222
`	223

the GameCreators

www.appgamekit.com