
LUA Documentation

Release 1.0

Saul

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To get started with scripting for Sakara, script files are located in Documents/sakara/scripts

Note: This project is under active development.

CONTENTS

1.1 Types

1.1.1 vector2

Basic container of 2 floats

Fields

Name	Type	Description
x	float	pitch
y	float	yaw

1.1.2 vector3

Basic container of 3 floats

Fields

Name	Type	Description
x	float	pitch
y	float	yaw
z	float	roll
length	function -> float	
length2D	function -> float	
squareLength	function -> float	
dotProduct	function -> float	
normalize	function	
crossProduct	function -> float	
toAngle	function	
fromAngle	function	

1.1.3 vector4

container of 4 floats

Fields

Name	Type	Description
x	float	pitch
y	float	yaw
z	float	roll
w	float	rotation

1.1.4 entity

Method	Description
isDormant	
isAlive	
isPlayer	
isWeapon	
isPistol	
isSniperRifle	
isGrenade	
isVisible	
isVisibleTo	
isFullAuto	
isInReload	
isBot	
isSpotted	
isScoped	
isDefusing	
isPinPulled	
isFlashed	
hasDefuser	
hasHelmet	
getEyePosition	
getEyeAngles	
getAimPunch	
getAimPunchAngle	
getViewPunchAngle	
getBonePosition	
getOrigin	
getAbsOrigin	
getVelocity	
getPlayerName	
getIndex	
getHealth	
getArmor	
getMoney	
getLastPlaceName	
getUserId	

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Method	Description
getSteamId	
getActiveWeapon	
getWeaponType	
getWeaponSubType	
getInaccuracy	
getSpread	
getShotsFired	
getDefinitionIndex	

1.1.5 playerResource

Method	Description
score	
color	
competitiveWins	
competitiveRanking	
musicID	
activeCoinRank	
hasC4	

1.1.6 userCmd

Method	Description
commandNumber	
tickCount	
viewangles	
aimdirection	
forwardmove	
sidemove	
upmove	
buttons	
impulse	
weaponselect	
weaponsubtype	
randomSeed	
mousedx	
mousedy	
hasbeenpredicted	

1.1.7 gameEvent

Method	Description
getName	
getInt	
getFloat	
getString	
setInt	
setString	

1.1.8 viewSetup

Method	Description
fov	
origin	
angles	
farZ	
nearViewmodelZ	
farViewmodelZ	
aspectRatio	

1.2 Hooks

To hook a function, use `hookFunction` function, example:

```
function myFunction(cmd)

end

hookFunction(myFunction, "on_create_move")
```

1.2.1 Hooks destinations

Function	Arguments	Description
on_create_move	userCmd	runs after ClientModeShared::CreateMove
on_frame_stage_notify	number (stage)	runs after CHLClient::FrameStageNotify
on_fire_game_event	gameEvent	runs inside event listener
on_present	nothing	runs inside directx present hook
on_override_view	viewSetup	runs after ClientModeShared::OverrideView
on_script_UI	nothing	called inside lua settings menu

1.2.2 Examples

```
fovOverride = 0

function scriptSettings()
fovOverride = Gui.slider("fov override", fovOverride, -20,20)
end

function fovChanger(setup)
setup.fov = setup.fov+fovOverride
end

hookFunction(fovChanger,"on_override_view")
hookFunction(scriptSettings,"on_script_UI")
```

1.3 Entities

Methods

Method	Arguments	Return
getLocalPlayer	nothing	entity pointer
getEntity	number (index of entity)	entity pointer
getPlayerResource	number (index of entity)	entity pointer
getIndexByUserID	number (userid)	number (index of entity)
getHighestEntityIndex	nothing	number

1.4 Helpers

Methods

Method	Arguments	Return
worldToScreen	vector3 world, vector2 screen	bool
calculateColor	vector4	number
calculateColor	number r, number g, number b, number a	number
getWeaponIcon	number weapon definition index	icon string
hash	string	number (Fowler–Noll–Vo hash)
notify	string	display cheats notification
hudMsg	string	display message on HUD chat

1.5 Input

Methods

Method	Return
getMousePos	vector2
isKeyDown	bool
isKeyReleased	bool
isKeyPressed	bool
isMouseClicked	bool
isMouseDown	bool
isMouseReleased	bool

1.6 Engine

Methods

Method	Arguments	Return
getScreenSize	nothing	vector2
getViewAngles	nothing	vector3
setViewAngles	vector3	
isInGame	nothing	bool
isConnected	nothing	bool
isHLTV	nothing	bool
getLevelName	nothing	string
command	string (runs console command)	
getMaxClients	nothing	number
getConvarInt	string (convar name)	number
getConvarFloat	string (convar name)	number
setConvarInt	string , number	
setConvarFloat	string , number	

1.7 Globals

Methods

Method	Return
getRealTime	number
getFrameCount	number
getAbsoluteFrameTime	number
getcurrentTime	number
getMaxClients	number
getTickCount	number
getIntervalPerTick	number

1.8 Draw

Methods

Method	Arguments
line	vector2 p1, vector2 p2, number color, number thickness
rect	vector2 p1, vector2 p2, number color, number rounding, number thickness
rectFilled	vector2 p1, vector2 p2, number color, number rounding
rectShadow	vector2 p1, vector2 p2, number color, number rounding, number thickness
rectGradient	vector2 p1, vector2 p2, number color1, number color2, number color3, number color4
triangle	vector2 p1, vector2 p2, vector2 p3, number col, number thickness
triangleFilled	vector2 p1, vector2 p2, vector2 p3, number col
circle	vector2 center, number radius, number col
circleFilled	vector2 center, number radius, number col
circleShadow	vector2 center, number radius, number col, number thickness
text	vector2 pos, number col, string text
blurFullscreen	number alpha
monochromeFullscreen	number amount
chromaticAberrationFullscreen	number amount

1.9 Gui

Method	Arguments	Return
beginWindow	string name	
text	string text	
textColored	string text, vector4 color	
button	string label	bool true if clicked
button	string label, vector2 size	bool true if clicked
slider	string label, number value, number min, number max	number new value
input	string label, string value	string new value
input	string label, number value	number new value
sameLine		
newLine		
indent	number value	
unindent	number value	
separator		
getRegionAvail		vector2
checkbox	string label, bool value	bool new value
setNextWindowPos	vector2 position	
setNextWindowSize	vector2 size	
setNextWindowBgAlpha	number value	
setWindowFontScale	number value	
pushID	string id	
popID		
beginFrame	string id, vector2 size	
endFrame		
endWindow		
openPopup	string id	
beginPopup	string id	
beginPopupModal	string id	bool true if opened
endPopup		
closeCurrentPopup		