# **AC Python Documentation**

# import ac

The following function are available when you import "ac" module inside your python document.

```
-ac.getCarState(<CAR_IDENTIFIER>, <INFO_IDENTIFIER> , /*OPTIONAL*/
<OPTIONAL IDENTIFIER>):
```

returns the <INFO\_IDENTIFIER> type of information associated to car <CAR\_IDENTIFIER>. The optional identifier can be omitted, it is used for special infos where they require a specific tyre, as described in the following section. The <OPTIONAL\_IDENTIFIER> and it can be one of the following values:

On the left a synthetic description is given using blue color

FL, Front Left
FR, Front Right
RL, Rear Left
RR, Rear Right

Using the following <INFO IDENTIFIER>s ac.getCarState returns a scalar value:

SpeedMS, Current speed using Meters/Seconds [0, ...]
SpeedMPH, Current speed using Miles/Hour [0, ...]
SpeedKMH, Current speed using Kilometers/Hour [0, ...]

Gas, Pression on the Gas pedal [0,1]
Brake, Pression on the Brake pedal [0,1]
Clutch, Pression on the Clutch pedal [0,1]

Gear, Current Gear [0,max gear]
BestLap, Best Lap in milliseconds [0, ...]

CGHeight, Height of the center of gravity of the car from the ground [0, ...]

DriftBestLap,
DriftLastLap,
DriftPoints,
DriveTrainSpeed,
RPM,
InstantDrift,

Best Lap points in Drift mode [0, ...]
Last Lap points in Drift mode [0, ...]
Current Lap points in Drift mode [0, ...]
Speed Delivered to the wheels [0, ...]
Engine's rounds per minute [0, ...]
Current drift points in Drift Mode [0, ...]

IsDriftInvalid, Current Drift is valid/invalid in Drift Mode {0,1}

IsEngineLimiterOn, Engine Limiter On/Off {0,1}

LapCount, Current Session Lap count [0, ...]

LapInvalidated, Is current Lap invalidated (by going out on the grass) {0, 1}

LapTime, Current LapTime in milliseconds [0, ...]

LastFF, Last Force Feedback signal sent to the Wheel [0, ...]

Last Lap in milliseconds [0, ...]

NormalizedSplinePosition, Position of the car on the track in normalized [0,1]

PerformanceMeter, Projection of how many seconds is the current time far from

the current best lap [0, ...]

Steer, Radians of steer rotation [-2pi,2pi]

TurboBoost, Turbo gain on engine torque for specific vehicles [0,...]

Caster, Caster Angle in radians

Using the following <INFO\_IDENTIFIER>s ac.getCarState returns a 3D vector (with x,y,z

components):

AccG, Gravity acceleration on the vehicle's GC x,y,z = [0, ...]

LocalAngularVelocity, Get the angular velocity of the car, using the car as origin x,y,z

=[0, ...]

LocalVelocity, Get the velocity using the car as origin x,y,x = [0, ...]SpeedTotal, Get all the speed representation x = kmh, y = mph, z = ms

Velocity, Current velocity vector x,y,z = [0, ...]

WheelAngularSpeed, Current Wheel angular speed x,y,z = [0, ...]WorldPosition Current Car Coordinates on map x,y,z = [0,...]

Using the following <INFO\_IDENTIFIER>s ac.getCarState returns a 4D vector (with w,x,y,z

components):

CamberRad, The camber angle in Radiants for each tyre CamberDeg, The camber angle in Degree for each tyre

SlipAngle, Slip angle, angle between the desired direction and the actual

direction of the vehicle [0, 360], degrees.

SlipRatio, Slip Ration of the tyres x,y,z,w = [0,1] Mz, Self Aligning Torque x,y,z,w = [0,...] Load, Current load on each tyre x,y,z,w = [0,...]

TyreRadius, Radius of any Tyre x,y,z,w = [0,...]

NdSlip, TyreSlip, Dy,

CurrentTyresCoreTemp Current core temperature of the tyres  $^{\circ}$ C x,y,z,w = [0,...]

ThermalState, Current temperature of the tyres  $^{\circ}$ C x,y,z,w = [0,...] DynamicPressure, Current pressure of the tyres psi x,y,z,w =[0, ...] TyreLoadedRadius, Radius of the tyre under load x,y,z,w =[0, ...] SuspensionTravel, Suspension vertical travel x,y,z,w =[0, ...] TyreDirtyLevel, Quantity of dirt on the tyres x,y,z,w =[0, 10)

Using the following <INFO\_IDENTIFIER>s combined with the

<OPTIONAL\_IDENTIFIER>

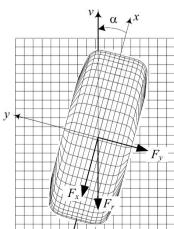
ac.getCarState returns a 3D vector (with x,y,z components) related

to the <OPTIONAL IDENTIFIER> wheel:

TyreContactNormal, Normal vector to tyre's contact point (z)

TyreContactPoint, Tyre contact point with the tarmac

TyreHeadingVector, Tyre Heading Vector (x)
TyreRightVector, Tyre Right Vector (y)



Using the following <INFO\_IDENTIFIER>s combined with the <OPTIONAL\_IDENTIFIER> ac.getCarState returns a scalar vector (with x,y,z components) related to the <OPTIONAL\_IDENTIFIER> index O:

Aero , o=0 drag Coefficient
Aero, o=1 lift Coefficient front
Aero, o=2 lift Coefficient rear

Example: ac.getCarState(0,TyreContactPoint,FR)

On failure ac.getCarState returns 0.

#### **GENERAL INFO:**

### -ac.getDriverName(<CAR\_ID>)

<CAR\_ID> must be the car ID, 0 for the player's car returns as a string the driver's name of the <CAR\_ID> car. This function returns the car name on success, -1 otherwise.

### -ac.getTrackName(<CAR ID>)

<CAR\_ID> must be the car ID, 0 for the player's car returns as a string the track's name where <CAR\_ID> is running. This function returns the track's name on success, -1 otherwise.

#### -ac.getTrackConfiguration(<CAR ID>)

<CAR\_ID> must be the car ID, 0 for the player's car returns as a string the track's configuration where <CAR\_ID> is running. This function returns the track's name on success, -1 otherwise.

#### -ac.getCarName(<CAR ID>)

<CAR\_ID> must be the car ID, 0 for the player's car returns as a string the car's name of the <CAR\_ID> car. This function returns the car name on success, -1 otherwise.

#### -ac.getLastSplits(<CAR ID>)

<CAR\_ID> must be the car ID, 0 for the player's car returns as a Python List the car's last splits of the <CAR\_ID> car. This function returns the Python list with the splits on success, -1 otherwise.

#### -ac.isCarInPitline(<CAR ID>)

<CAR\_ID> must be the car ID, 0 for the player's car This function returns 1 if the car is currently in the Pitline

# -ac.isCarInPit(<CAR ID>)

<CAR\_ID> must be the car ID, 0 for the player's car This function returns 1 if the car is currently in the Pitbox

# -ac.isConnected(<CAR\_ID>)

<CAR\_ID> must be the car ID, 0 for the player's car This function returns 1 if the car is currently connected

# -ac.getCarBallast(<CAR\_ID>)

<CAR\_ID> must be the car ID, 0 for the player's car This function returns the ballast value of the car

# -ac.getCarMinHeight(<CAR\_ID>)

<CAR\_ID> must be the car ID, 0 for the player's car This function returns the minimum height of the car

# -ac.getServerName()

This function returns the name of the joined server

# -ac.getServerIP()

This function returns the IP of the joined server

# -ac.getServerHttpPort()

This function returns the Http port of the joined server

# -ac.getServerSlotsCount()

This function returns total number of occupied slot in the server

# -ac.getCarsCount()

This function returns the session's max number of cars.

# -ac.getCarLeaderboardPosition(<CAR\_ID>)

<CAR\_ID> must be the car ID, 0 for the player's car

This function returns position of the car on the Leaderboard

# -ac.getCarRealTimeLeaderboardPosition(<CAR\_ID>)

<CAR\_ID> must be the car ID, 0 for the player's car This function returns position of the car on realtime

# -ac.getCarFFB()

This function returns the FFB Gain value for the player current car

#### -ac.setCarFFB(<VALUE>)

<VALUE>is the value taht will be added to the current FFB gain This function sets the FFB Gain value for the player current car

#### **CAMERA MANAGEMENT**

# -ac.setCameraMode(<INFO IDENTIFIER>)

<INFO IDENTIFIER> can be (CM):

Cockpit

Car

Drivable

Track

Helicopter

OnBoardFree

Free

Random

ImageGeneratorCamera

Start

#### -ac.getCameraMode()

This function returns a <INFO\_IDENTIFIER> above

# -ac.isCameraOnBoard(<CAR\_ID>)

<CAR\_ID> must be the car ID, 0 for the player's car This function returns 1 on success, -1 otherwise.

# -ac.setCameraCar(<CAMERA\_ID>,<CAR\_ID>)

<CAMERA\_ID> must be the F6 camera index <CAR\_ID> must be the car ID, 0 for the player's car This function returns 1 on success, -1 otherwise.

# -ac.getCameraCarCount(<CAR\_ID>)

<CAR\_ID> must be the car ID, 0 for the player's car This function returns the number of F6 cameras, -1 otherwise.

# -ac.focusCar(<CAR\_ID>)

<CAR\_ID> must be the car ID, 0 for the player's car This method get switch the actor to the selected car This function returns 1 on success, -1 otherwise.

# -ac.getFocusedCar()

This method get the selected car index

# **DEBUG**

# -ac.log(<VALUE>):

<VALUE> must be a string

Use ac.log if you want to send some text to the AC log.txt file The function returns 1 on success

# -ac.console(<VALUE>)

<VALUE> must be a string

Use ac.console to send a string to the AC console

The function returns 1 on success

#### **GENERAL APP MANAGEMENT:**

#### -ac.newApp(<VALUE>)

<VALUE> must be a string

Creates a new app and returns the corresponding Identifier.

returns the App ID on success, -1 otherwise

#### -ac.setTitle(<CONTROLO IDENTIFIER>,<TITLE>)

<TITLE> must be a string, <CONTROL\_IDENTIFIER> must be a form

This function will set the title of the specified App by <CONTROL IDENTIFIER>.

The function returns 1 on success, -1 otherwise

#### -ac.setSize(<CONTROLO IDENTIFIER>,<WIDTH>,<HEIGHT>)

<WIDTH>,<HEIGHT> must be a floating point numbers

This function will set the size of a control specified by <CONTROL IDENTIFIER>.

The function returns 1 on success, -1 otherwise

# -ac.addLabel(<CONTROL\_IDENTIFIER>,<VALUE>)

<VALUE> must be a string

It is possible to add a label to a Window, we need to pass the Window to ac.addLabel and the label name.

The function returns 1 on success, -1 otherwise

# -ac.setPosition(<CONTROLO\_IDENTIFIER>,<X>,<Y>)

<X>,<Y> must be a floating point numbers

Use ac.setPosition to set the control's position specified by <CONTROL\_IDENTIFIER> in the app.

The function returns 1 on success, -1 otherwise

# -ac.setIconPosition(<CONTROLO\_IDENTIFIER>,<X>,<Y>)

<X>,<Y> must be a floating point numbers, <CONTROL\_IDENTIFIER> must be a form Use ac.setPosition to set the new icon's position instead of the default one.

The function returns 1 on success, -1 otherwise

#### -ac.setTitlePosition(<CONTROLO IDENTIFIER>,<X>,<Y>)

<X>,<Y> must be a floating point numbers, <CONTROL\_IDENTIFIER> must be a form Use ac.setPosition to set the new title's position inside the app.

The function returns 1 on success, -1 otherwise

# -ac.getPosition(<CONTROLO\_IDENTIFIER>)

<CONTROL\_IDENTIFIER> is the identifier of a control

Use ac.getPosition to get the control's position in the parent window, this function returns a python tuple width,height.

The function returns the position as a tuple x,y on success, -1 otherwise

#### -ac.setText(<CONTROL IDENTIFIER>, <VALUE>)

<VALUE> must be a string, <CONTROL\_IDENTIFIER> is the control that we want to set the text to

Set the text of the control specified by <CONTROL\_IDENTIFIER>, with the <VALUE> text passed as an argument.

The function returns 1 on success, -1 otherwise

### -ac.getText(<CONTROLO\_IDENTIFIER>)

<CONTROL\_IDENTIFIER> is the control that we want to get the text from Use ac.getText to get the control's text.

This function returns the coordinates x,y of the control on success, -1 otherwise

# -ac.setBackgroundOpacity(<CONTROL\_IDENTIFIER>, <VALUE>)

<VALUE> must be a floating point value between 0 and 1

Use ac.setBackgroundOpacity to change the alpha channel of the desired control.

The function returns 1 on success, -1 otherwise

#### -ac.drawBackground(<CONTROL IDENTIFIER>, <VALUE>)

<VALUE> must be 0 or 1

Use ac.drawBackground to set the background visible (1)(DEFAULT) or transparent (0) The function returns 1 on success, -1 otherwise

# -ac.drawBorder(<CONTROL\_IDENTIFIER>, <VALUE>)

<VALUE> must be 0 or 1

Use ac.drawBorder to draw the border of the desired control (1) (DEFAULT) or not (0) The function returns 1 on success, -1 otherwise

# -ac.setBackgroundTexture(<CONTROL IDENTIFIER>, <PATH>)

<PATH> starts from Assetto Corsa root folder, <CONTROL\_IDENTIFIER> must be a control identifier

Use ac.setBackgroundTexture to draw a specified texture stored in the path specified by <PATH> as background image for the control specified by <CONTROL\_IDENTIFIER>. The function returns 1 on success, -1 otherwise

# -ac.setFontAlignment(<CONTROL\_IDENTIFIER>, <ALIGNMENT>)

<a href="#"><ALIGNMENT> is one of the following strings:</a>

"left "

"right"

"center"

Use ac.setFontAlignment to set the font alignment of the control text as specified by the <ALIGNMENT> string.

The function returns 1 on success, -1 otherwise

# -ac.setBackgroundColor(<CONTROL\_IDENTIFIER>, <R>,<G>,<B>)

<PATH> starts from Assetto Corsa root folder

Use ac.setBackgroundColor to set the background color of the window as specified by the R.G.B values

The function returns 1 on success, -1 otherwise

# -ac.setVisible(<CONTROL\_IDENTIFIER>, <VALUE>)

<VALUE> must be 0 or 1

It is possible to hide the object using the function ac.setVisible with VALUE set to 1.

The function returns 1 on success, -1 otherwise

#### -ac.addOnAppActivatedListener(<CONTROL\_IDENTIFIER>, <VALUE>)

<VALUE> must be a function name defined inside the Python script,

<CONTROL IDENTIFIER> must be an app.

This method set the <VALUE> function as callback function for the event of app selection on the task bar.

The function returns 1 on success, -1 otherwise

# -ac.addOnAppDismissedListener(<CONTROL\_IDENTIFIER>, <VALUE>)

<VALUE> must be a function name defined inside the Python script,

CONTROL IDENTIFIER> must be an app.

This method set the <VALUE> function as callback function for the event of app deselection on the task bar.

The function returns 1 on success, -1 otherwise

# -ac.addRenderCallback(<CONTROL\_IDENTIFIER>, <VALUE>)

<VALUE> must be a function name defined inside the Python script

This method set the <VALUE> function as callback function for the finished rendering event.

The function returns 1 on success, -1 otherwise

#### -ac.setFontColor(<CONTROL IDENTIFIER>,<R>,<G>,<B>,<A>)

<CONTROL\_IDENTIFIER> must be a Controlidentifier, <R>,<G>,<B>,<A> are the color value scaled from 0 to 1

This function returns 1 on success, -1 otherwise

#### -ac.setFontSize(<CONTROL IDENTIFIER>, <VALUE>)

This method set <VALUE> as new new size of the control's font.

The function returns 1 on success, -1 otherwise

#### -ac.initFont(0, <FONTNAME>, <ITALIC>, <BOLD>)

This method loads the font in memory (stored as font+italic+bold). Should be used at the initialization of the application. The font needs to be saved in the "content/fonts" folder.

<FONTNAME> must be the name of the base font (real name, not filename, so it can be "Arial") <ITALIC> must be a 0 for non-

italic font, 1 for italic font (instance will be "Arial Italic") <BOLD> must be a 0 for non-bold font, 1 for bold font (instance will be "Arial Bold" or "Arial Italic Bold" is also italic) The function returns 1 on success, -1 otherwise

-ac.setCustomFont(<CONTROL\_IDENTIFIER>, <FONTNAME>, <ITALIC>, <BOLD>)

This method create or replace the font of a control. Should not be done without calling "iniFont". The font needs to be saved in the "content/fonts" folder.

<CONTROL IDENTIFIER> is the control owner of the font

<FONTNAME> must be the name of the base font (real name, not filename, so it can be "Arial") <ITALIC> must be a 0 for non-

italic font, 1 for italic font (instance will be "Arial Italic") <BOLD> must be a 0 for non-bold font, 1 for bold font (instance will be "Arial Bold" or "Arial Italic Bold" is also italic) The function returns 1 on success, -1 otherwise

#### **SPECIFIC CONTROL MANAGEMENT:**

#### **Button:**

#### -ac.addButton(<CONTROL IDENTIFIER>, <VALUE>)

<VALUE> must be a string, <CONTROL\_IDENTIFIER> must be a form
The function adds a Button to the window specified by <CONTROL\_IDENTIFIER>
The function returns the Button ID on success, -1 otherwise

-ac.addOnClickedListener(<CONTROL\_IDENTIFIER>, <VALUE>)

<VALUE> must be a function name defined in this file

It is possible to associate the button with an event to trigger when it is clicked using this function

The function returns 1 on success, -1 otherwise

#### Graph:

#### -ac.addGraph(<CONTROL IDENTIFIER>, <VALUE>)

<VALUE> must be a string

The function adds a Graph to the window specified in <CONTROL\_IDENTIFIER> The function returns the Graph ID on success, -1 otherwise

# -ac.addSerieToGraph(<CONTROL\_IDENTIFIER>, <R>,<G>,<B>)

<R>,<G>,<B> must be floating point numbers between 0 and 1

To plot some data it is necessary to add a Serie. A serie is a succession of points to plot on the graph.

When adding a serie you must specify the color of the serie as argument The function returns 1 on success, -1 otherwise

#### -ac.addValueToGraph(<CONTROL IDENTIFIER,<SERIE INDEX>,<VALUE>)

<SERIE\_INDEX> is the Serie ID in the graph that where <VALUE> will be added. The function returns 1 on success, -1 otherwise

ac.setRange(<CONTROL IDENTIFIER>,<MIN VALUE>,<MAX VALUE>,<MAX POINTS>)

<MIN\_VALUE>,<MAX\_VALUE>,<MAX\_POINTS> must be floating point numbers
In order to plot the data inside the Graph it is necessary to specify the amplitude of the ordinates and the maximum number of points to store in memory

The function returns 1 on success, -1 otherwise

# Spinner:

# -ac.addSpinner(<CONTROL\_IDENTIFIER>, <VALUE>)

<VALUE> must be a string

It is possible to add a Spinner using the function

The function returns the Spinner ID on success, -1 otherwise

# ac.setRange(<CONTROL\_IDENTIFIER>, <MIN\_VALUE>,<MAX\_VALUE>)

<MIN\_VALUE>,<MAX\_VALUE> must be floating point numbers

It is possible to set the min and max values of the Control:

The function returns 1 on success, -1 otherwise

# -ac.setValue(<CONTROL\_IDENTIFIER>, <VALUE>)

<VALUE> must be floating point number

This function set the "value" parameter of the specific Control if this is an available parameter.

This function affects controls like Spinner, Progress Bar or Check Box

The function returns 1 on success, -1 otherwise

#### -ac.getValue(<CONTROL IDENTIFIER>)

<VALUE> must be floating point number

This function returns the "value" parameter of the specific Control if this is an available parameter.

The function returns the value on success, -1 otherwise

# -ac.setStep(<CONTROL\_IDENTIFIER>,<VALUE)</pre>

<CONTROL\_IDENTIFIER> must be a Spinner ID <VALUE> must be floating point number Set the value added or subtracted when the + or - button is pressed in a Spinner controller. The function returns 1 on success, -1 otherwise

# -ac.addOnValueChangeListener(<CONTROL\_IDENTIFIER>, <VALUE>)

<VALUE> must be a function name defined inside the Python script
It is now possible to associate the spinner with an event to trigger when one of the two
buttons is pressed

The function returns 1 on success, -1 otherwise

```
Progress Bar:
```

#### -ac.addProgressBar(<CONTROL IDENTIFIER>, <VALUE>)

<VALUE> must be a string

It is possible to add a Progress Bar using the function

The function returns the Progress Bar ID on success, -1 otherwise

# Input Text:

```
-ac.addInputText(<CONTROL_IDENTIFIER>, <VALUE>)
```

# -ac.addTextInput(<CONTROL\_IDENTIFIER>, <VALUE>)

<VALUE> must be a string

It is possible to add an Input Text Field using the function

The function returns the Input Text ID on success, -1 otherwise

# -ac.setFocus(<CONTROL\_IDENTIFIER>, <FOCUS>)

<CONTROL\_IDENTIFIER> must be an Input Text, <FOCUS> must be 0 or 1

If FOCUS is 1, this function sets the Input Text as first responder.

The function returns 1 on success, -1 otherwise

#### -ac.addOnValidateListener(<CONTROL\_IDENTIFIER>, <VALUE>)

<VALUE> must be a function name defined inside the Python script

It is possible to associate the <CONTROL\_IDENTIFIER> with an event to trigger when the enter key is pressed

The function returns 1 on success, -1 otherwise

#### List Box:

#### -ac.addListBox(<CONTROL\_IDENTIFIER>,<NAME>)

<CONTROL IDENTIFIER> must be a window identifier

This method adds a List Box to the window specified by CONTROL IDENTIFIER

The function returns the ListBox ID on success, -1 otherwise

# -ac.addItem(<CONTROL IDENTIFIER>,<NAME>)

<CONTROL\_IDENTIFIER> must be a ListBox identifier

This method adds a List Box item to the List Box specified.

The item's label is specified by the Name string.

This function returns the ListBox Item ID on success, -1 otherwise

#### -ac.removeItem(<CONTROL\_IDENTIFIER>,<ID>)

<CONTROL IDENTIFIER> must be a ListBox identifier

This method removes from the List Box the item with ID as identifier

This function returns the size of the List Box on success, -1 otherwise

#### -ac.getItemCount(<CONTROL\_IDENTIFIER>)

<CONTROL IDENTIFIER> must be a ListBox identifier

This function returns the size of the List Box on success, -1 otherwise

#### -ac.setItemNumberPerPage(<CONTROL IDENTIFIER>,<NUMBER>)

<CONTROL\_IDENTIFIER> must be a ListBox identifier, <NUMBER> is the number of element to be displayed desired for each page

This function sets the number of element displayed for each page in a List Box.

This function returns 1 on success, -1 otherwise

# -ac.highlightListBoxItem(<CONTROL\_IDENTIFIER>,<ID>)

<CONTROL\_IDENTIFIER> must be a ListBox identifier, <ID> is the element to be selected.
This function sets the list box item with <ID> as identifier as selected.

This function returns 1 on success. -1 otherwise

#### -ac.addOnListBoxSelectionListener(<CONTROL IDENTIFIER>, <VALUE>)

<VALUE> must be a function name defined inside the Python script

Control identifier must be a List Box controller otherwise the function does nothing and returns 0.

This method set the <VALUE> function as callback function for the event of item SELECTION inside a ListBox.

The callback function receives as input parameters the Item's NAME and its ID (his position inside the list-box).

The function returns 1 on success, -1 otherwise

#### -ac.addOnListBoxDeselectionListener(<CONTROL IDENTIFIER>, <VALUE>)

<VALUE> must be a function name defined inside the Python script

Control identifier must be a List Box controller otherwise the function does nothing and returns 0.

This method set the <VALUE> function as callback function for the event of item DESELECTION inside a ListBox.

The callback function receives as input parameters the Item's NAME and its ID (his position inside the list-box).

The function returns 1 on success, -1 otherwise

# -ac.setAllowDeselection(<CONTROL\_IDENTIFIER>,<ALLOW\_DESELECTION>)

<CONTROL\_IDENTIFIER> must be a ListBox identifier, <ALLOW\_DESELECTION> must be 0 or 1

Passing true as a parameter, when the user clicks on a selected item the item is deselected.

In this way there could be 0 or 1 selected item at a given time.

If also ac.setAllowMultiSelection is set as true there can be more than 1 selected items at a given time.

This function returns 1 on success, -1 otherwise

# ac.setAllowMultiSelection(<CONTROL IDENTIFIER>,<ALLOW MULTI SELECTION>)

<CONTROL\_IDENTIFIER> must be a ListBox identifier, <ALLOW\_MULTI\_SELECTION> must be 0 or 1

Passing true as a parameter, when the user clicks on a different item the item is added to the selected item list.

In this way there could me more than one selected items at a given time This function returns 1 on success, -1 otherwise

#### -ac.getSelectedItems(<CONTROL IDENTIFIER>)

<CONTROL IDENTIFIER> must be a ListBox identifier

This method returns the list of the selected items at a given time.

This function returns a Python list of Long on success, -1 otherwise

#### Check Box: -ac.addCheckBox(<CONTROL\_IDENTIFIER>,<VALUE>)

<CONTROL\_IDENTIFIER> must be a form ,<VALUE> must be the form's name

This function adds a checkbox to the current form passed as <CONTROL IDENTIFIER>.

The function returns the checkbox created on success, -1 otherwise

# -ac.addOnCheckBoxChanged(<CONTROL\_IDENTIFIER>, <VALUE>)

<VALUE> must be a function name defined inside the Python script

Control identifier must be a Check Box controller otherwise the function does nothing and returns 0.

This method set the <VALUE> function as callback function for the event of checkbox SELECTION or DESELECTION inside a ListBox.

The callback function receives as input parameters the CheckBox's NAME and its value, 1 if selected. -1 otherwise.

The function returns 1 on success, -1 otherwise

#### Text Box:

# -ac.addTextBox(<CONTROL IDENTIFIER>,<NAME>)

<CONTROL\_IDENTIFIER> form identifier, <NAME> text box name

This method adds a text box (scrollable if the text is longer than the textbox, to the current form.

THIS CONTROL IS NOT CURRENTLY WORKING YET, so no set text has been exposed

#### **GRAPHICS AND RENDERING:**

#### -ac.newTexture(<PATH>)

<PATH> must be a string, the path is considered from AC installation directory.

This method loads in memory the texture specified by path.

This method returns the texture identifier on success, -1 otherwise.

#### -ac.glBegin(<PRIMITIVE ID>)

<PRIMITIVE\_ID> must be an int corresponding to the following ints:

- 0: Draw lines
- 1: Draw lines Strip
- 2 : Draw triangles
- 3: Draw quads.

Begin a rendering of the specified type.

This function returns 1 on success, -1 otherwise

#### -ac.glEnd(void)

Finishes the render of a previous specified primitive

This function returns 1 on success

-ac.glvertex2f(<X>,<Y>) <X>,<Y> must be a floating point numbers Adds a 2d point to the rendering queue.

This function returns 1 on success, -1 otherwise

- -ac.glColor3f( $\langle R \rangle$ ,  $\langle G \rangle$ ,  $\langle B \rangle$ )  $\langle R \rangle$ ,  $\langle G \rangle$ ,  $\langle B \rangle$  rgb coordinates scaled from 0 to 1, must be a floating point numbers set the current rendering color to  $\langle R \rangle$ ,  $\langle G \rangle$ ,  $\langle B \rangle$  color. This function returns 1 on success. -1 otherwise
- -ac.glColor4f( $\langle R \rangle$ , $\langle G \rangle$ , $\langle B \rangle$ , $\langle A \rangle$ ) <R>, $\langle G \rangle$ , $\langle B \rangle$  rgb coordinates scaled from 0 to 1, <A> alpha component from 0 to 1, all the values must be a floating point numbers set the current rendering color to  $\langle R \rangle$ , $\langle G \rangle$ , $\langle B \rangle$  color, with  $\langle A \rangle$  as transparency. This function returns 1 on success, -1 otherwise
- -ac.glQuad(<X>,<Y>,<WIDTH>,<HEIGHT>) <X>,<Y>,<WIDTH>,<HEIGHT> must be a floating point numbers draw a quad quickly without using glBegin, ..., glEnd This function returns 1 on success, -1 otherwise

# -ac.glQuadTextured(<X>,<Y>,<WIDTH>,<HEIGHT>,<TEXTURE\_ID>)

<X>,<Y>,<WIDTH>,<HEIGHT> must be a floating point numbers, <TEXTURE\_ID> is the id of the texture previously loaded. draw a quad quickly without using glBegin, ..., glEnd This function returns 1 on success. -1 otherwise

new in this document as of 2020:

```
ac.isAcLive() as bool
ac.restart()
ac.isCarInPitlane() as bool # same as ac.isCarInPitline()
ac.getCarSkin(carID) as string
ac.getDriverNationCode(carID) as string
ac.getCurrentSplits(carID) as List
ac.getTrackLength(carID) as float
ac.getWindSpeed() as float
ac.getWindDirection() as float
ac.isAIControlled() as bool
ac.getCarEngineBrakeCount() as int
ac.getCarPowerControllerCount() as int
ac.freeCameraSetClearColor(r, g, b, alpha)
ac.freeCameraMoveForward(float)
ac.freeCameraMoveRight(float)
ac.freeCameraMoveUpWorld(float)
ac.freeCameraRotatePitch(float)
ac.freeCameraRotateHeading(float)
ac.freeCameraRotateRoll(float)
ac.sendChatMessage(string_msg)
ac.addOnChatMessageListener(ac_WindowID, callBackFunction)
```

also changed wrong ac.addInputText() to ac.addTextInput() on page 11.

CustomShadersPatch adds more python funtions, <u>see</u> https://github.com/ac-custom-shaders-patch/acc-extension-config/wiki/Python-Apps-%E2%80%93-New-functions