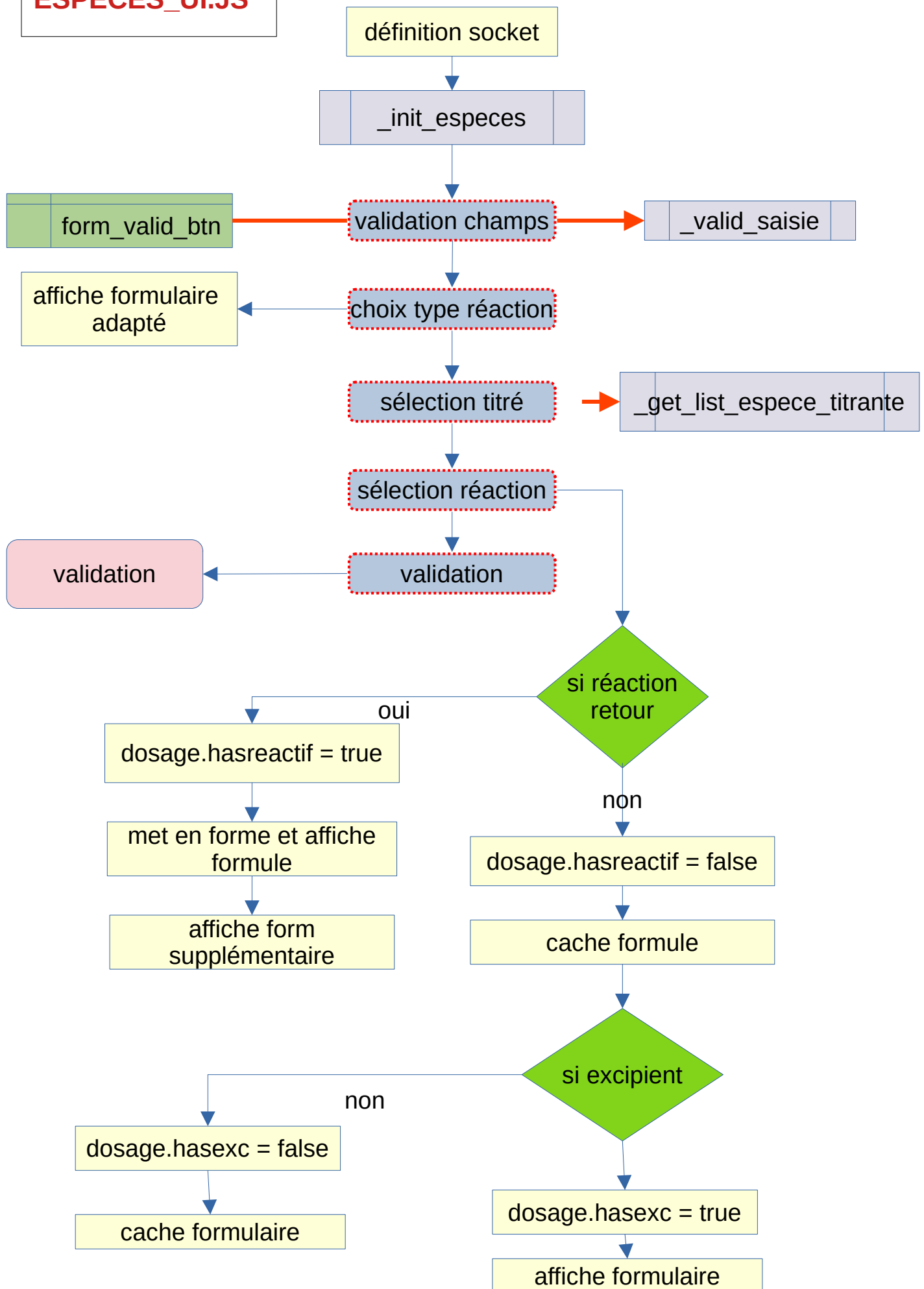
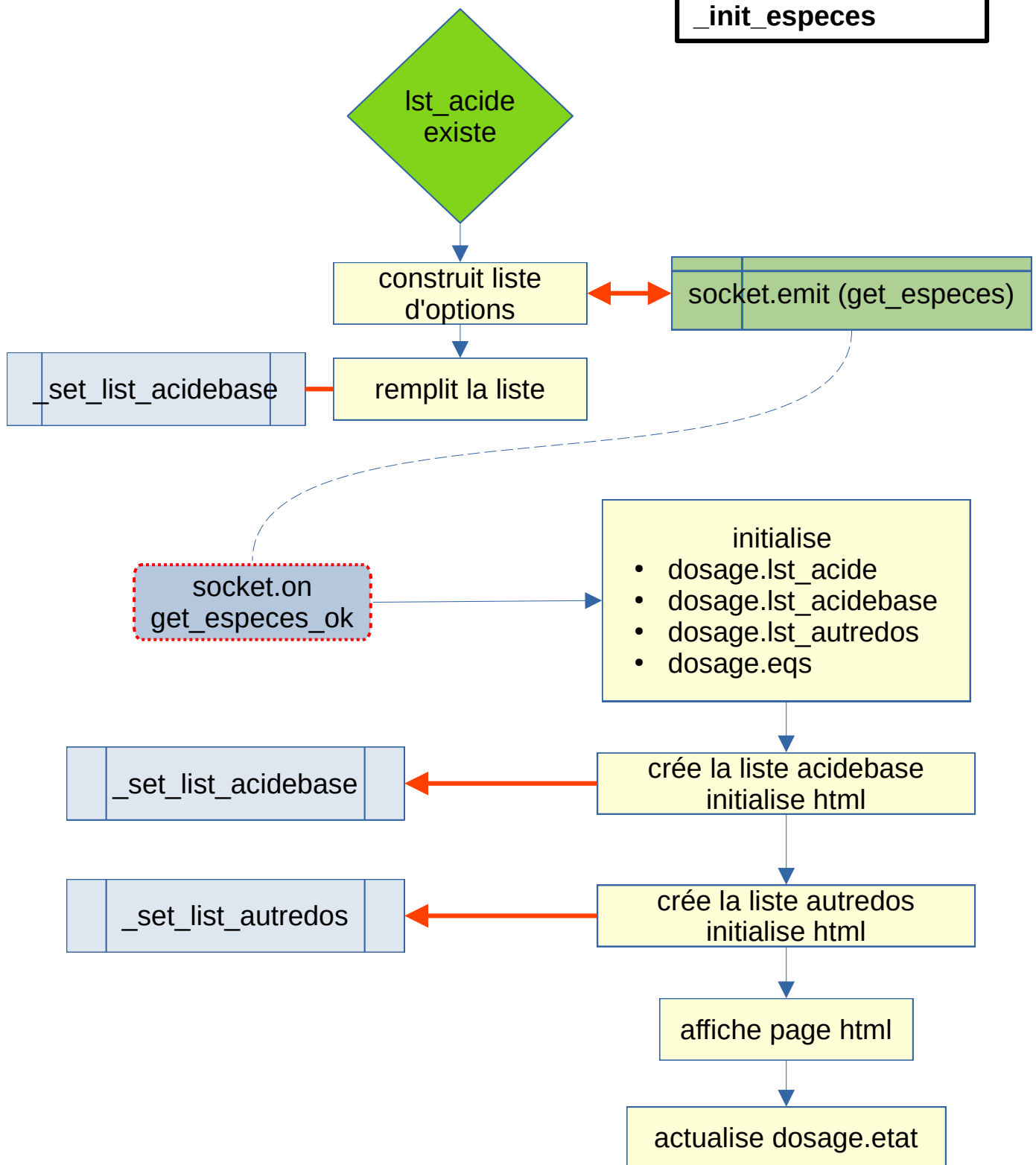


## ESPECES\_UI.JS



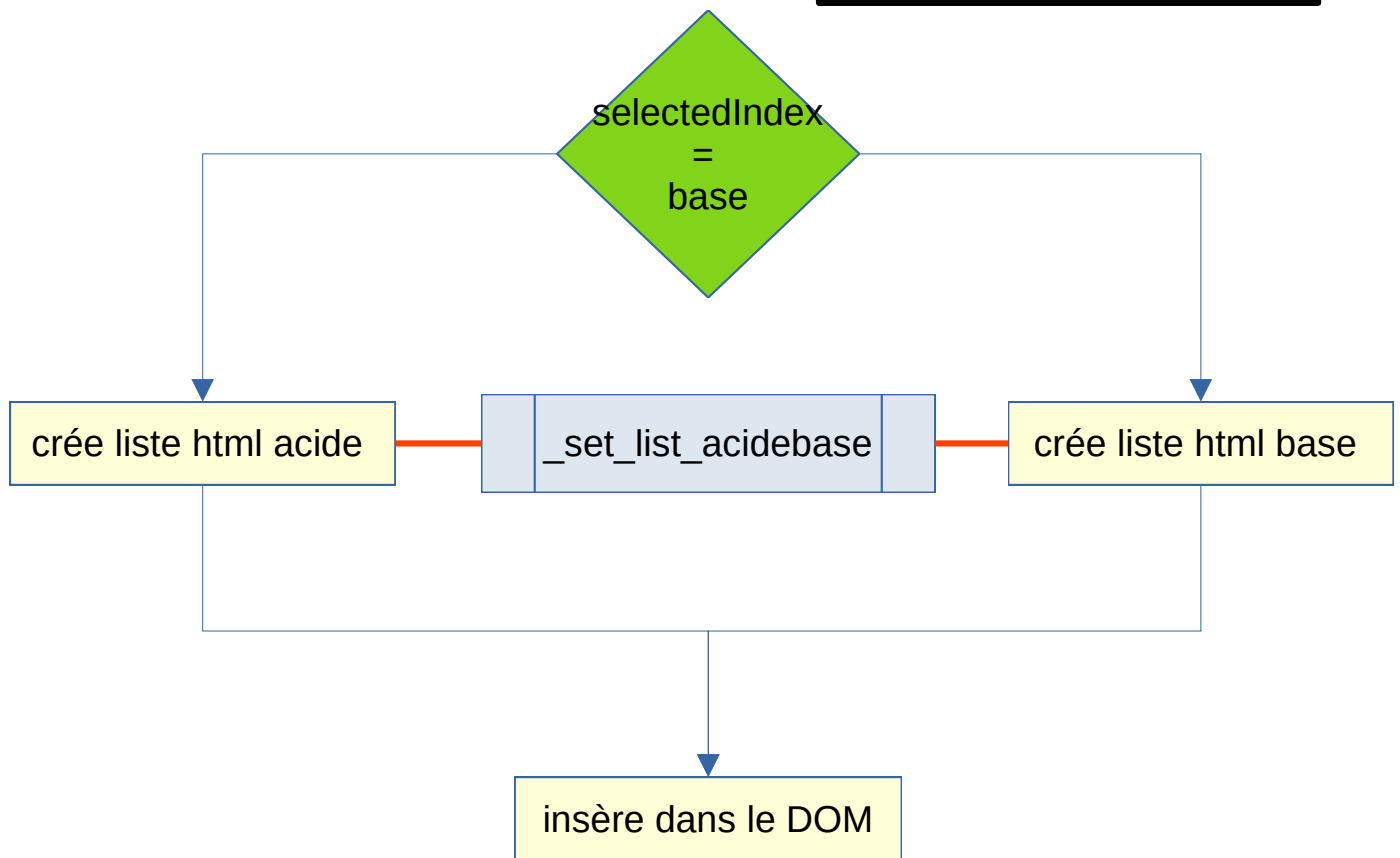
## ESPECES\_UI.JS

\_init\_especes



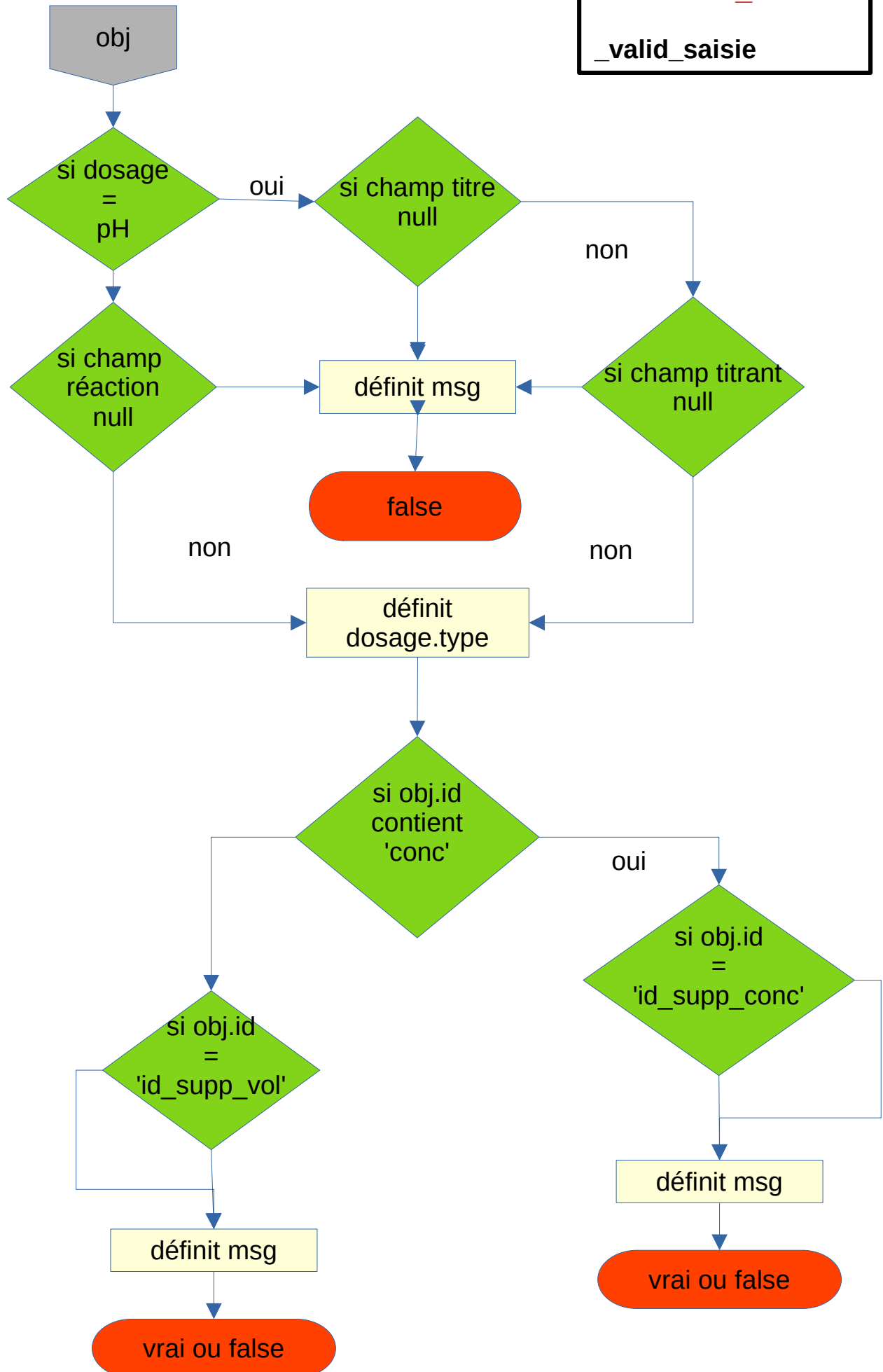
**ESPECES\_UI.JS**

**`_get_list_espece_titrante`**



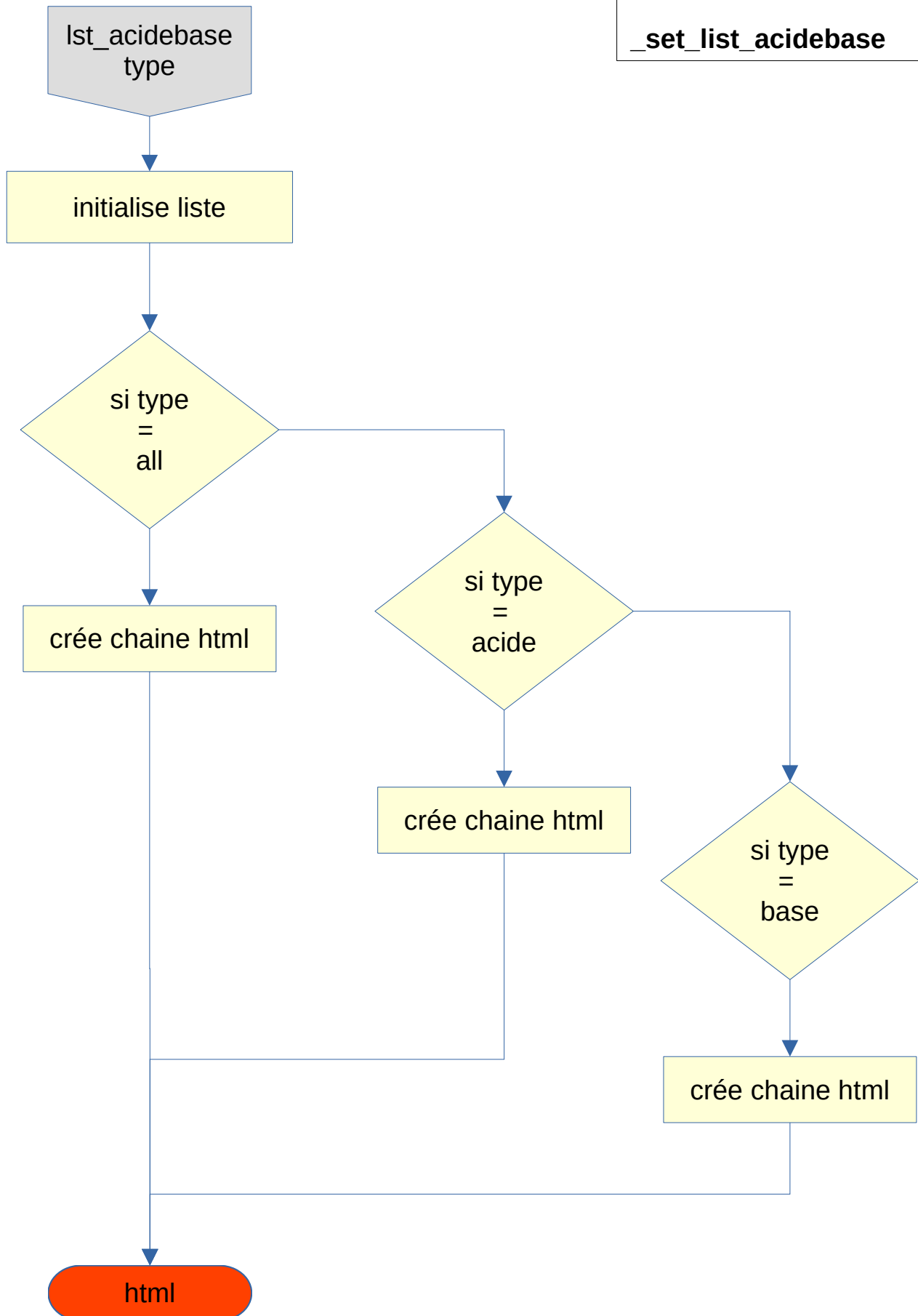
**ESPECES\_UI.JS**

**\_valid\_saisie**



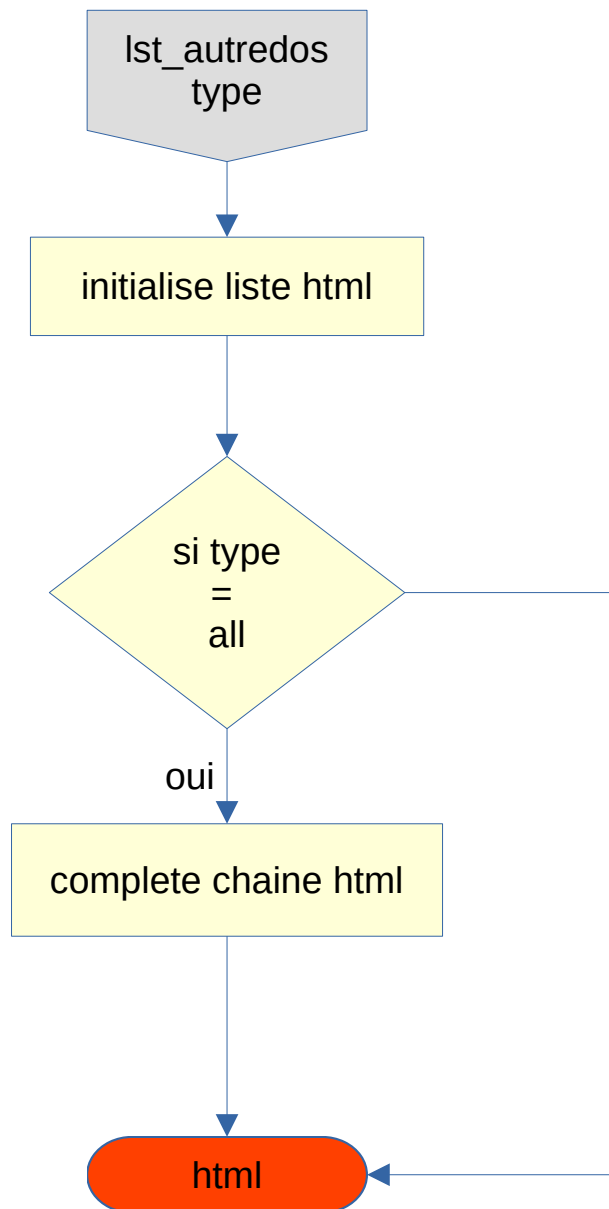
**ESPECES\_UI.JS**

**\_set\_list\_acidebase**



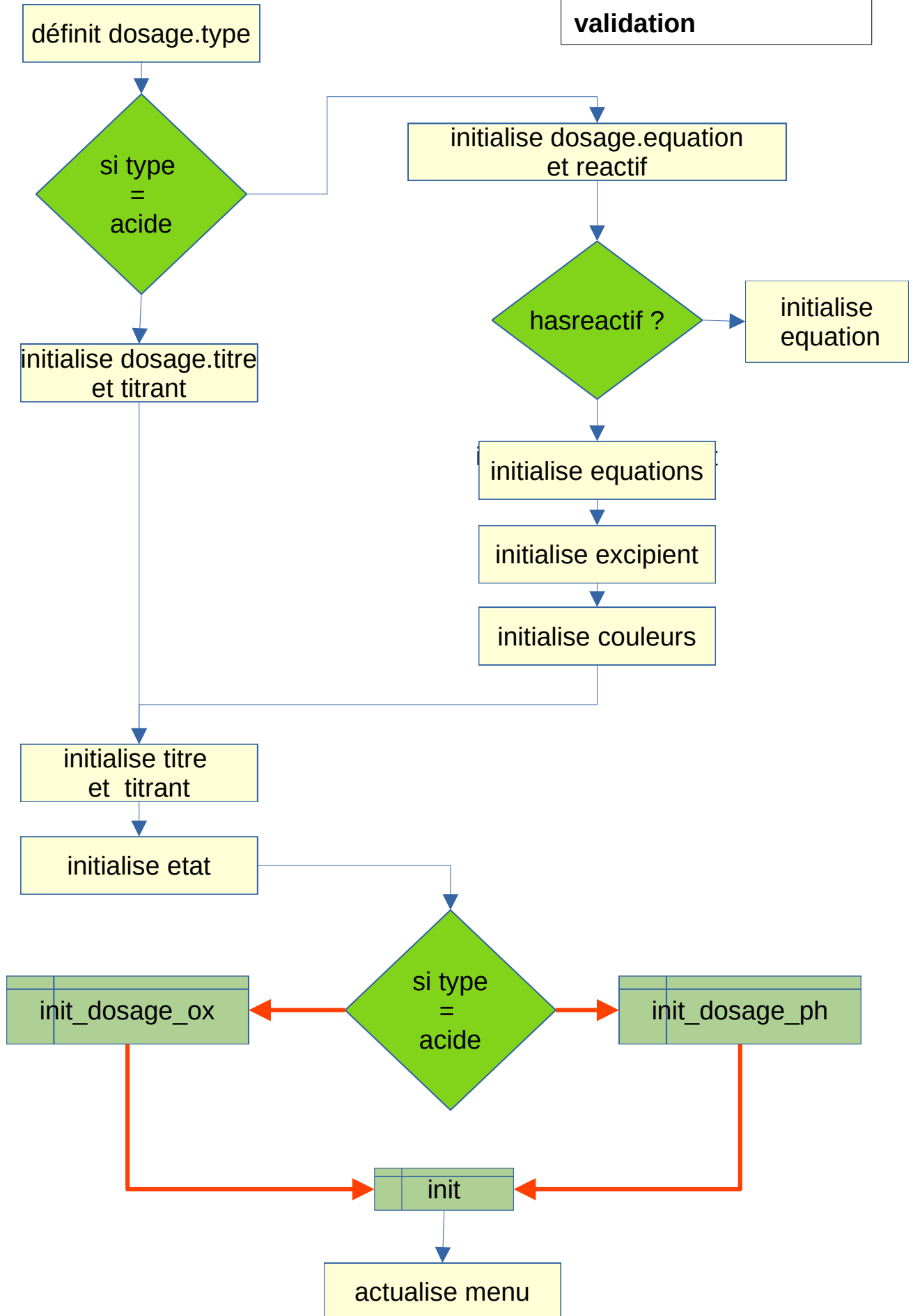
**ESPECES\_UI.JS**

**\_set\_list\_autredos**



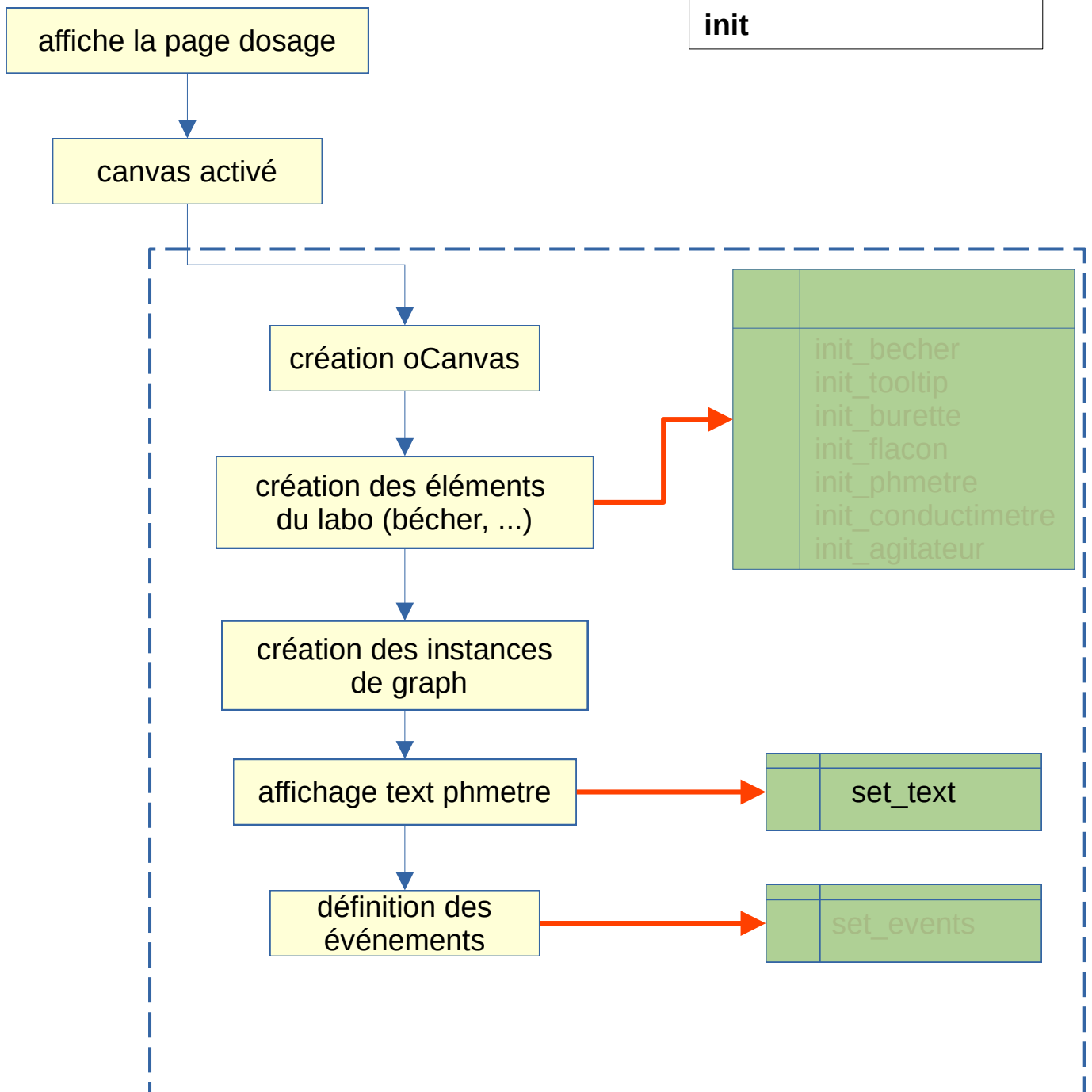
## ESPECES\_UI.JS

### validation



## DOSAGE.JS

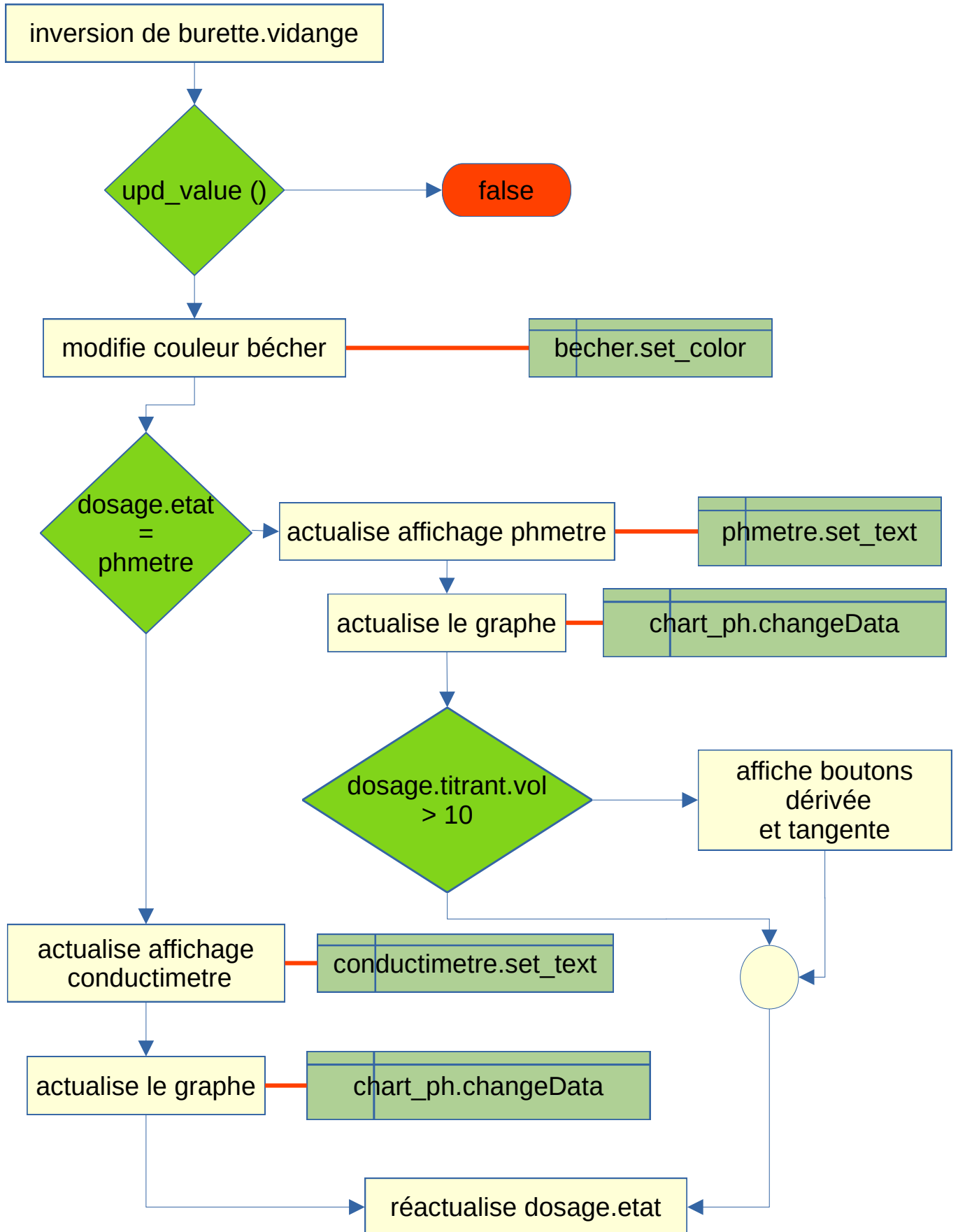
init





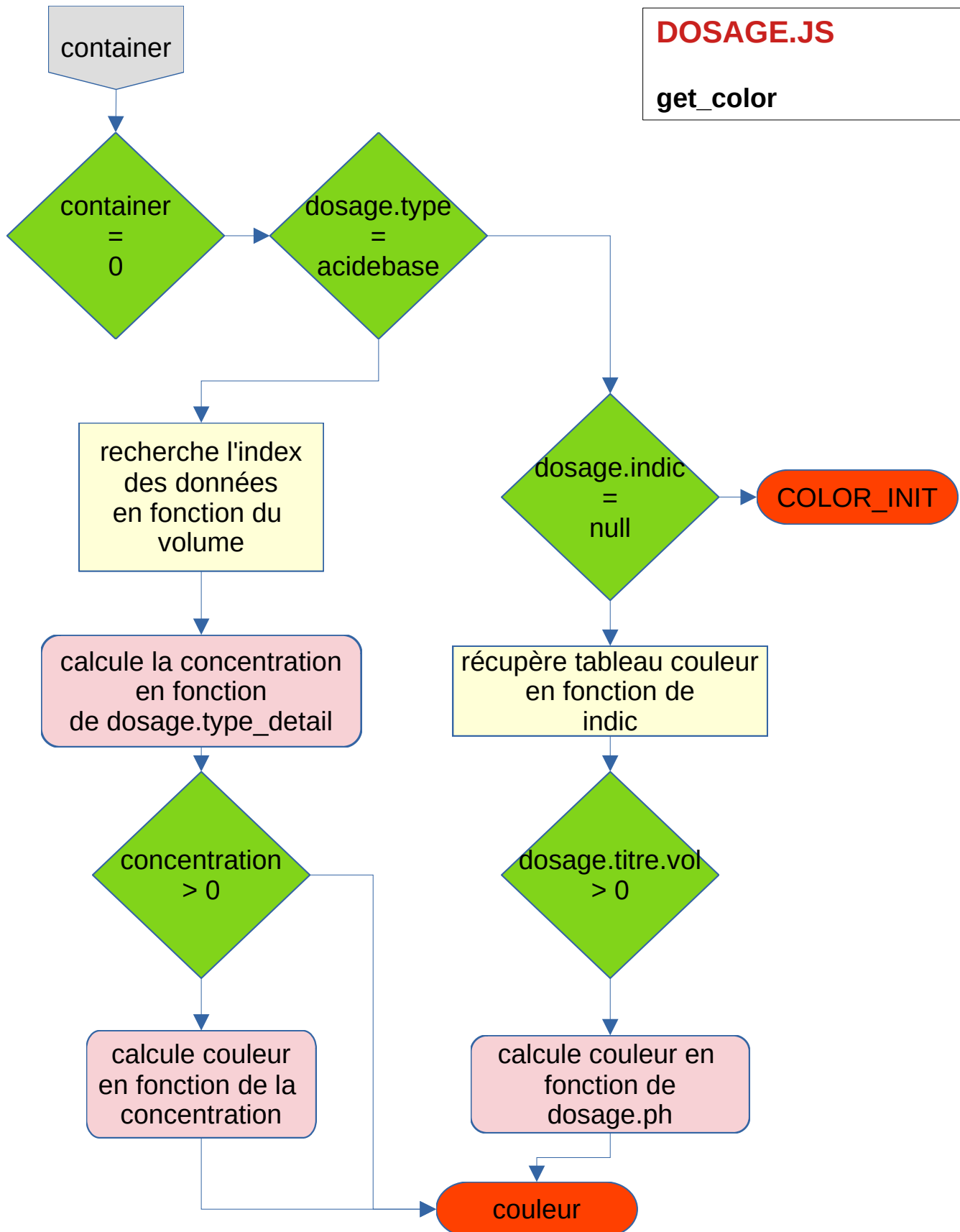
## DOSAGE.JS

vidange



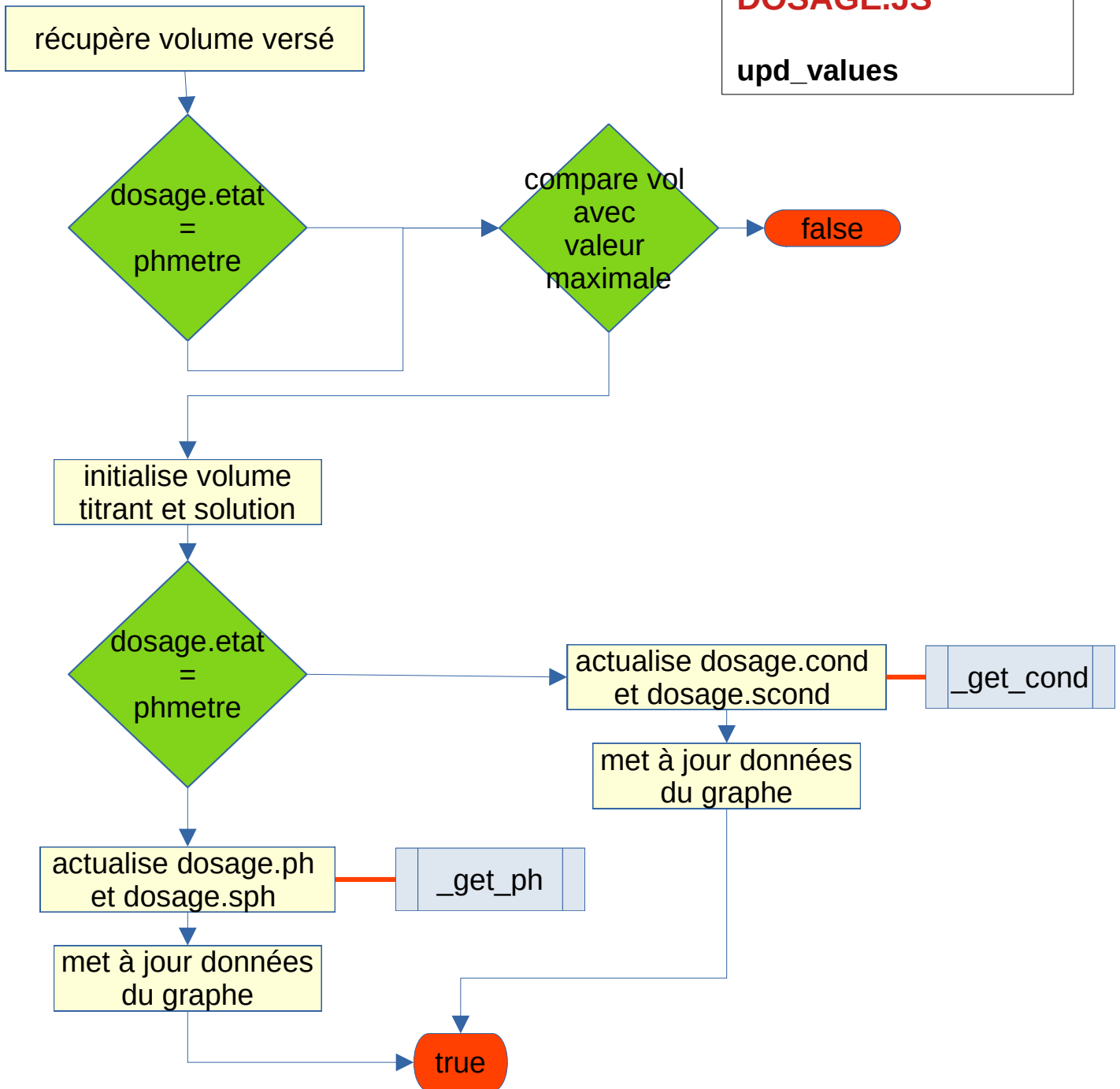
## DOSAGE.JS

get\_color



## DOSAGE.JS

upd\_values



## DOSAGE.JS

menu\_espece  
display\_message  
reset\_mesures

menu\_espece

active le menu espece

désactive le menu  
dosage

display\_message

création objet data

affiche message

dsp\_message

reset\_mesures

all

si all  
=  
true

réinitialise toutes  
les variables  
dosage

réinitialise les  
variables pH  
et cond

## DOSAGE.JS

set\_concentrations

calcule la concentration  
du titré et du titrant  
à partir des concentrations  
initiales et des volumes

set\_concentrations

\_get\_pH

\_get\_cond

\_get\_ph

vol

récupère le volume (v) le  
plus proche

get\_array\_near\_index

dosage.phs [v]

\_get\_cond

vol

récupère le volume (v) le  
plus proche

get\_array\_near\_index

dosage.conds [v]

## DOSAGE\_UI.JS

init\_becher  
init\_burette  
init\_flacon

### init\_becher

canvas

crée instance becher

becher\_init

becher

### init\_burette

canvas,  
becher,  
burette

crée instance burette

burette\_init

burette

### init\_flacon

canvas,  
becher,  
tooltip

crée instance flacons

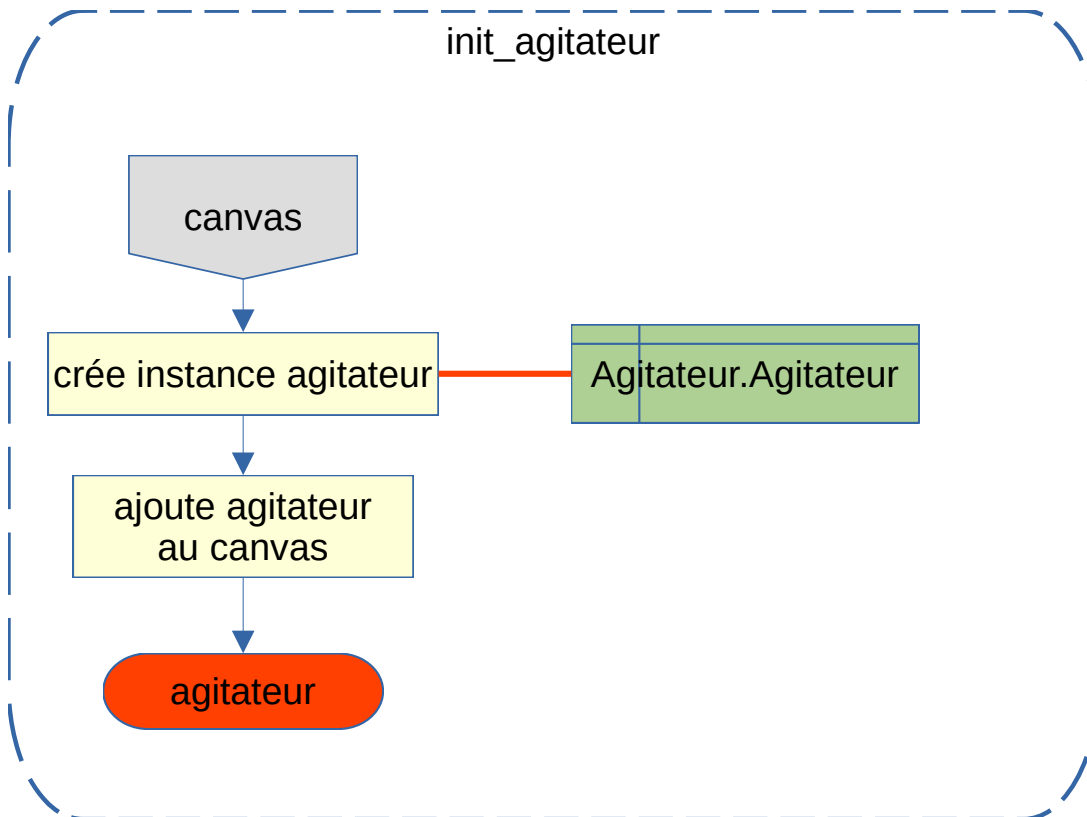
flacon\_init

flacons

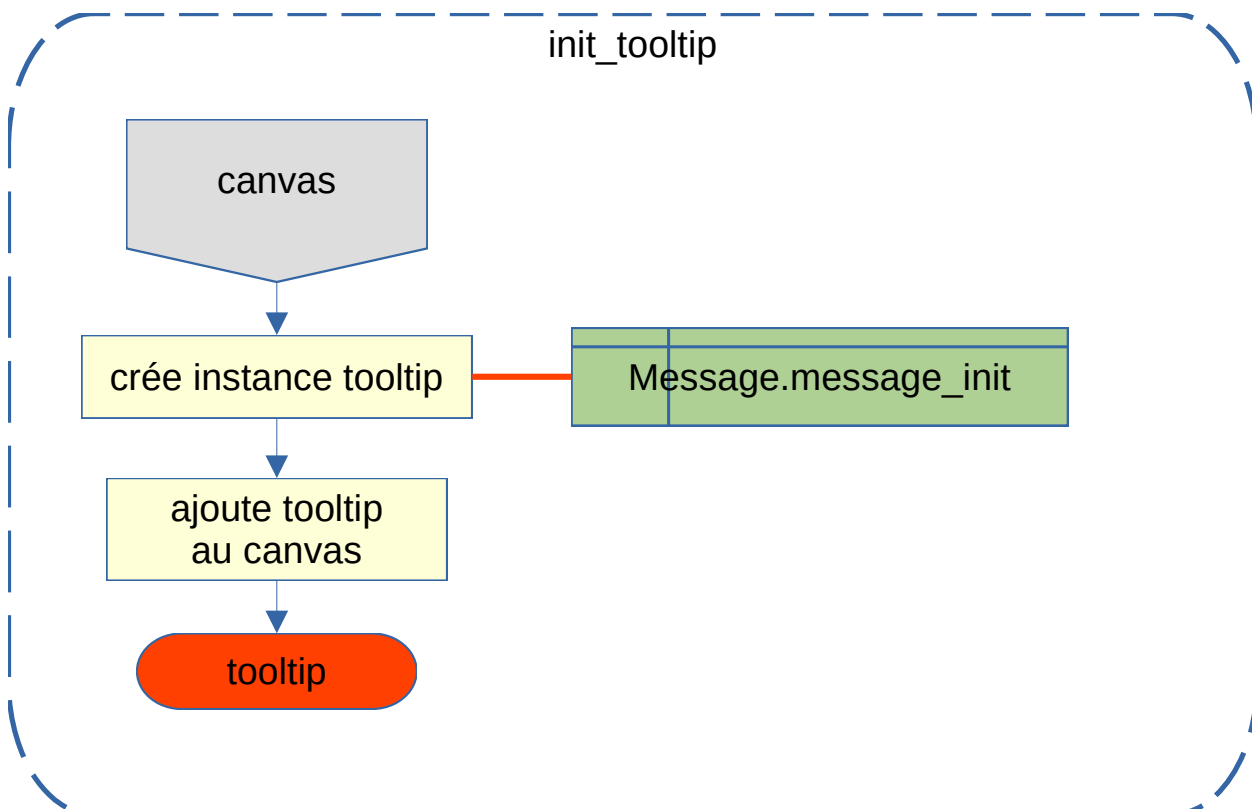
## DOSAGE\_UI.JS

init\_agitateur  
init\_tooltip  
init\_flacon

### init\_agitateur



### init\_tooltip



## DOSAGE\_UI.JS

init\_phmetre  
init\_conductimetre  
init\_flacon

### init\_phmetre

canvas,  
tooltip,  
becher

crée instance phmetre

phmetre\_init

phmetre

### init\_conductimetre

canvas,  
becher,  
burette

crée instance conductimetre

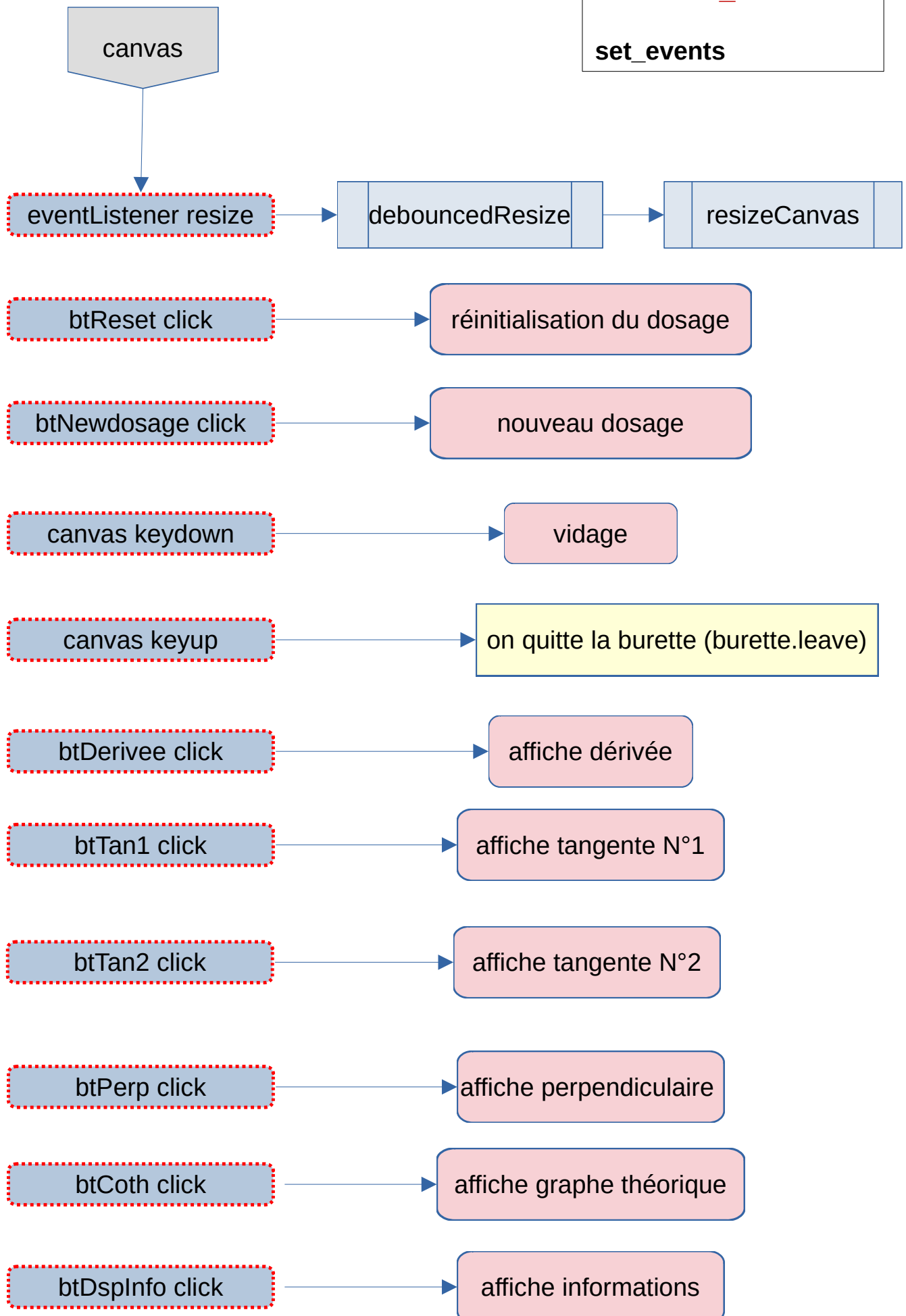
conductimetre\_init

conductimetre



## DOSAGE\_UI.JS

set\_events



## GRAPHX.JS

constructor  
set\_options

constructor

crée un chart

initialise les tableaux

set\_options

type

type  
=  
1

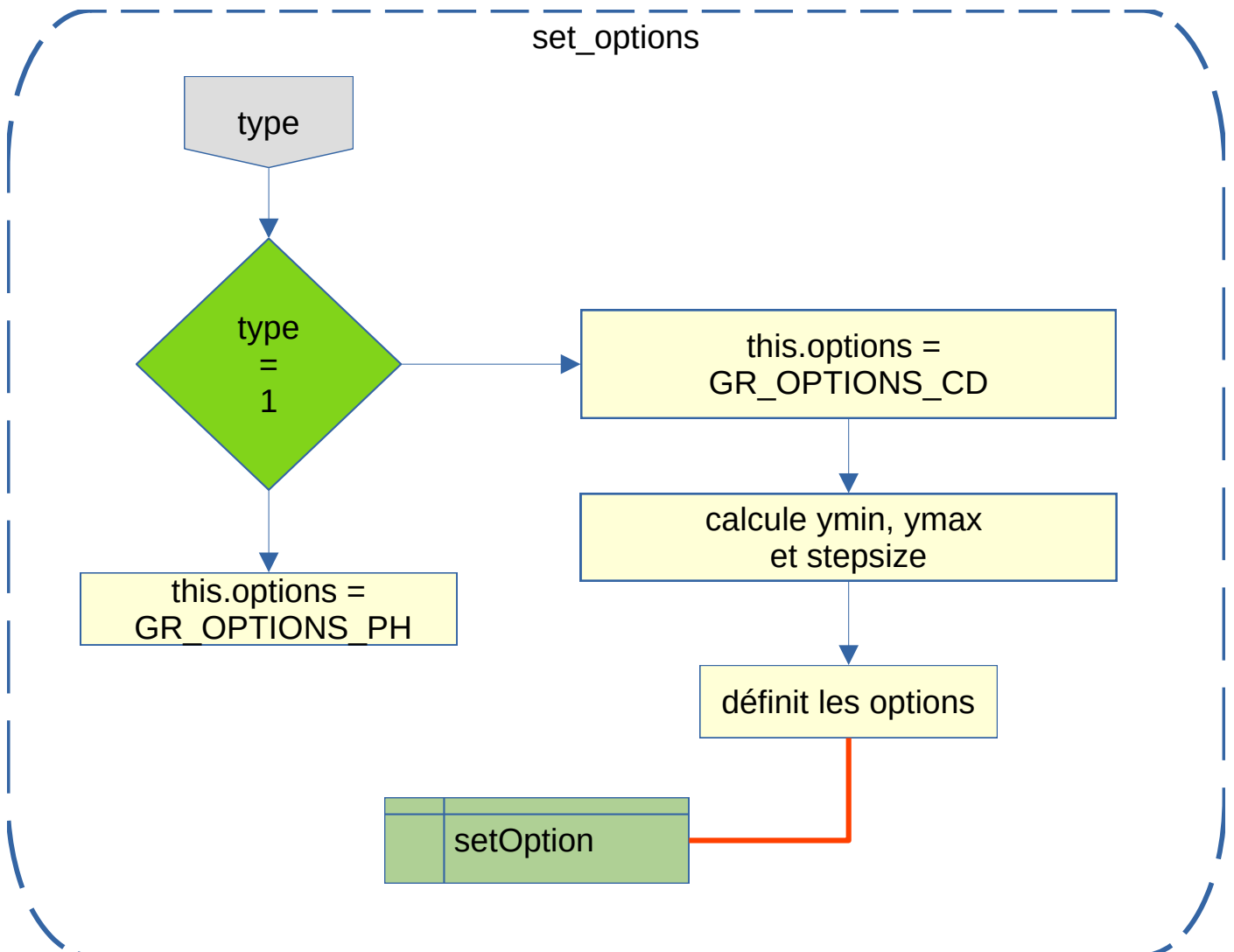
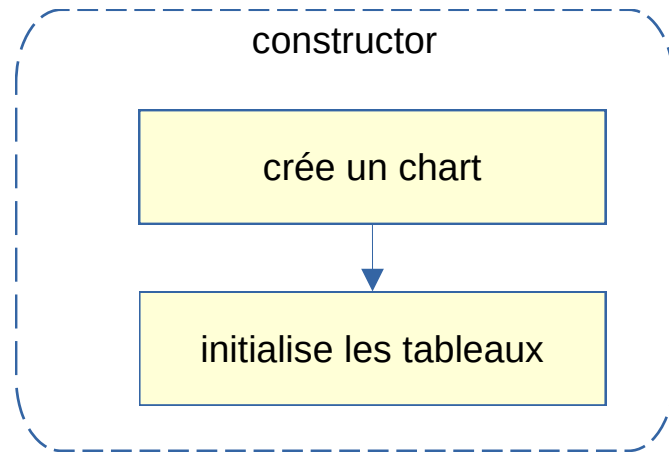
this.options =  
GR\_OPTIONS\_CD

calcule ymin, ymax  
et stepsize

this.options =  
GR\_OPTIONS\_PH

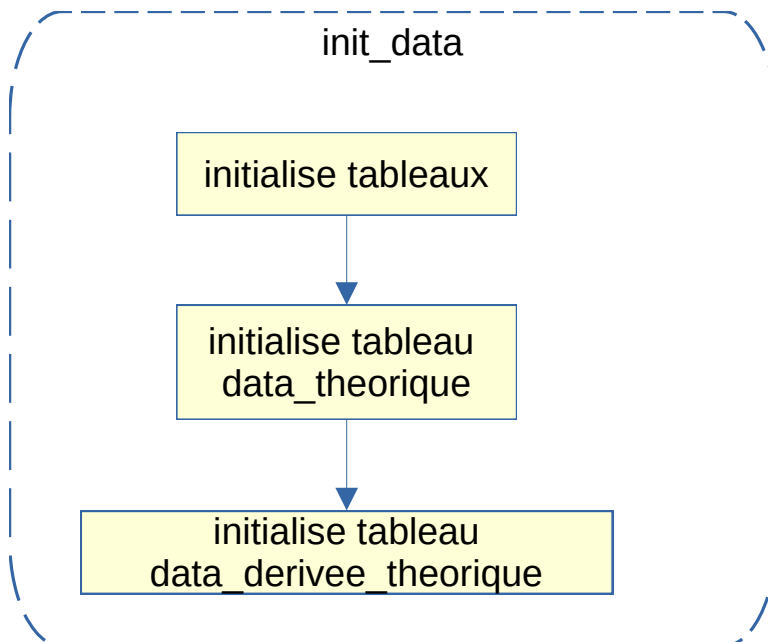
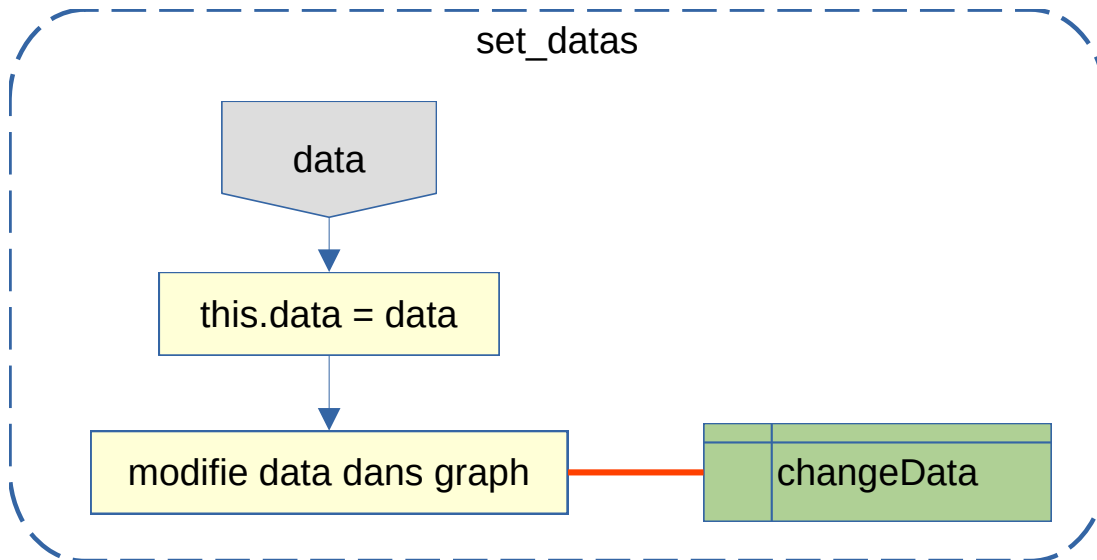
définit les options

setOption



## GRAPHX.JS

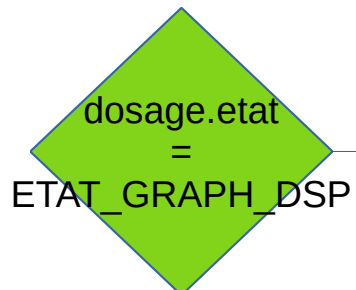
set\_datas  
init\_data



## GRAPHX.JS

display  
dsp\_courbe\_theorique

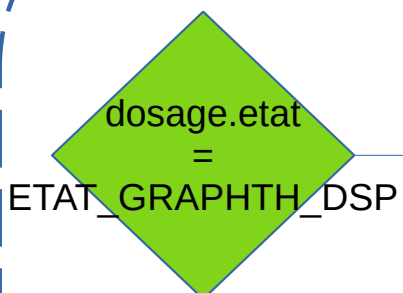
display



cache canvas

affiche canvas

dsp\_courbe\_theorique



récupère indice courbe

supprime données

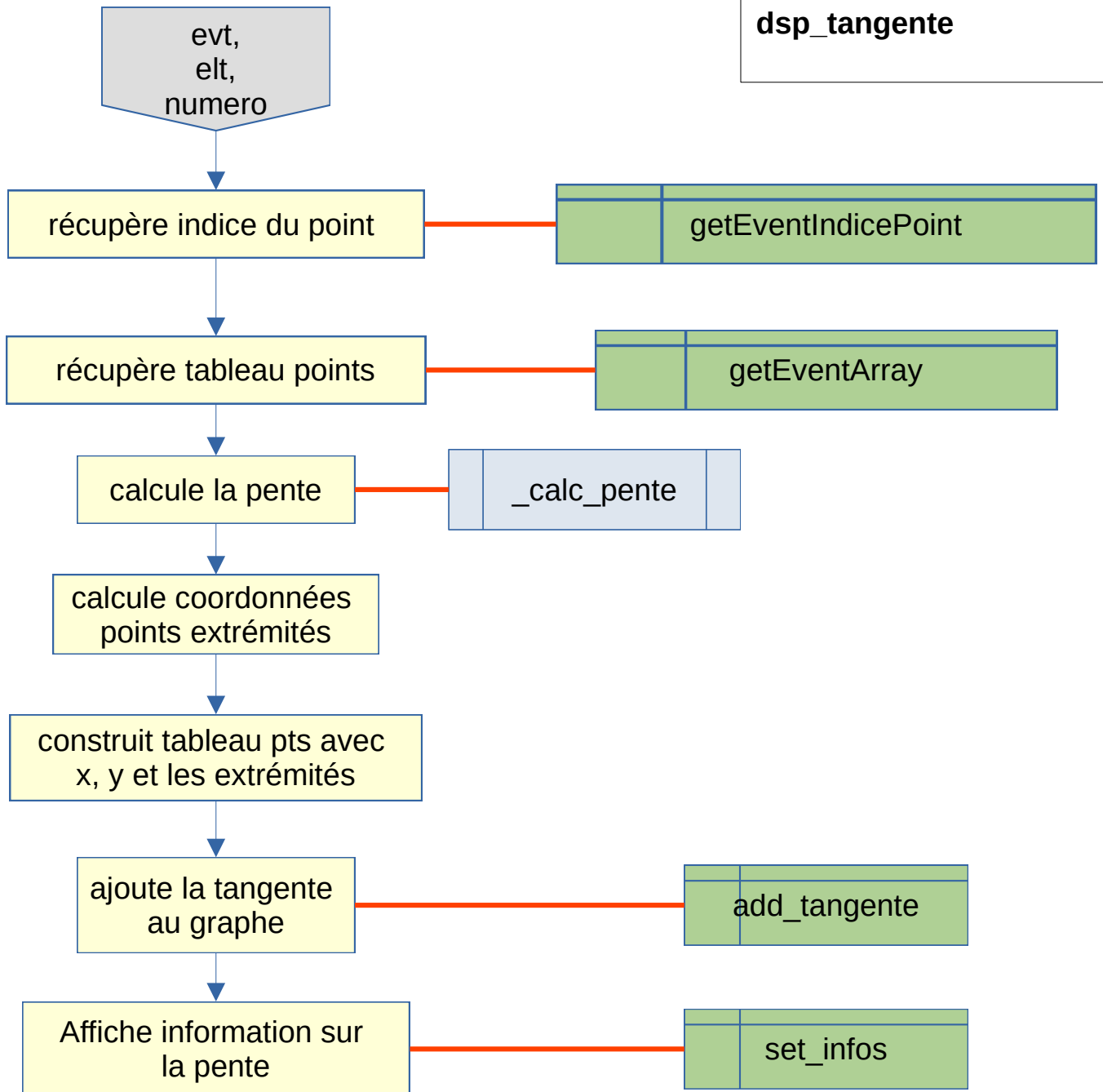
initialise data

ajoute dataset

addDataset

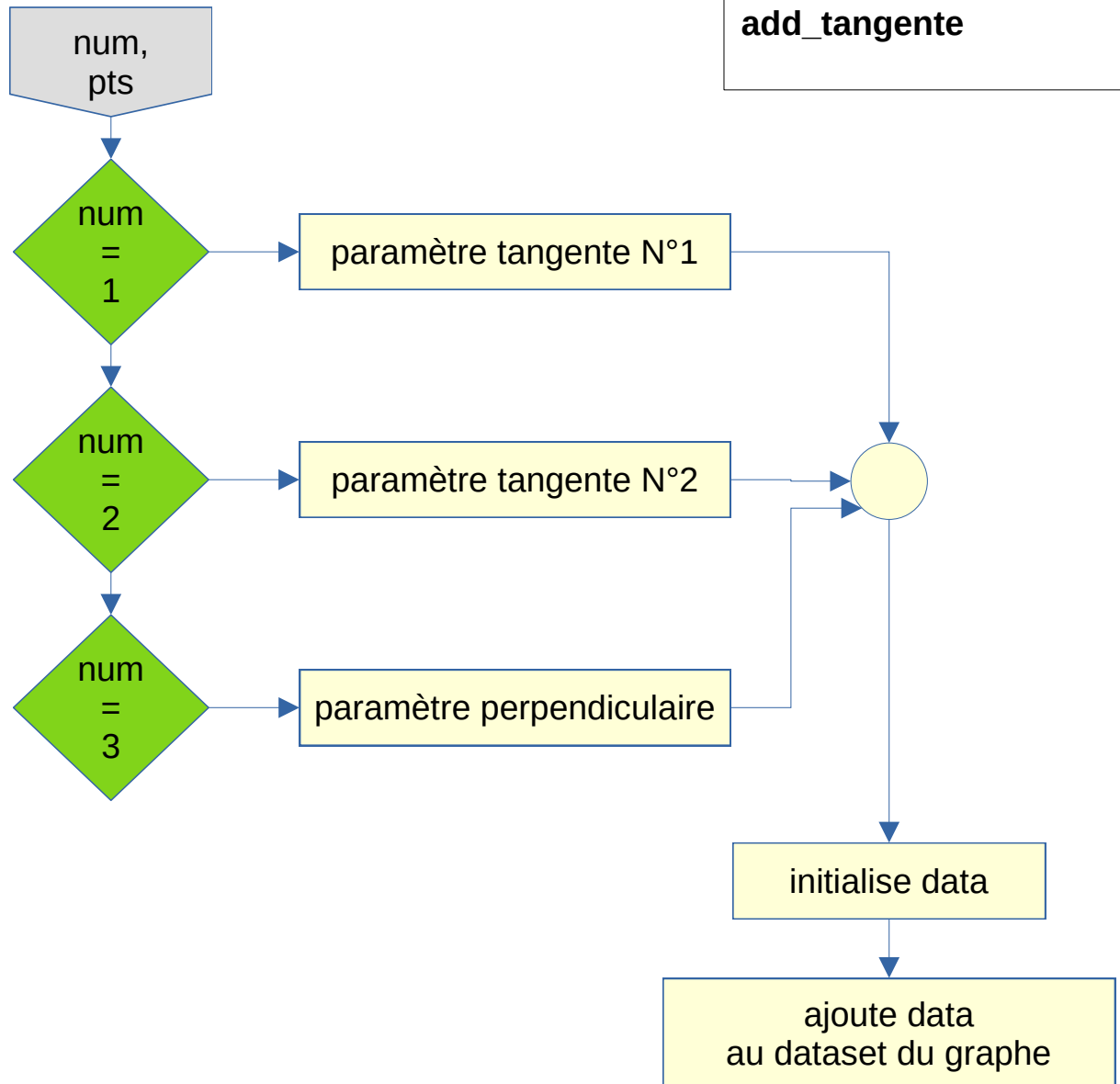
## GRAPHX.JS

dsp\_tangente



## GRAPHX.JS

**add\_tangente**

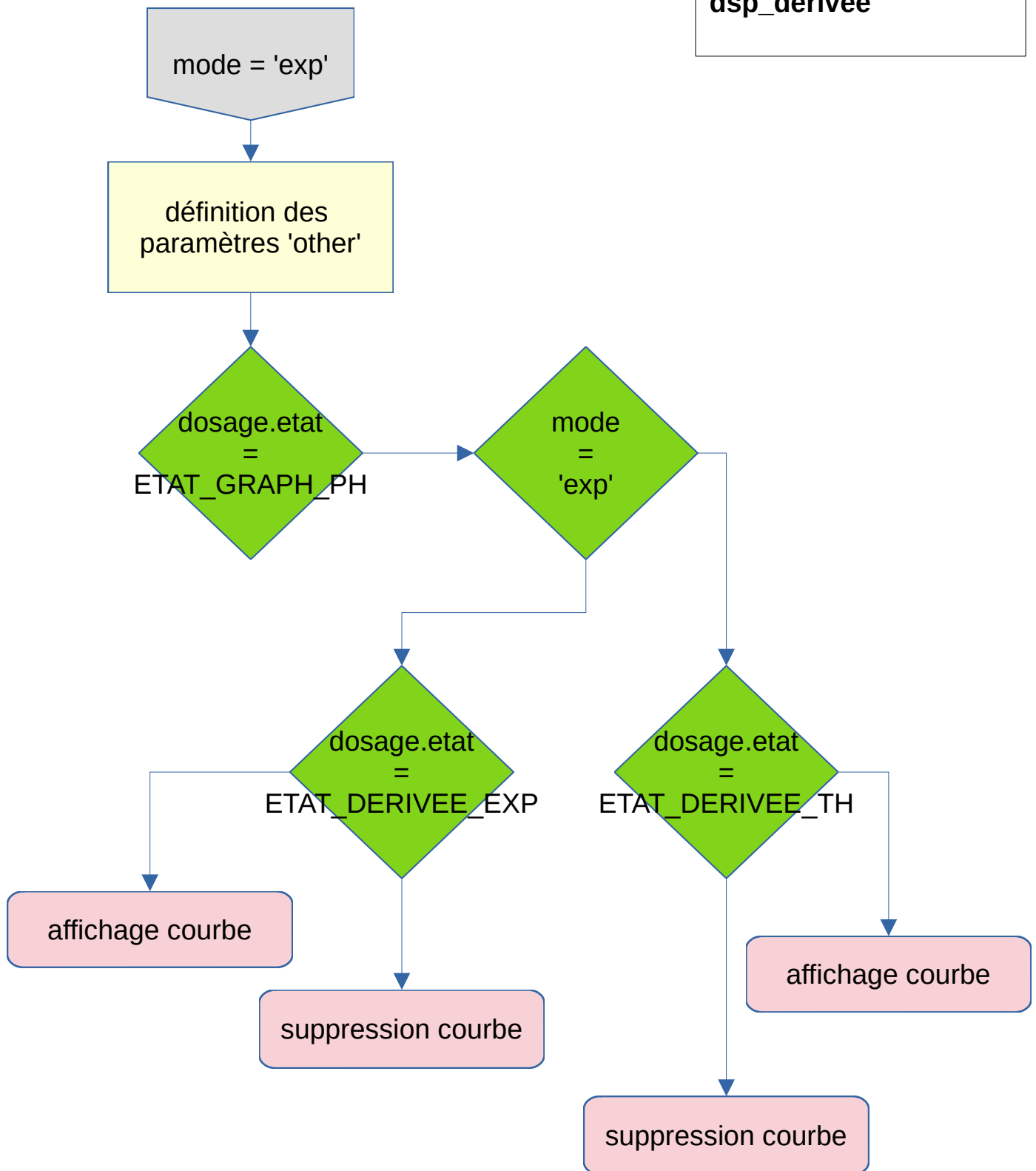


**GRAPHX.JS**

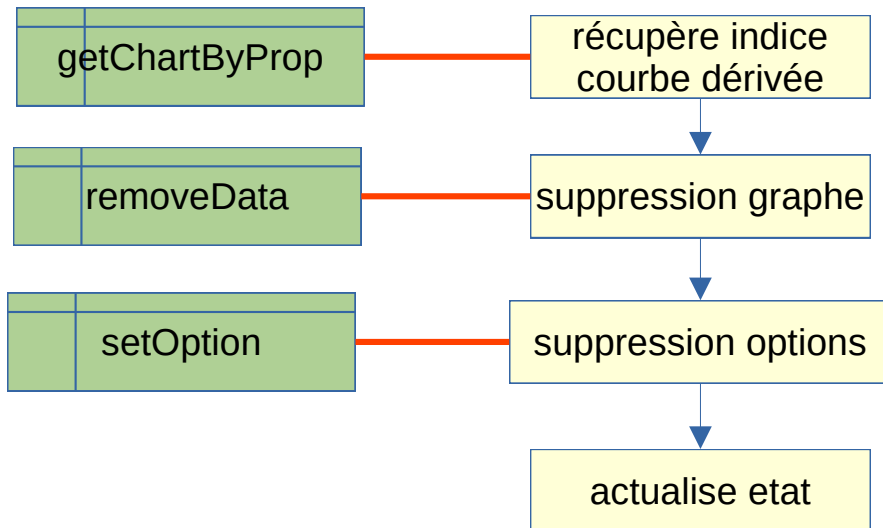
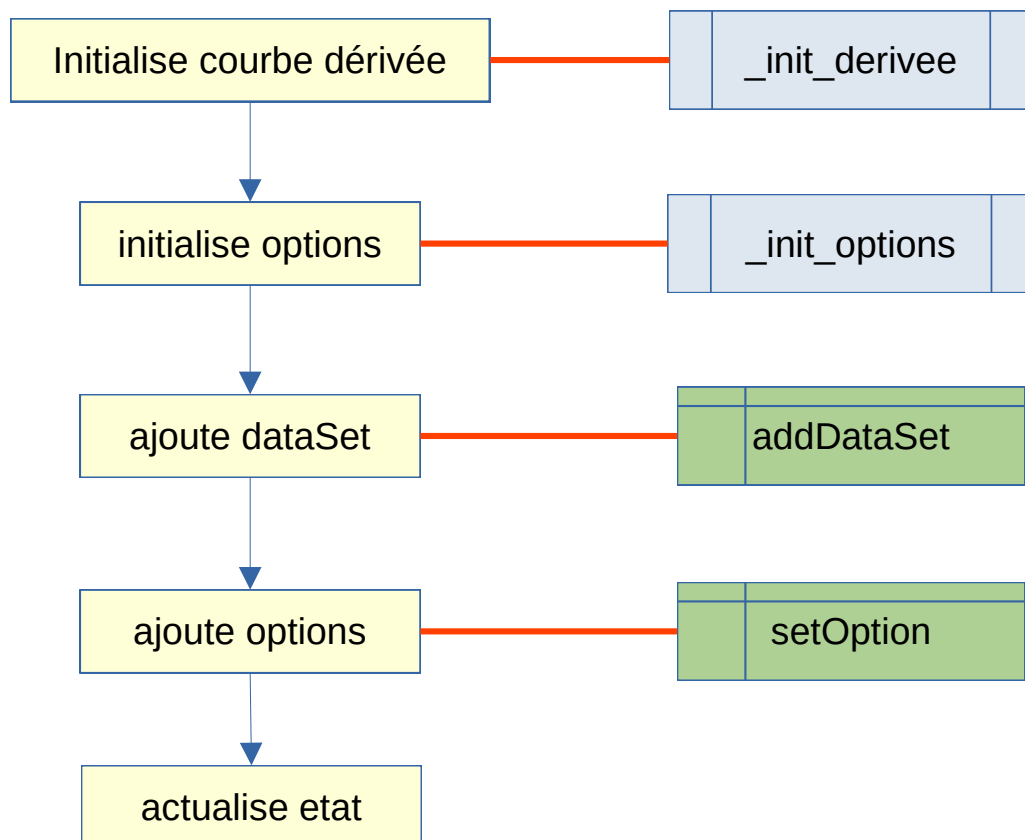
**move\_tangente**

## GRAPHX.JS

dsp\_derivee

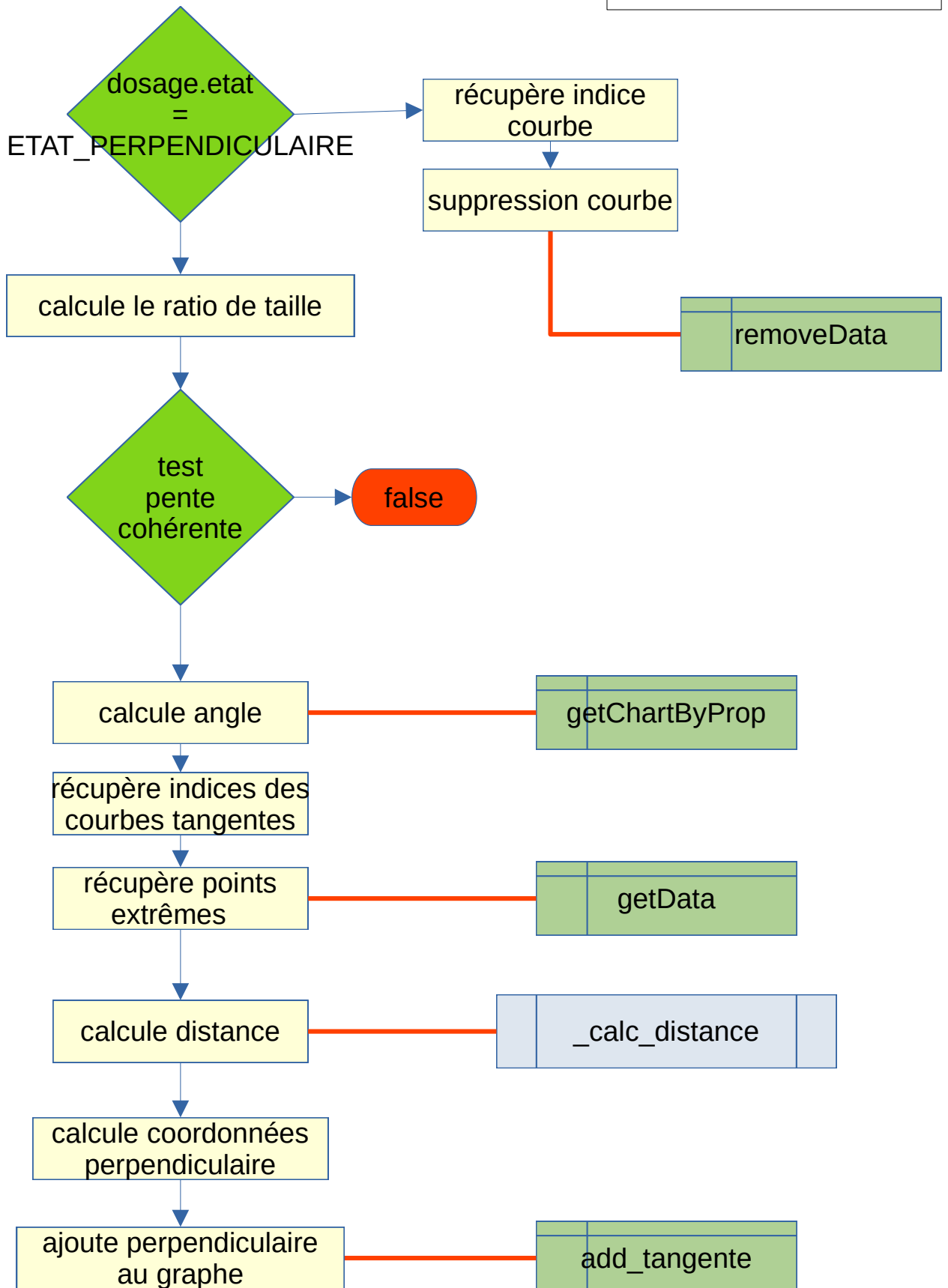




**Suppression courbe dérivée****ajout courbe dérivée**

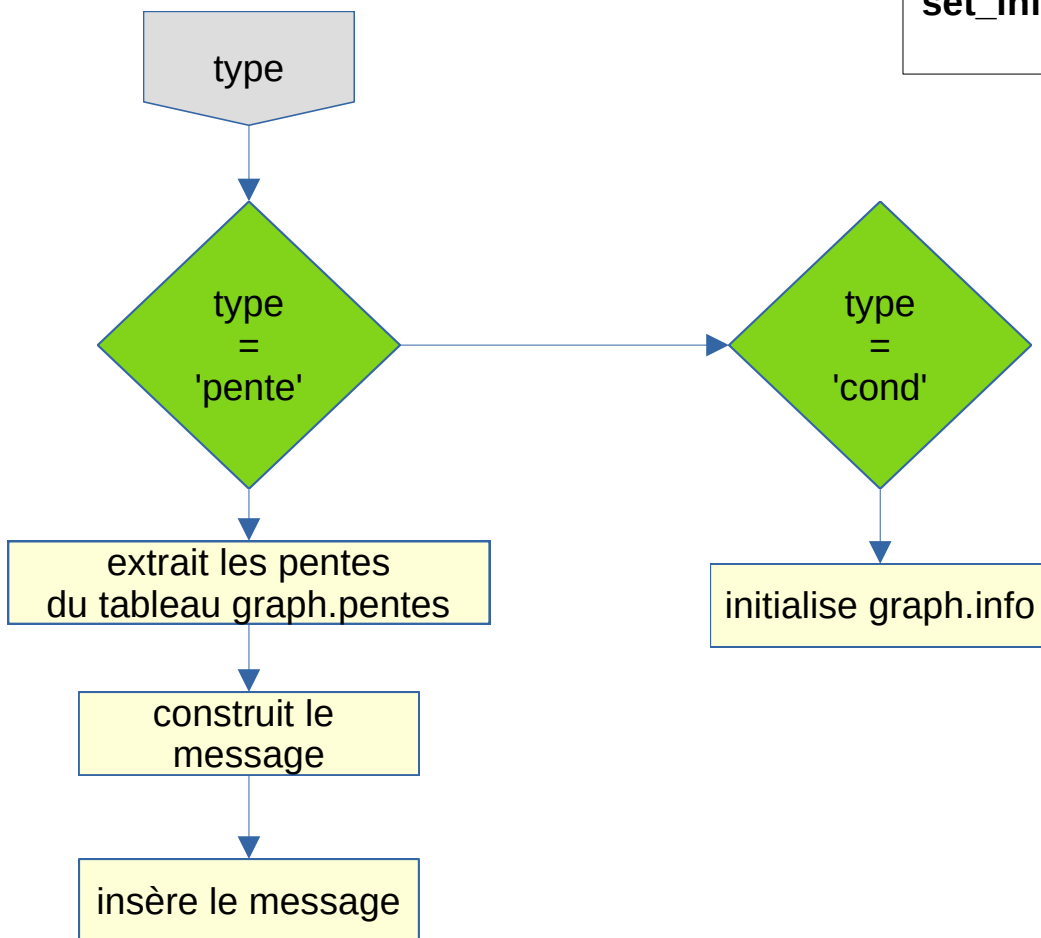
## GRAPHX.JS

dsp\_perpendiculaire



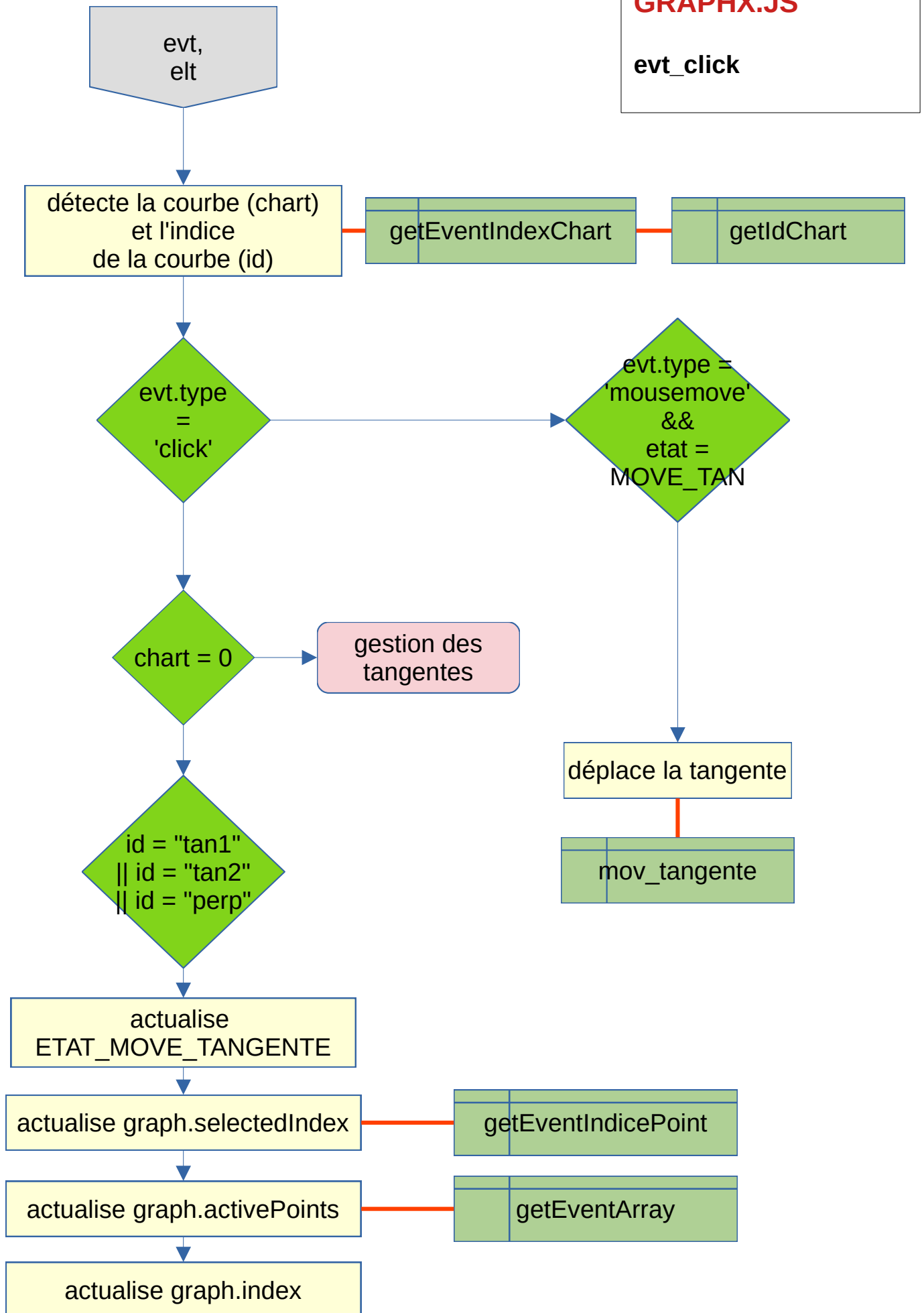
## GRAPHX.JS

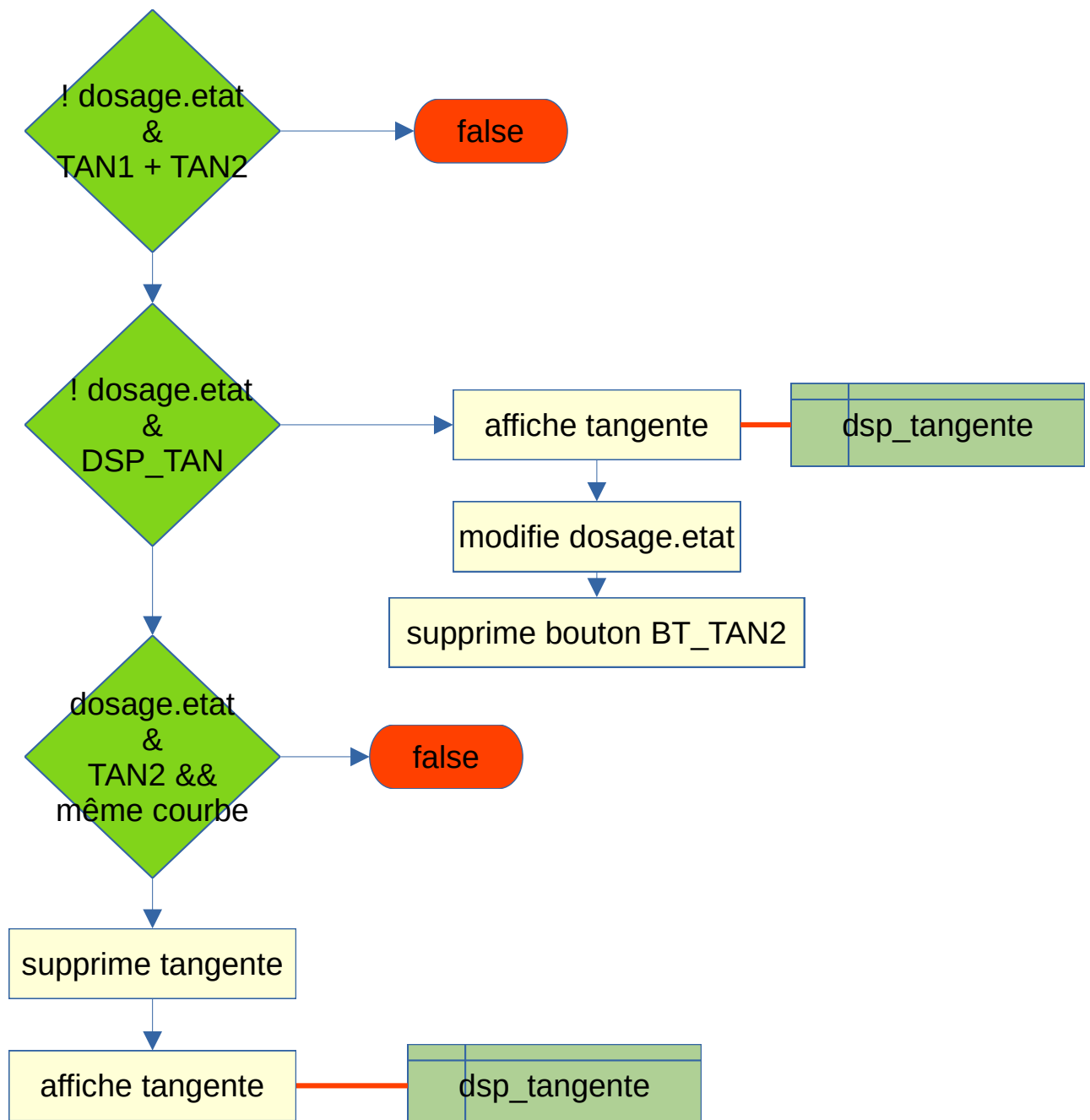
set\_info



## GRAPHX.JS

evt\_click





## GRAPH.JS

constructeur  
createChart

### Constructor

canvas

Crée les tableaux  
et les objets

### createChart

type,  
dataset  
options

ajoute dataset au  
tableau datasets

crée le graphe

ajoute dataset.label  
à data.labels

Chart

## GRAPH.JS

setDataset  
addDataset

### setDataset

label  
data  
[other]

crée un objet Dataset  
avec label  
data

parcours l'objet other  
pour compléter le  
Dataset

Dataset

### addDataset

label  
data  
[other]  
[options]

génère le dataset

setDataset

ajoute le dataset  
au tableau datasets

ajoute le dataset  
à chart.data

complète chart.data.labels

complète chart.options si options

## GRAPH.JS

changeData  
addData

### changeData

data  
index = 0

modifie les données  
de la courbe identifiée  
par index

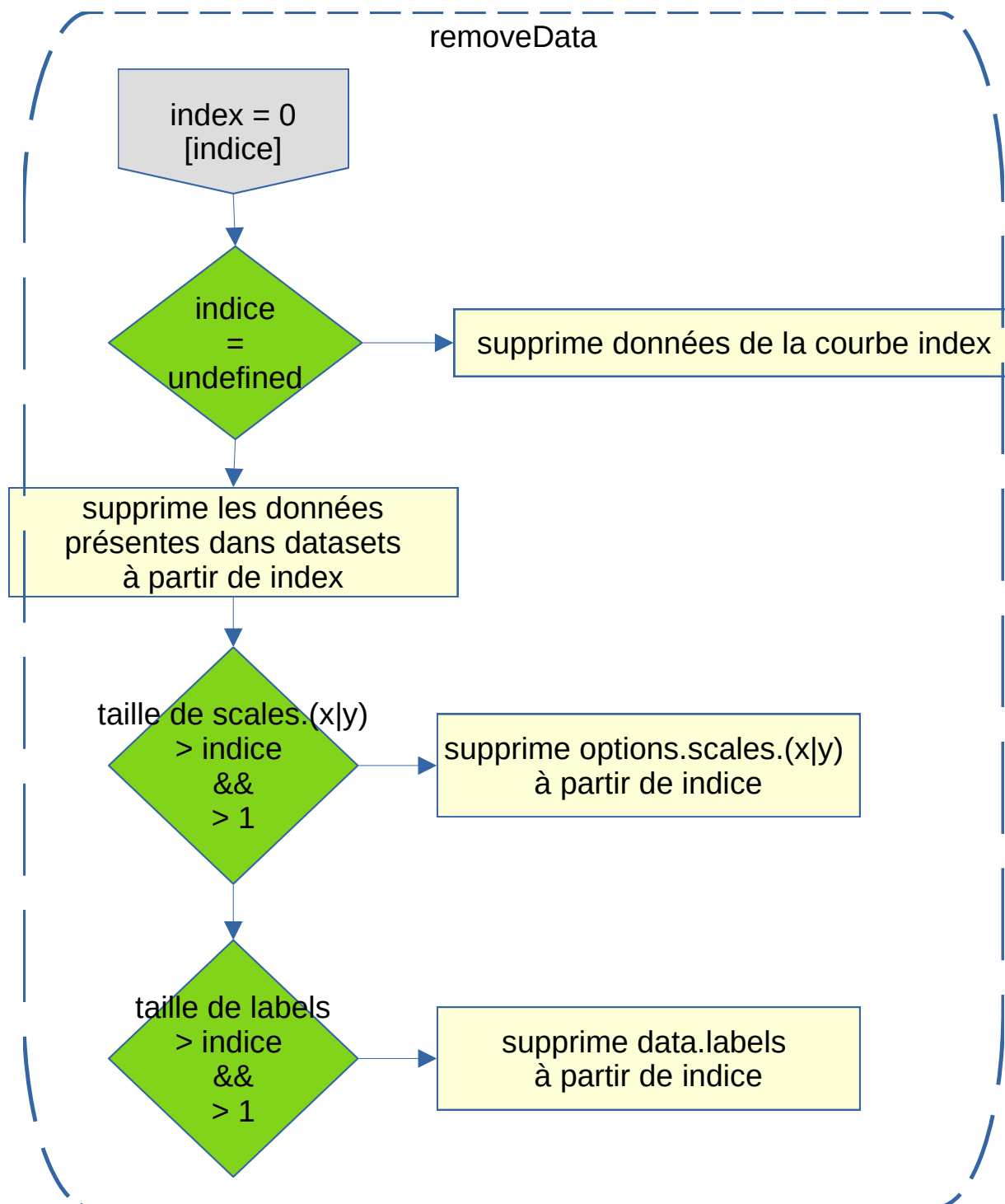
### addData

data  
index = 0

pour chaque elt de data

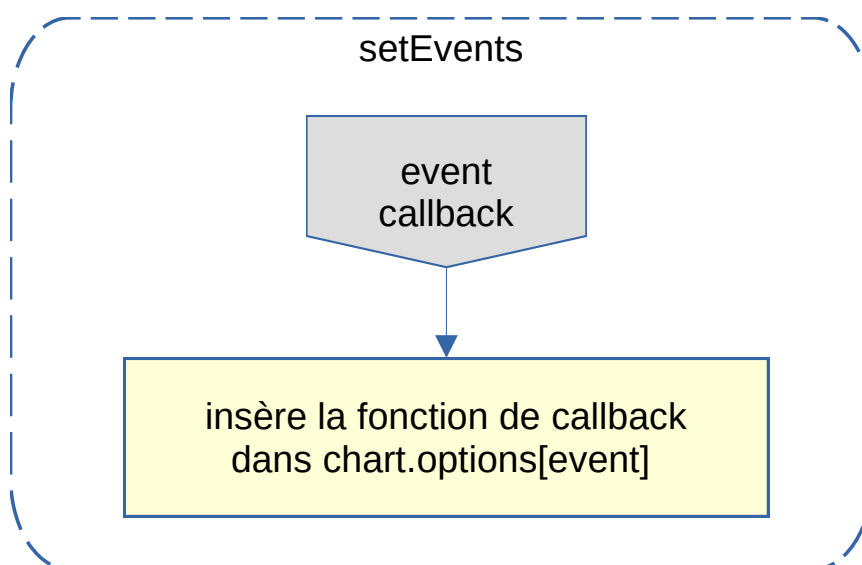
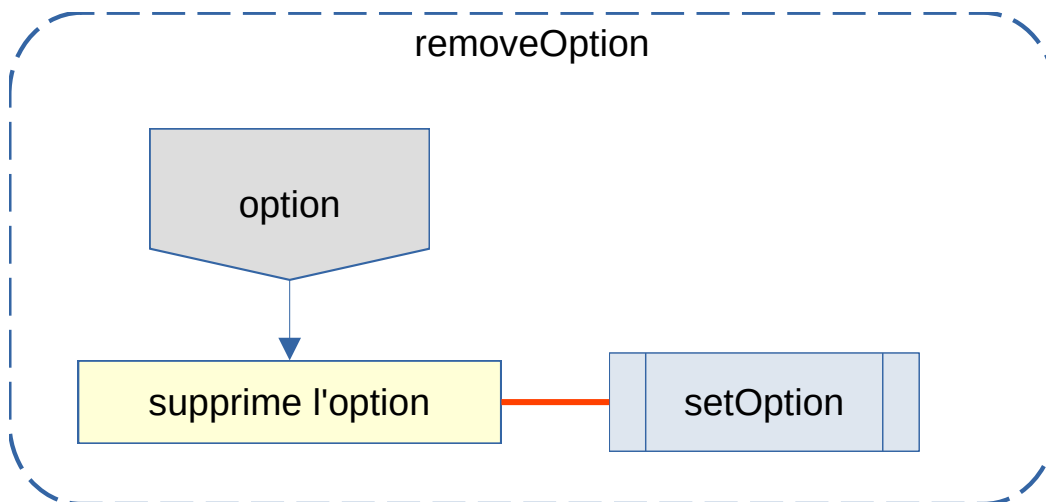
ajoute à la courbe identifiée  
par index  
les éléments data[elt]





## GRAPH.JS

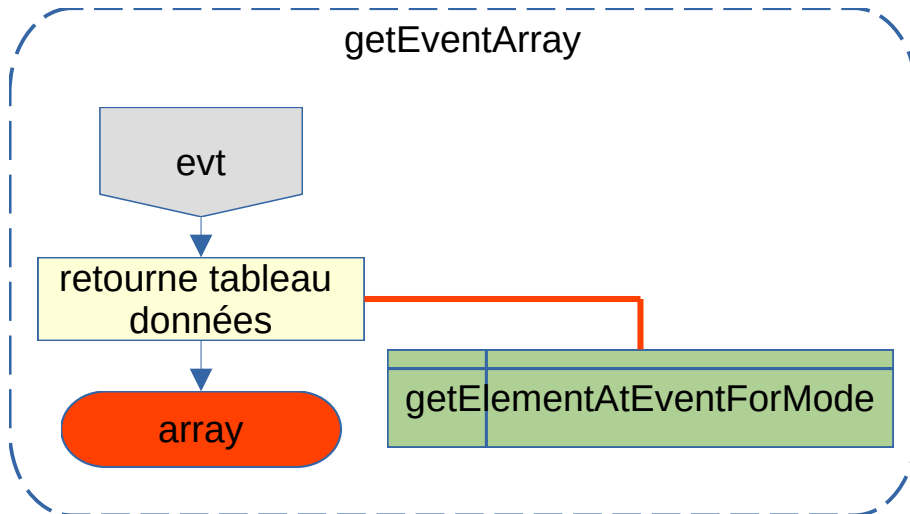
removeOption  
setEvent



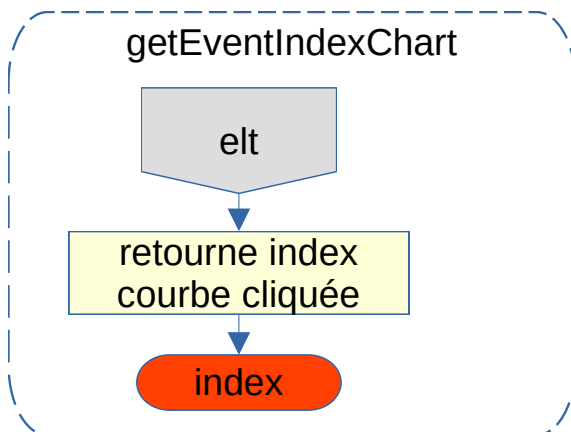
## GRAPH.JS

getEventArray  
getEventIndexChart  
getEventIndicePoint  
getEventCoordPixel

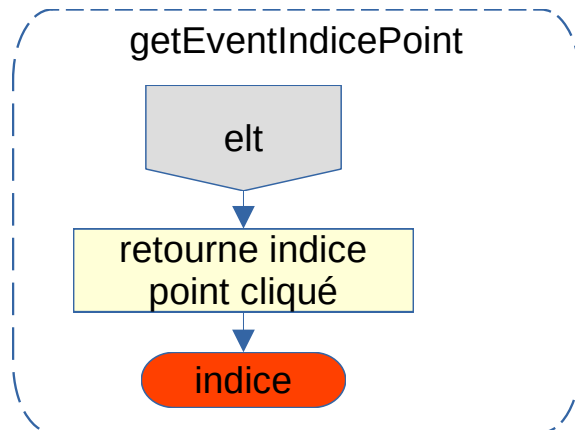
### getEventArray



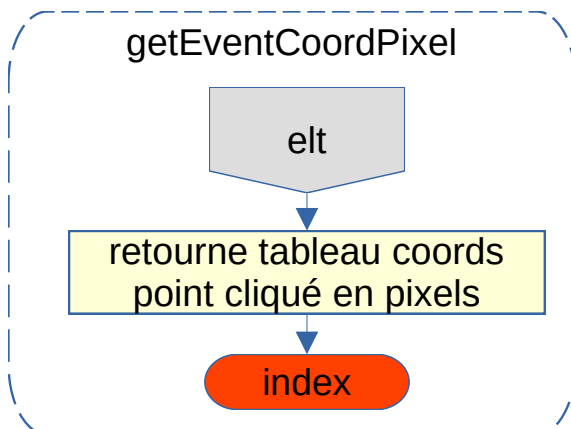
### getEventIndexChart



### getEventIndicePoint



### getEventCoordPixel



## GRAPH.JS

getChartByProp  
getIdChart  
getData

getChartByProp

prop  
value

pour chaque indice  
de datasets

datasets[i][prop]  
=  
value

false

i

getIdChart

index

crée objet avec  
id et label  
du datasets[index]

objet

getData

prm

type prm  
=  
'number'

recupère tableau  
des points de la courbe  
identifiée par number

tableau

type prm  
=  
"object"

recupère  
index courbe

recupère tableau  
des points de la courbe  
identifiée par index

getEventIndexChart

getEventCoords

elt

construit un tableau avec  
elt[0].element.parsed.(x|y)

tableau

**GRAPH.JS**

getEventCoords  
setOption

setOption

option  
value

transforme la chaine  
option en tableau

parcours récursif  
du tableau

\_setOption

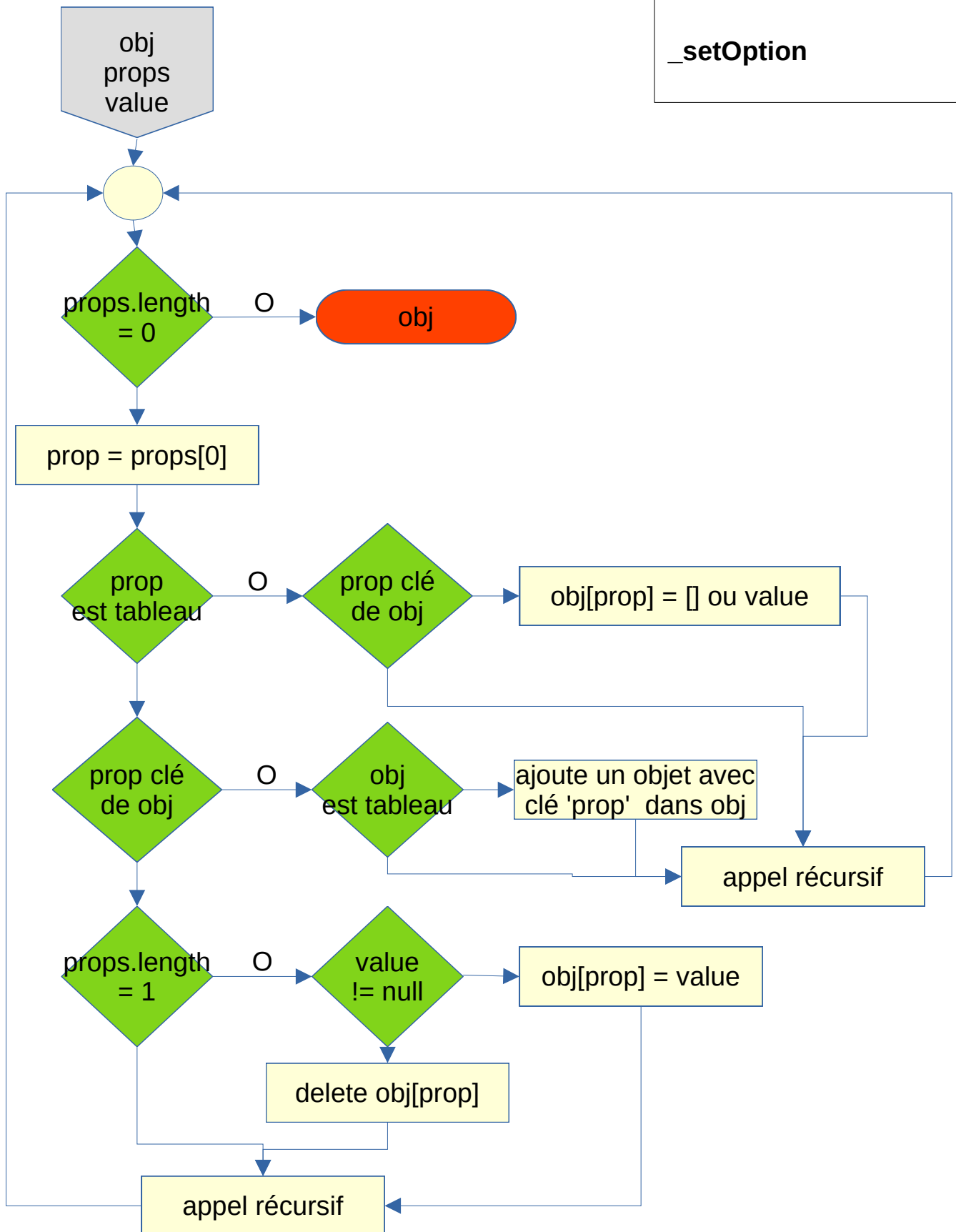
fin

complète this.options

this.options

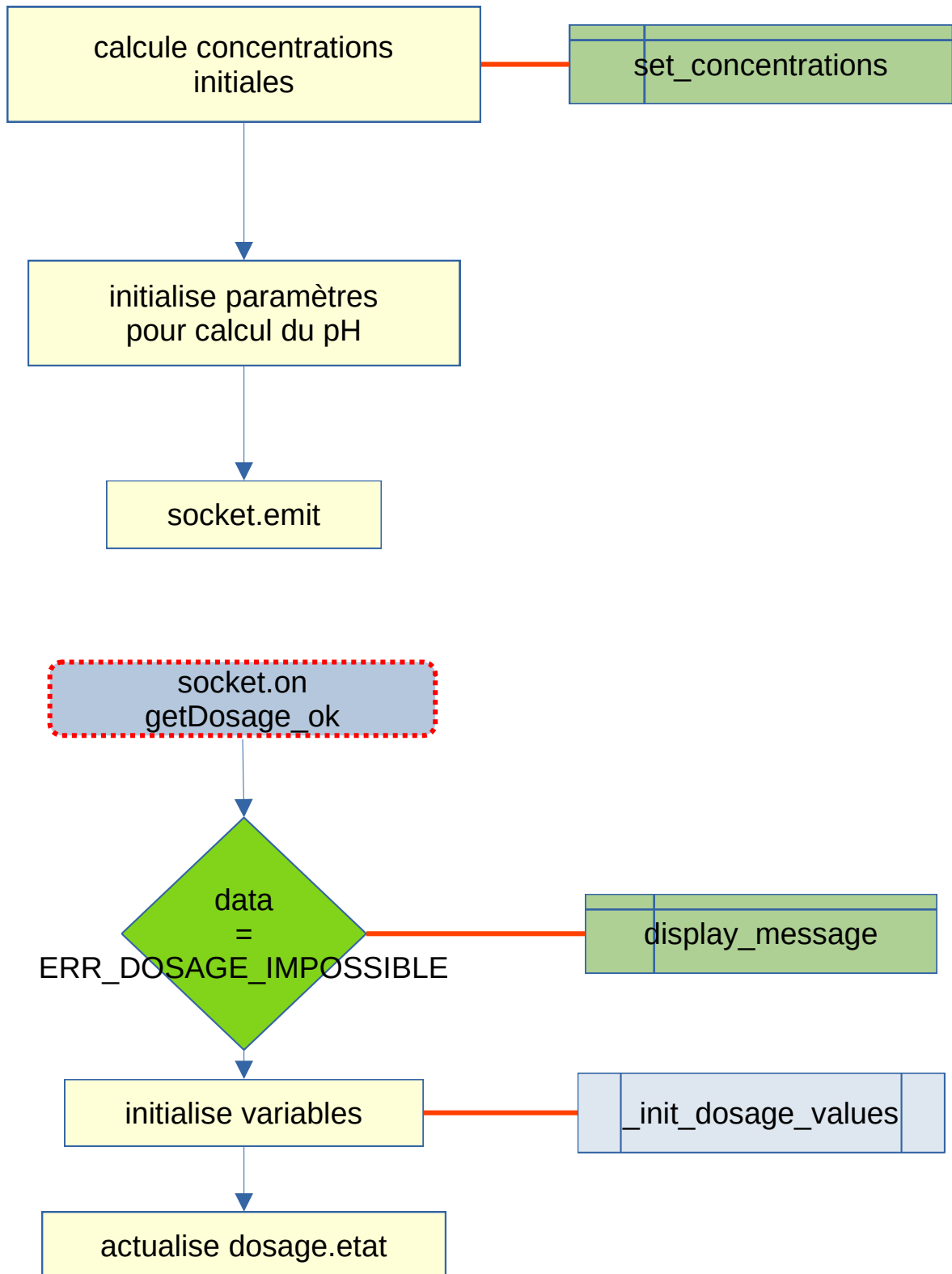
# GRAPH.JS

\_setOption



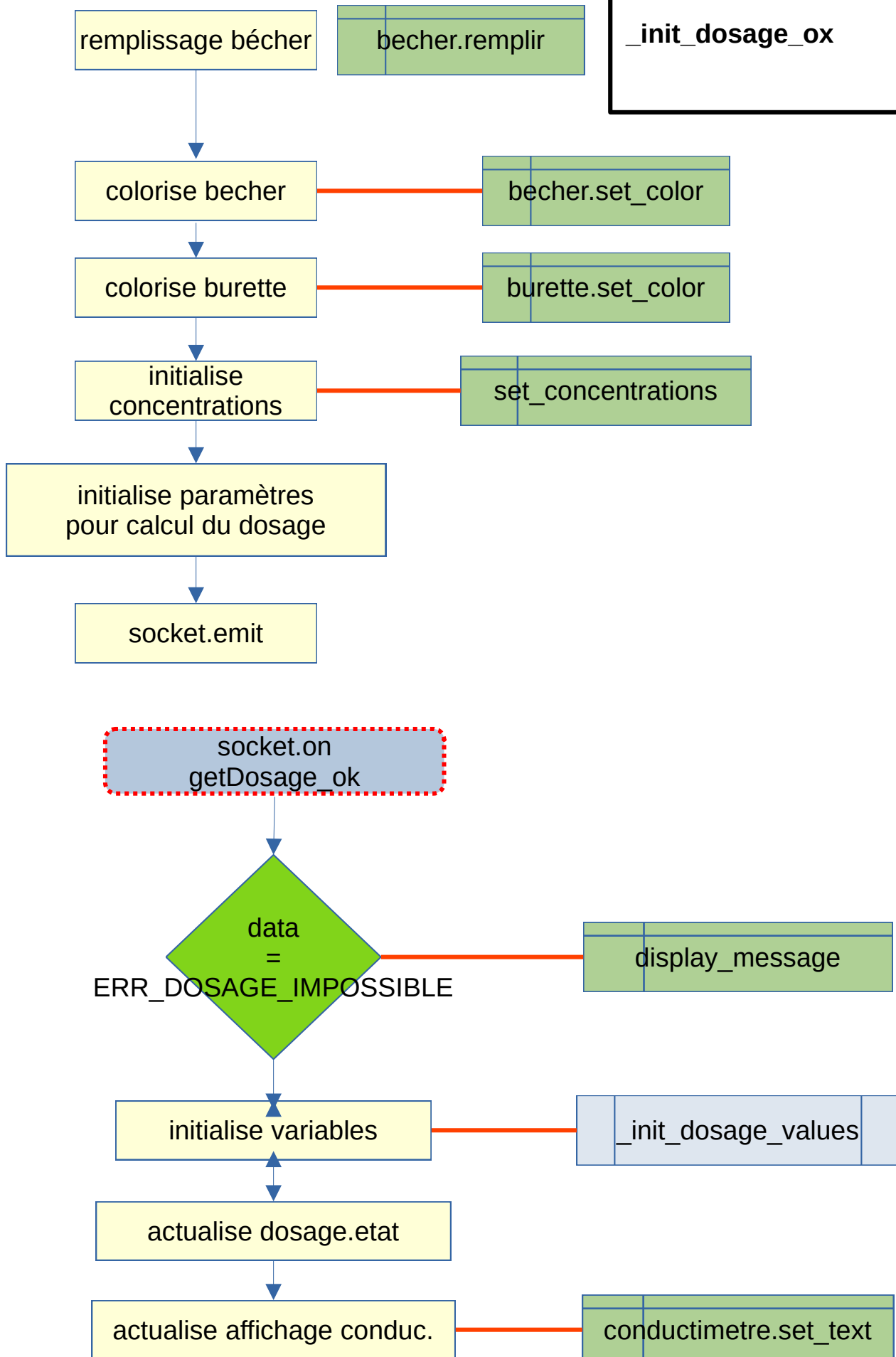
## DOSAGE\_PH.JS

init\_dosage\_ph



## DOSAGE\_OX.JS

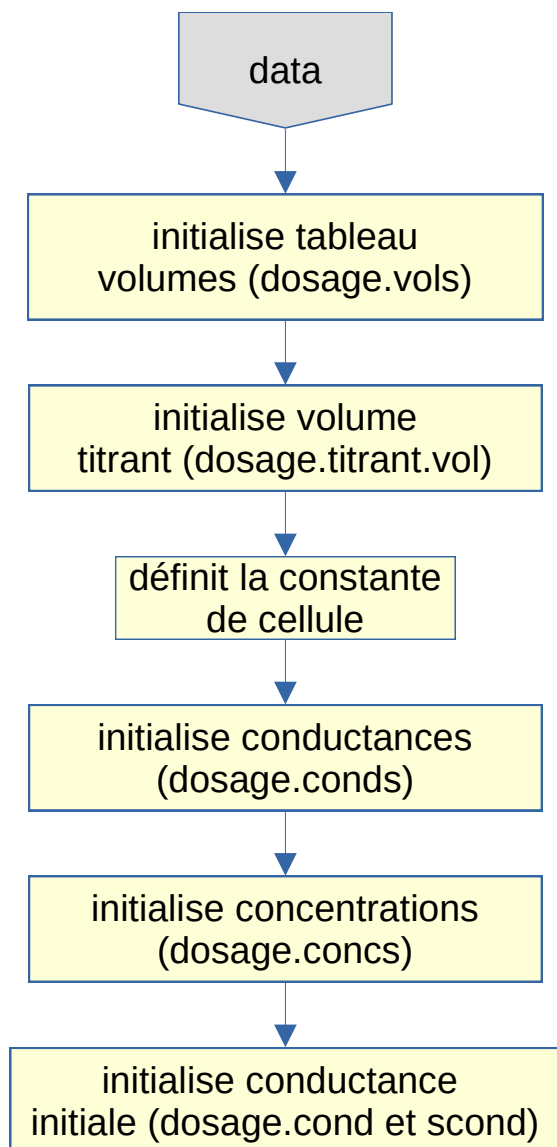
`_init_dosage_ox`





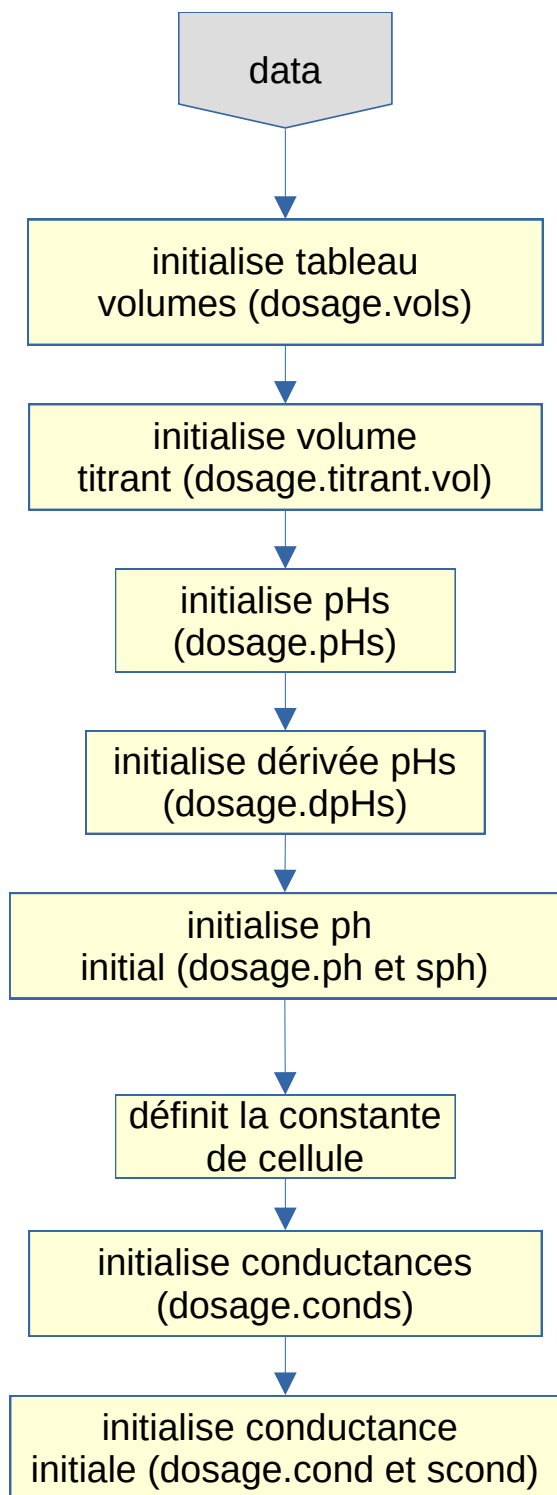
## DOSAGE\_OX.JS

`_init_dosage_values`



## DOSAGE\_PH.JS

`_init_dosage_values`



agitateur.constructor

agitateur  
canvas

définir  
agitateur  
canvas  
fond

**AGITATEUR.JS**  
**APPAREIL.JS**

constructor  
constructor  
dispose  
set\_text

appareil.constructor

app  
canvas  
etat  
unite

définir  
app, canvas, valeur, mesure  
etat, valeur, unite et fond

appareil.dispose

becher  
x, y

dosage.etat  
&  
etat

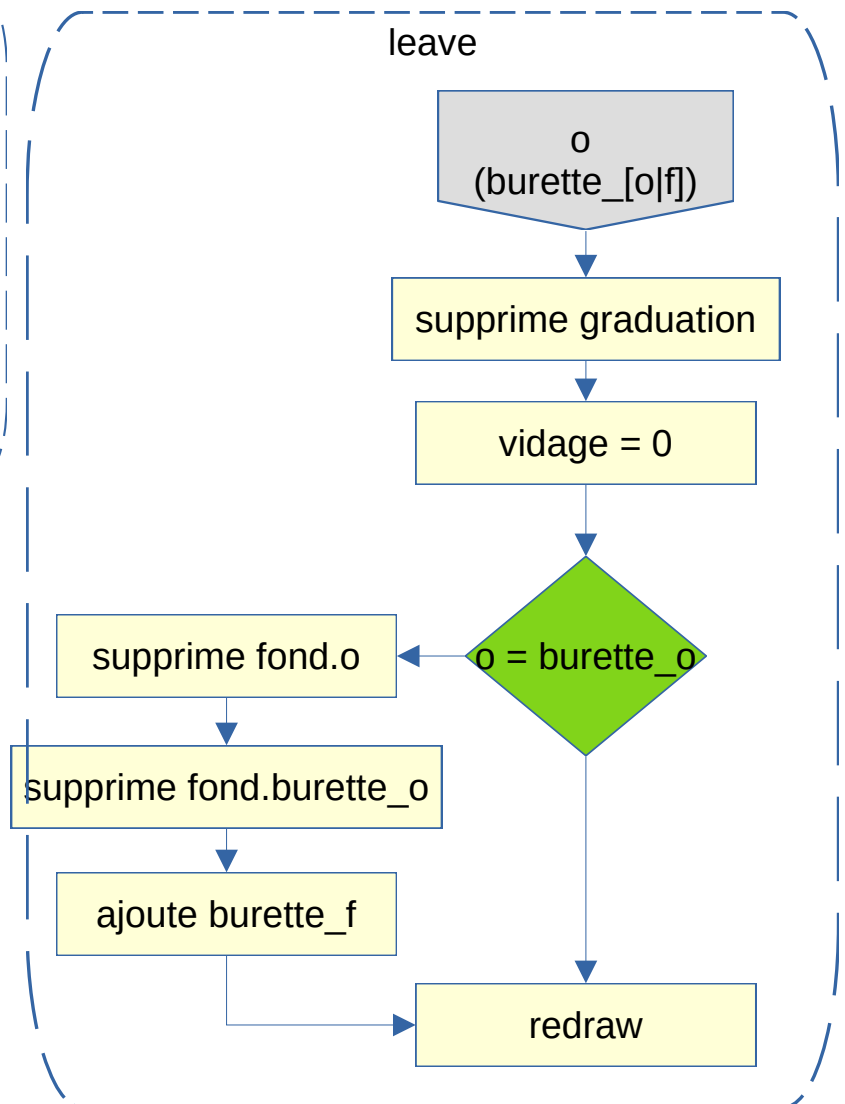
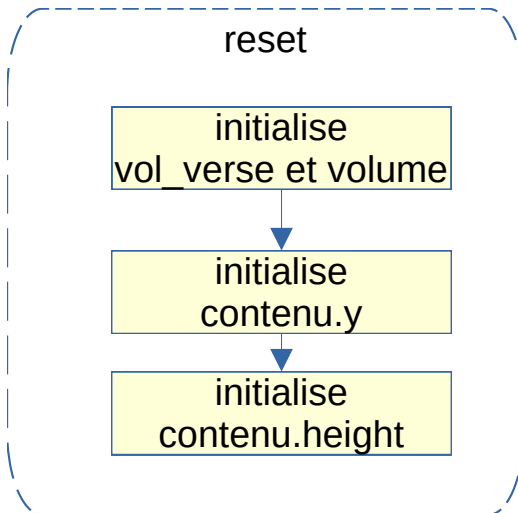
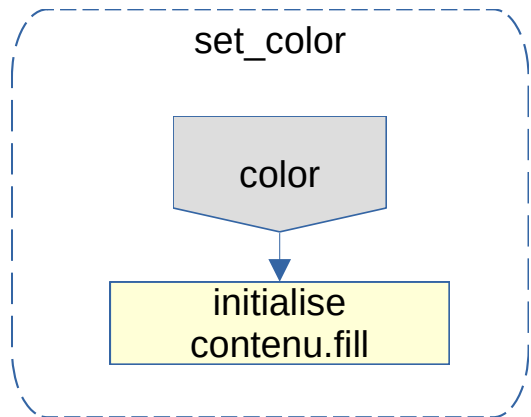
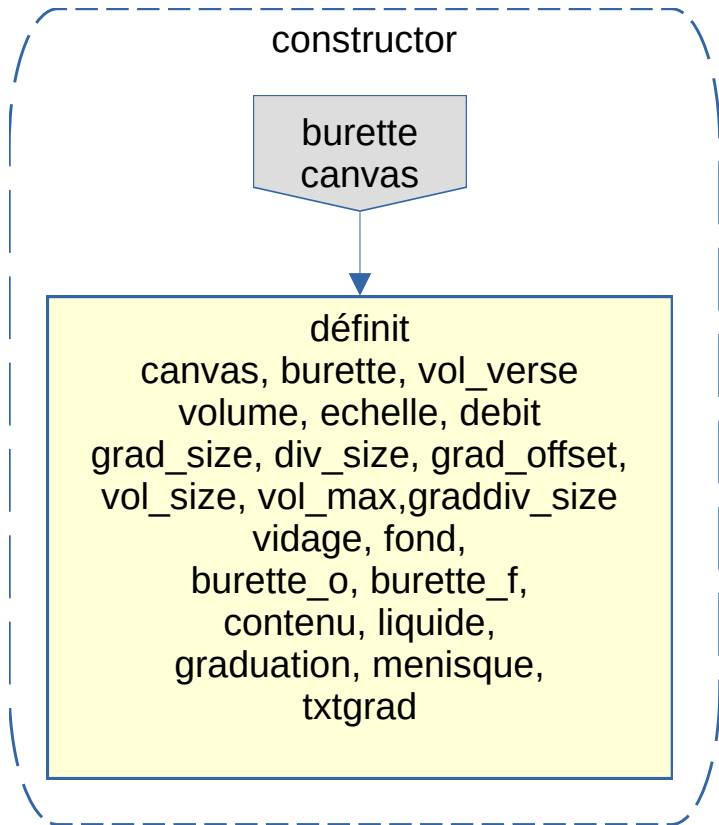
calculer positions  
par rapport  
au becher

définir text = "—"

appareil.set\_text

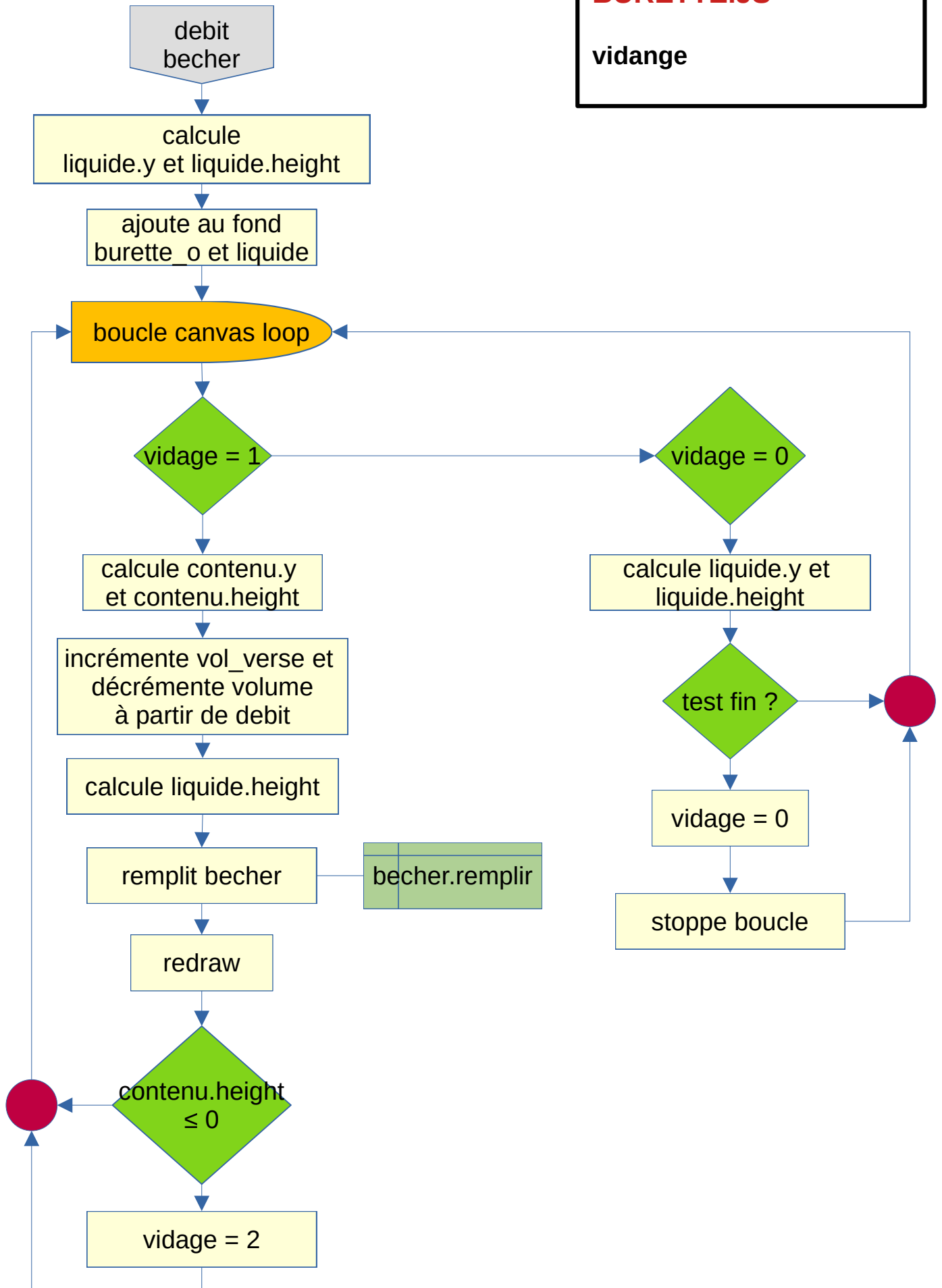
val

initialiser valeur.text



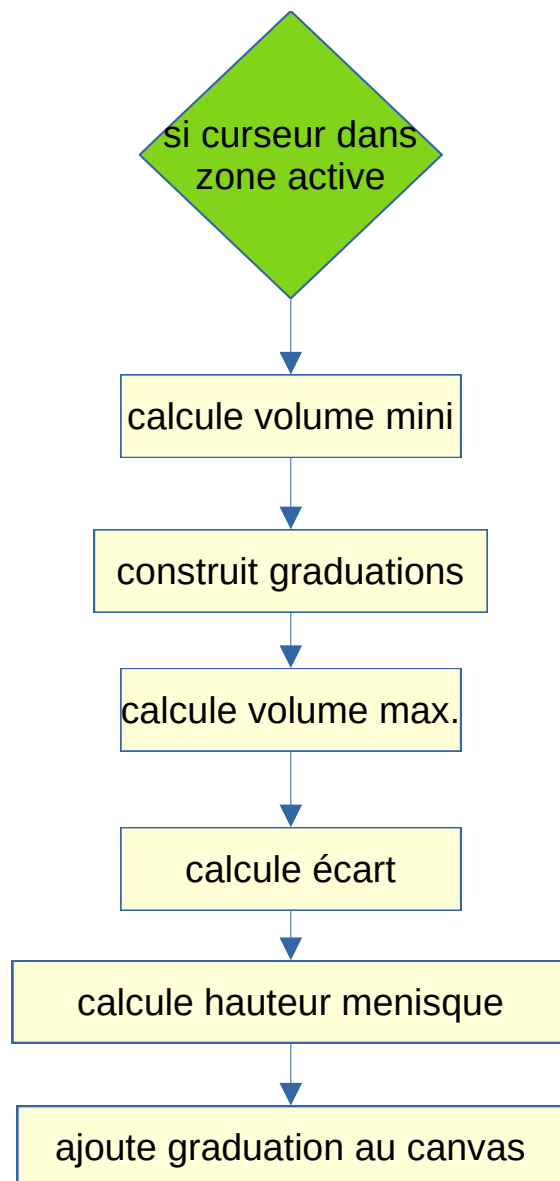
## BURETTE.JS

vidange



## BURETTE.JS

show\_detail



## BECHER.JS

constructor  
set\_color  
remplir

becher.constructor

becher  
canvas

définir  
becher  
canvas  
volume  
fond  
contenu

set\_color

color

initialise  
contenu.fill

remplir

debit  
volume = 0  
mode = 0

mode = 0

met à jour  
contenu.y initial

met à jour  
contenu.volume

initialise  
volume

mode = 1  
&  
debit > 1

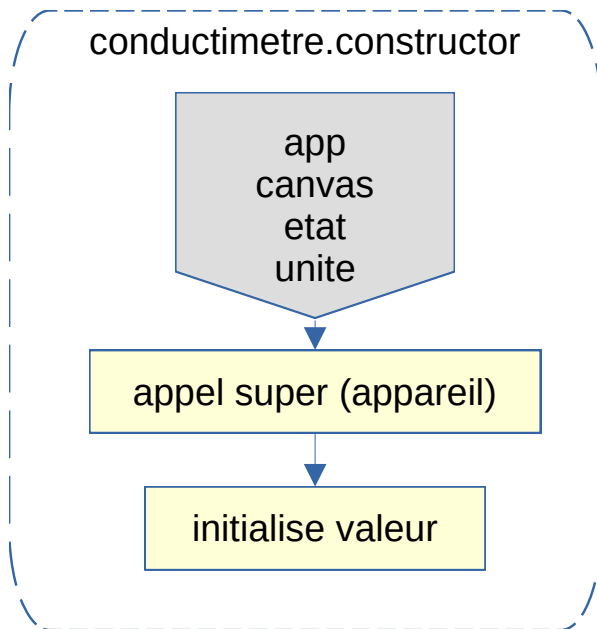
calcule la variation  
de volume (dV)

met à jour contenu.y  
et contenu.volume  
en fonction de dV

actualise volume

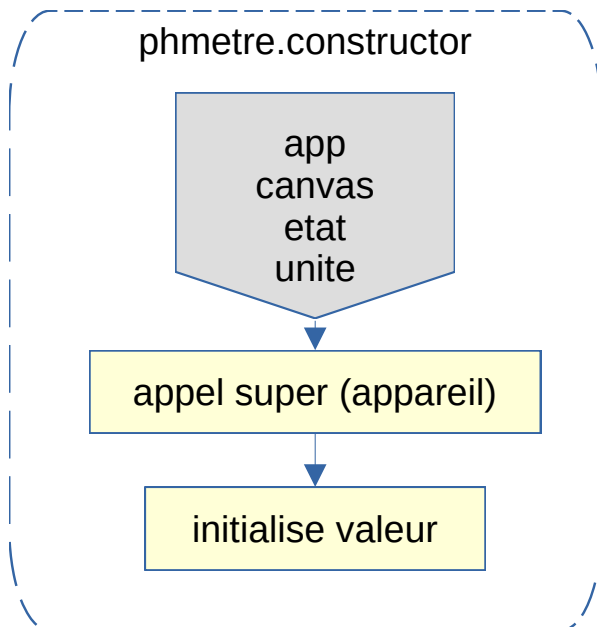
met à jour  
contenu.y  
et  
contenu.volume  
en fonction  
du débit

incrémente volume



**CONDUCTIMETRE.JS**  
**PHMETRE.JS**

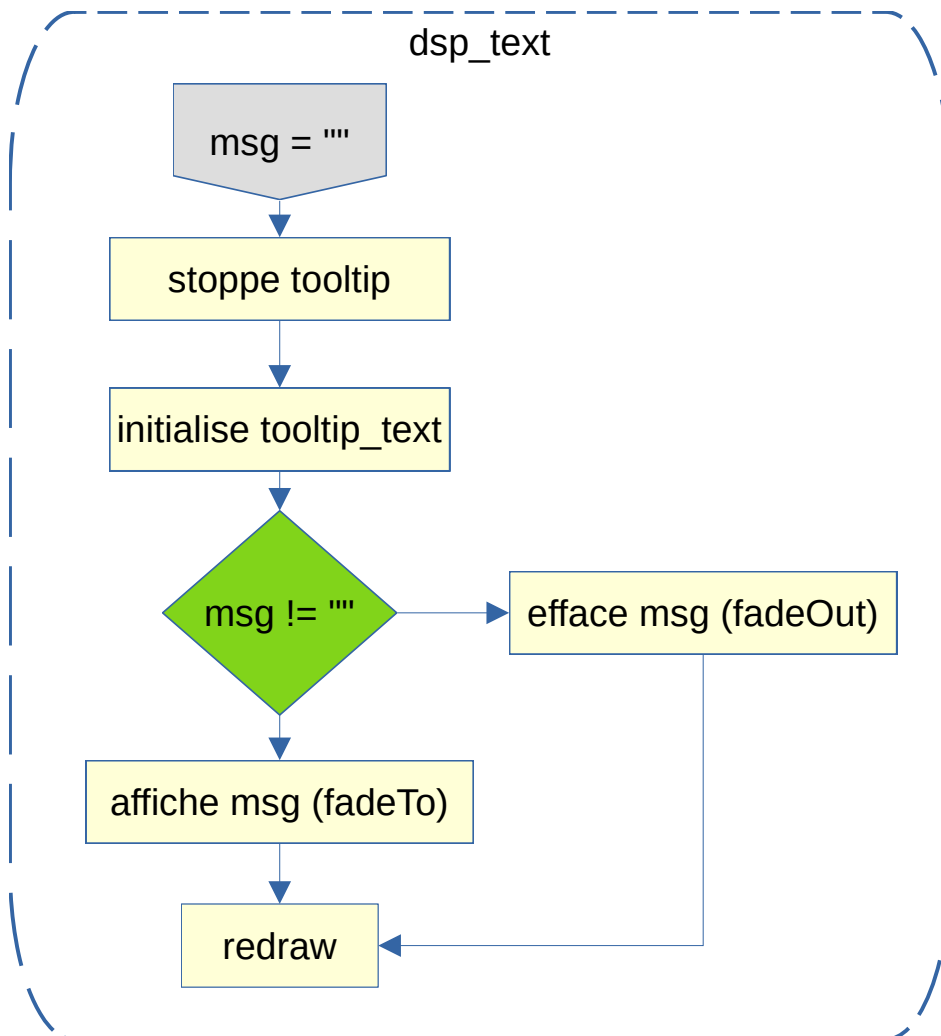
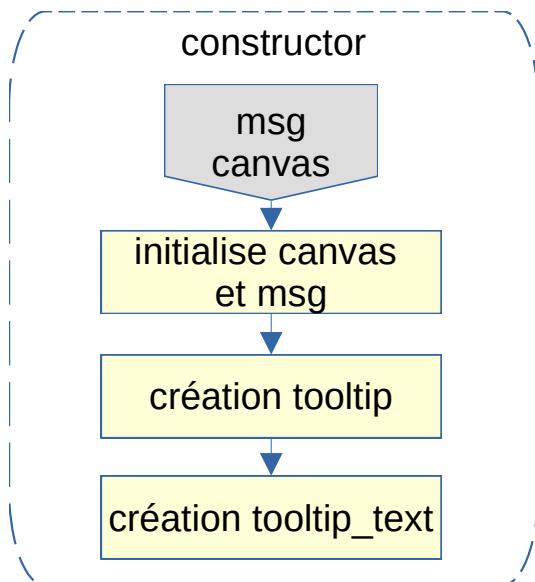
**constructor**





## TOOLTIP.JS

constructor



## INFOS.JS

`_init_html`  
`dsp_info`  
`_dsp_info_ph`  
`_dsp_info_ox`

`_init_html`

`id_modal`  
`txt_titre`  
`txt_close`  
`id_btclose`  
`txt_btclose`

crée les éléments  
html

html

`_dsp_info_ph`  
`_dsp_info_ox`

construit  
`info_titre`  
`info1`  
`info_txt`

`dsp_info`

event

`event.data.infos.type`  
`= TYPE_ACIDEBASE`

`_dsp_info_ox`

`_dsp_info_ph`

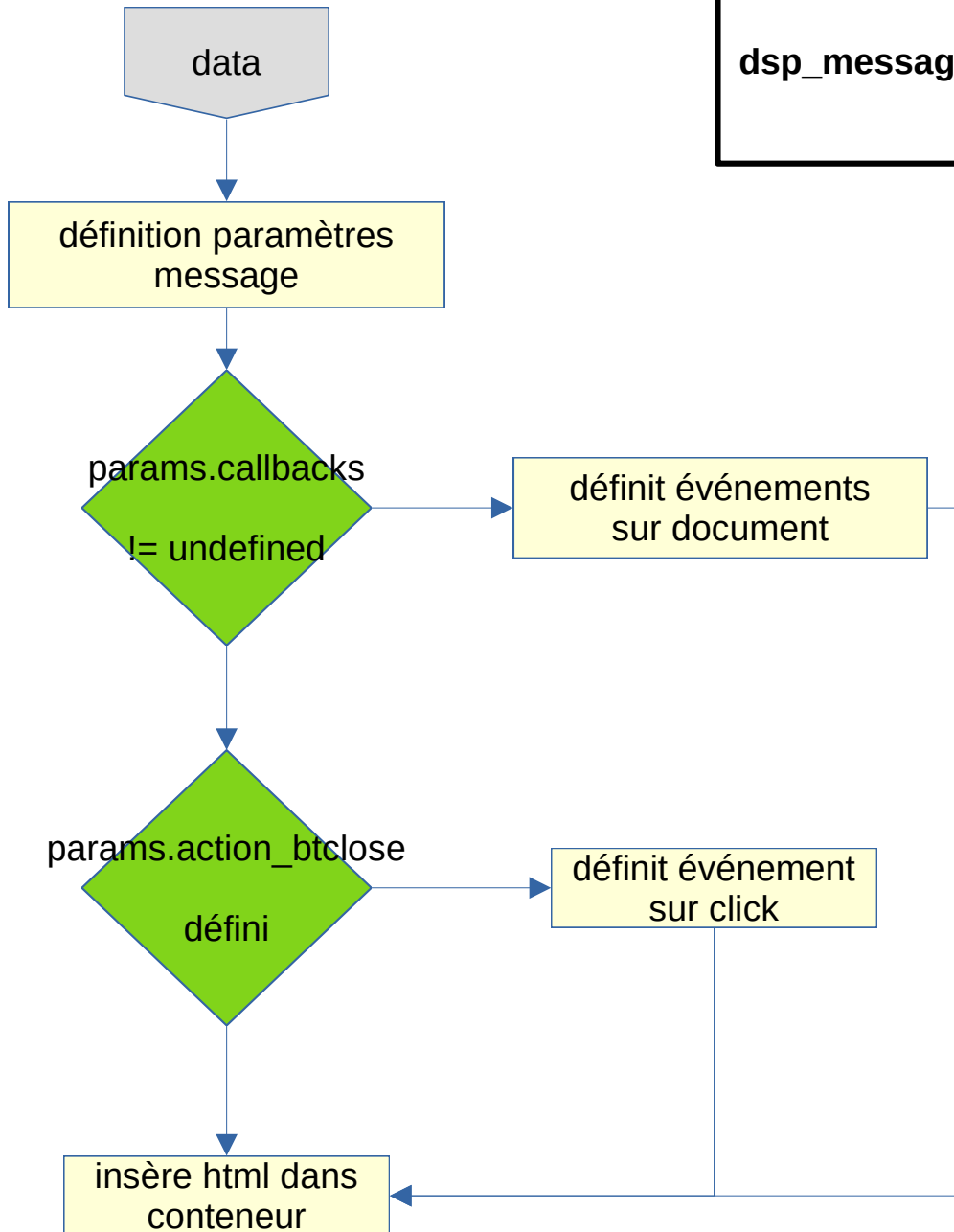
récupère html

`_init_html`

insère html dans container

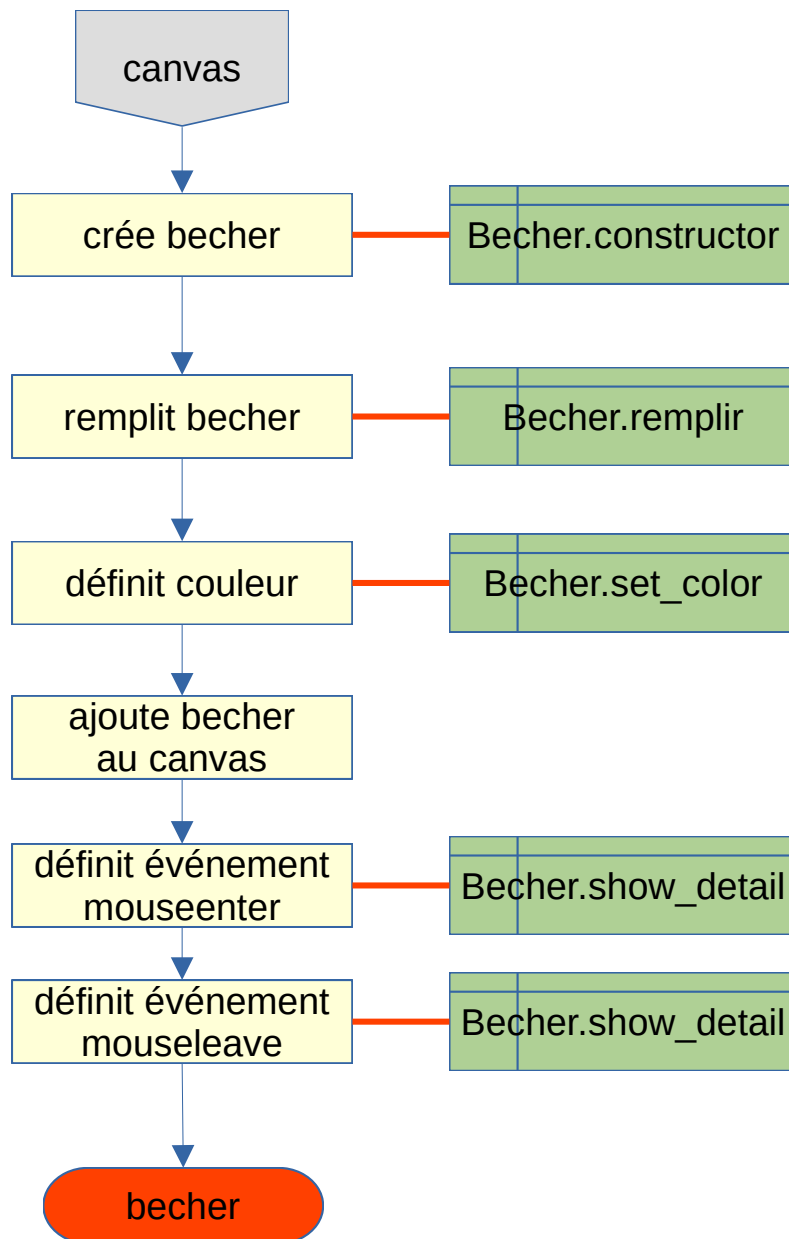
## INFOS.JS

dsp\_message



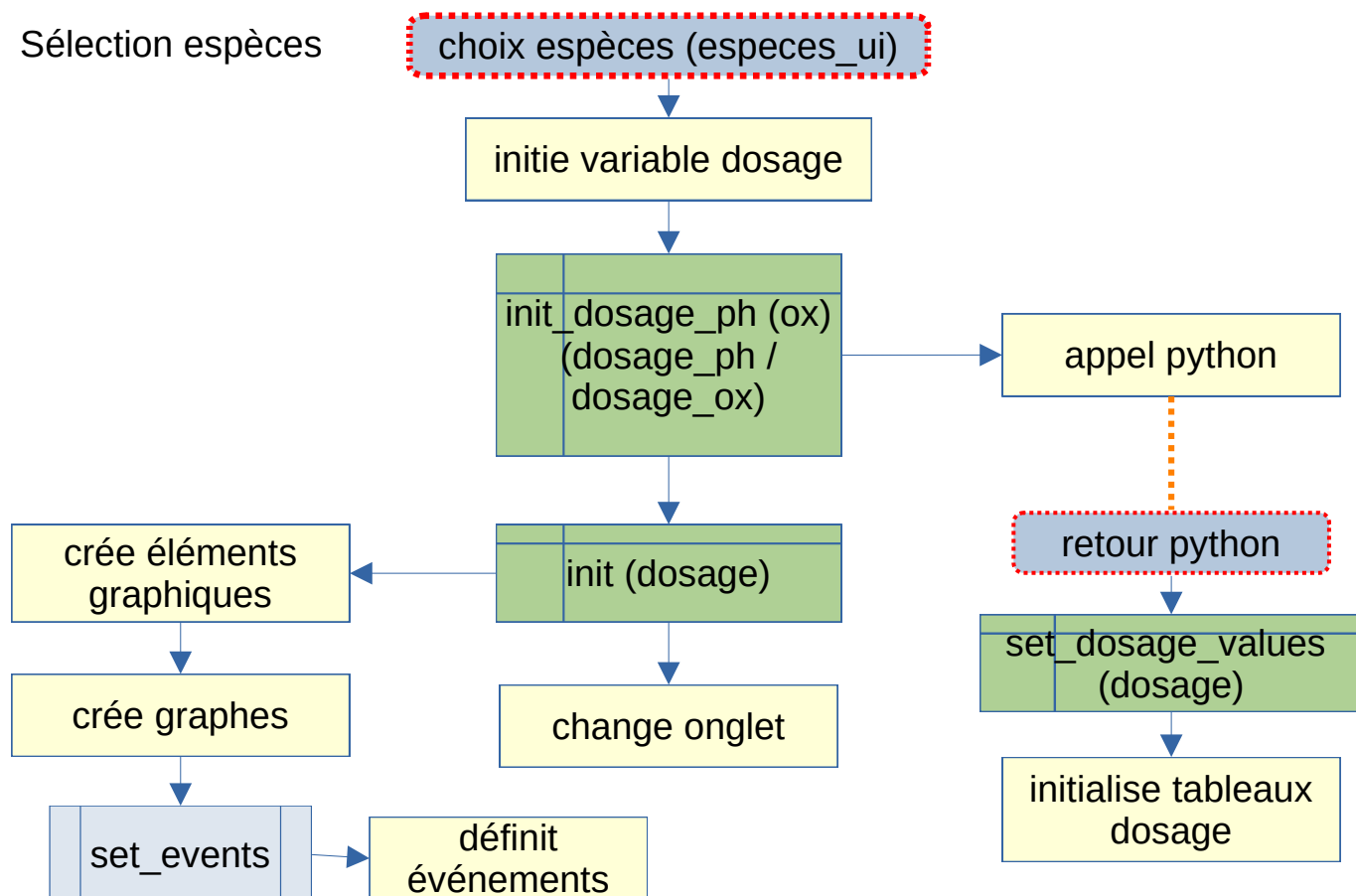
## INIT\_BECHER.JS

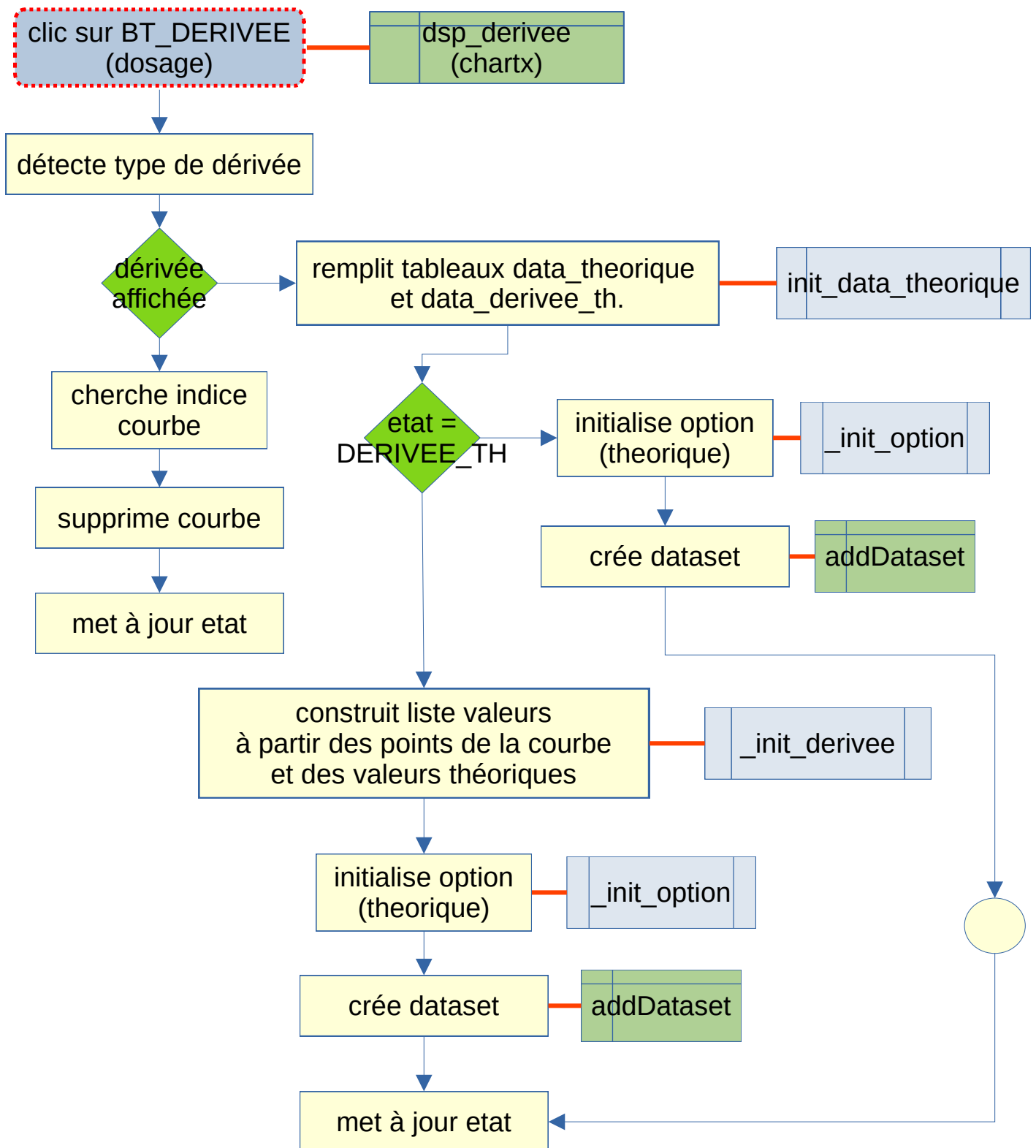
becher\_init





Sélection espèces





module	fonction	page
especes_ui		0
	init_especes	1
	_get_list_espece_titrante	2
	valid_saisie	3
	set_list_acidebase	4
	set_list_autredos	5
	validation	6
dosage	init	7
	vidange	8
	get_color	9
	upd_values	10
	menu_especes, display_message, reset_mesures	11
	set_concentrations, _get_ph, _get_cond	12
dosage_ui	init_becher, init_burette, init_flacon	13
	init_tooltip, init_agitateur	14
	init_phmetre, init_conductimetre	15
	set_events	16
Graphx	constructor, set_options	17
	set_datas, init_data	18
	display, dsp_courbe_theorique	19
	dsp_tangente	20
	add_tangente	21
	move_tangente	22
	dsp_derivee	23
	dsp_derivee (détail)	24
	dsp_perpendiculaire	25
	set_info	26
	event_click	27
	event_click (détail)	28



[illegible]