



SEDNOVE

Sncode/Extenso

pierre.Laplante@sednove.com

Version 1.4 : 2020-07-03

Course #5

- What we have seen in course #4
 - POST vs GET
 - Function cgidata
 - Array and array functions

Hash / associative / context array

- In computer science, an **associative array**, **map**, **symbol table**, or **dictionary** is an abstract data type composed of a collection of (key, value) pairs, such that each possible key appears at most once in the collection.
- Based on JSON structure
- <https://www.json.org/json-en.html>
- Example:

```
{ "x" : [1,2], "pi" : 3.1415 };
```

Hash array

- If we have:

```
a = { "x" : [1,2], "pi" : 3.1415 };  
a.x; // return [1,2]  
a.pi; // return 3.1415  
a{"x"}; //return [1,2]  
a{"p" .+ "i"}; // return 3.1415  
a.x[0]; // return 1  
a.x[1]; // return 2
```

Hash array

- If we have:

```
a = { "x & y" : [1,2], "pi" : 3.1415 };
```

a.x & y; does not work but

a{"x & y"}; will return [1,2]

```
a{"p & l"} = { "p" : 1, "l" : 56 };
```

a; will return

```
{"x & y": [1,2], "pi": 3.1415, "p & l": {"l": 56, "p": 1} }
```

JSON / Hash array

- Hash array and JSON are completely compatible in Sncode
- With javascript you can do:

```
{ { a = { "x" : [1, 2] } ; } }
```

```
<script>
```

```
var a = { { a } };
```

```
console.log(a);
```

```
</script>
```

Hash functions : clearctx

- clearctx : Clears everything in a context.

```
a = { "x" : 1 };  
clearctx(a);  
a; // return {}
```

hash functions : deletctx

- Delete an entry in a context.

```
a = { "x":1,"y":2};  
deletctx(a,"x");  
a; // return {"y":2}
```

Hash functions : **exist**

- Check if an element exist in a context.

```
a = { "pi" : 1 };
```

```
a.exist("pi"); // return true
```

```
a.exist("PI"); // return false
```

```
a.exist('pi') exist(a, 'pi')
```

```
if a.pierre != undefined then "ok"; endif
```

```
a;
```

hash functions : keys

- Return an array of the keys of the hash array

```
a = { "x":1, "y":2};  
keys(a); // return ["x", "y"];
```

- This can be used to loop in the hash array:

```
a = { "x":1, "y":2};  
for k in keys(a) do  
    k; "="; a{k}; "  
endfor  
// return y=2 x=1
```

Hash array : Note about the order

- Keys in hash array do not have an order.

```
a = { "x" : 1, "y" : 2 };
```

keys(a); might return

```
[ "x", "y" ] or [ "y", "x" ]
```

Hash functions : values

- **values** - Returns the list of values of a context.

```
a = { "x" :1, "y" : 2};
```

```
values(a); // return [1,2]
```

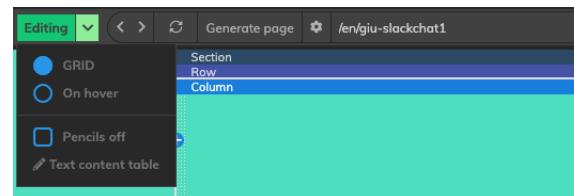
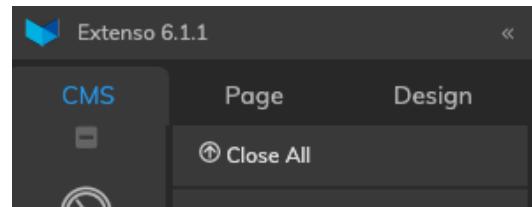
Hash functions : both

- **both** - Returns the list of keys and values of a context.

```
a = { "x" : 1, "y" : 2};  
both(a); // return  
[{"key":"y", "value":2}, {"key":"x", "value":1}]  
for i in both(a) do  
    i.key; "="; i.value;  
endfor  
// return x=1y=2
```

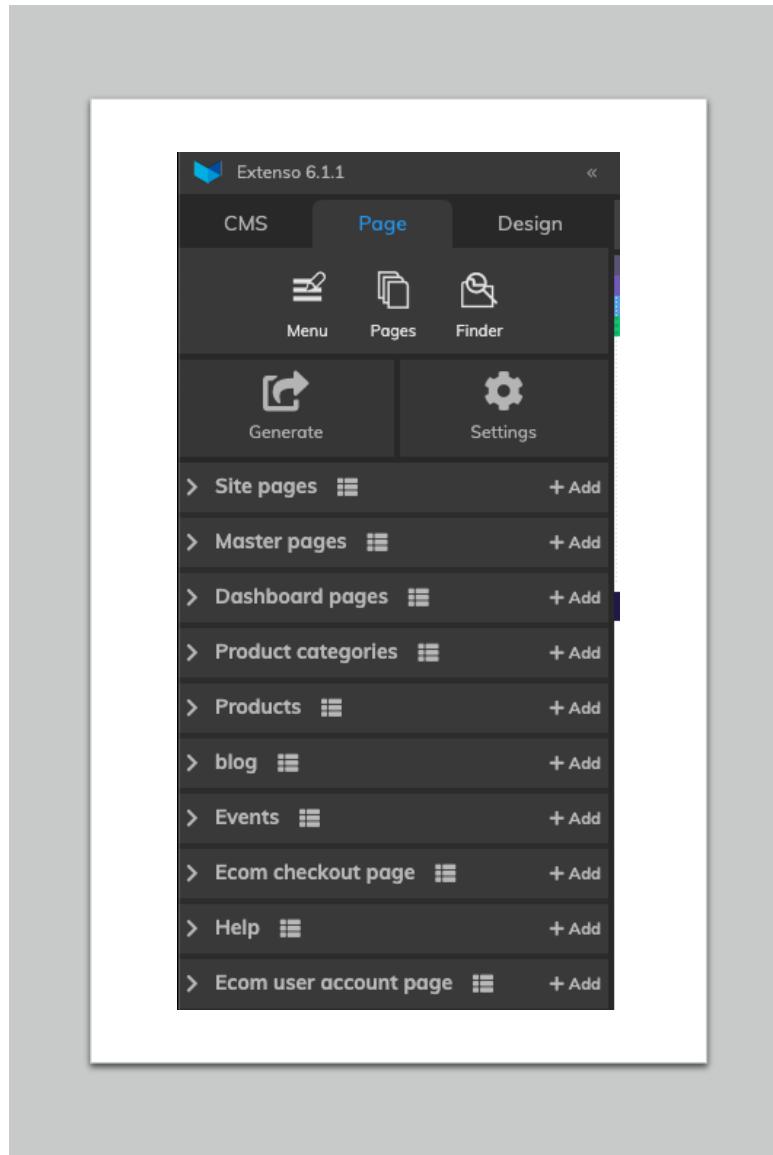
Extenso : a brief introduction

- The interface
- The left menu
 - CMS
 - Page
 - Design
- The right menu (displayed in Page or Design)
- The top menu



Extenso : A brief introduction

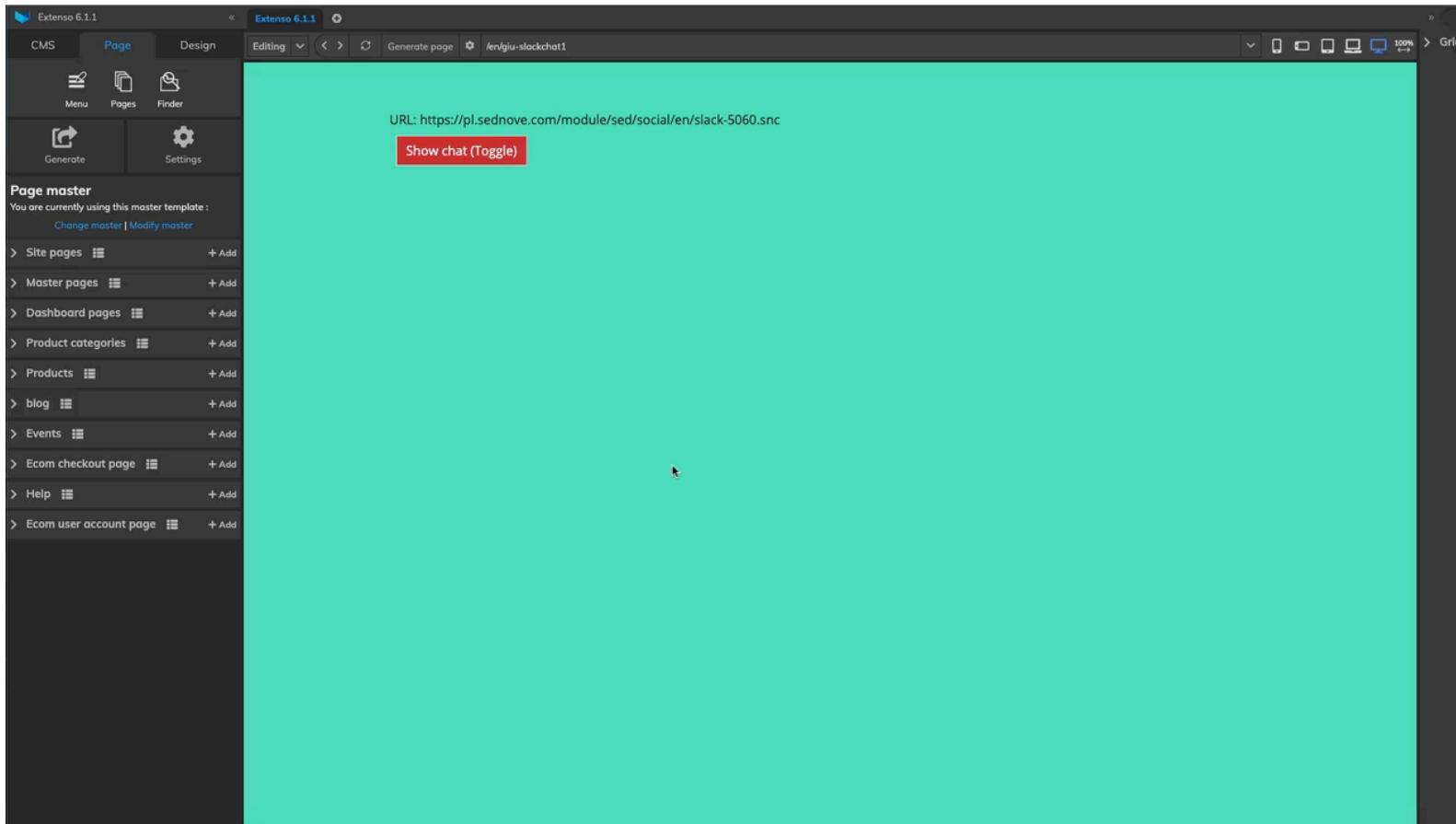
- Master Page
- Site Pages
- Other pages

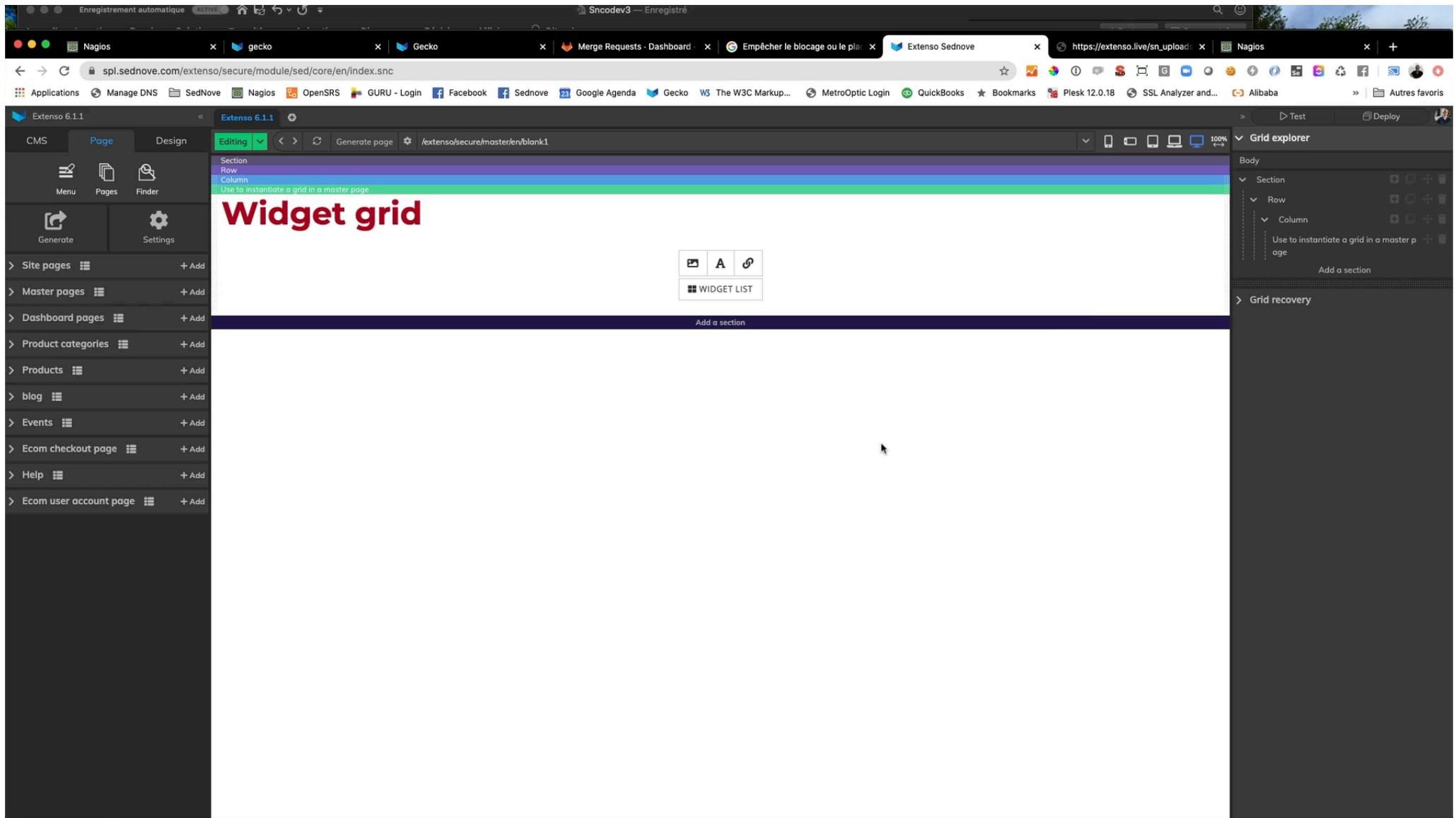


Extenso : A brief introduction : create a new master page

- https://extenso.live/sn_uploads/cours/create-blank-master.mp4

Extenso : Create a blank master

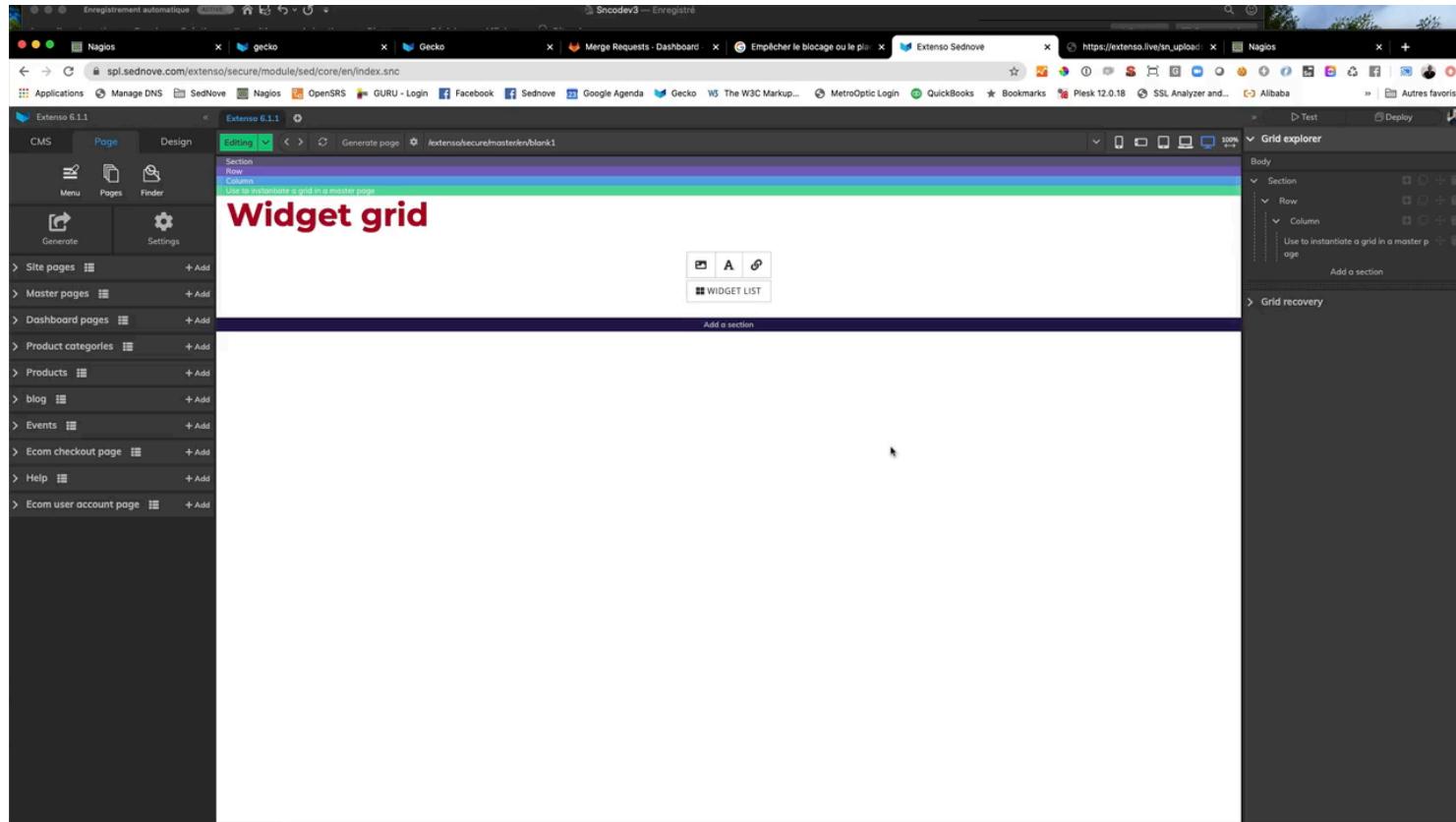




Extenso : create a site page

- We create a new page using the new master blank page
- https://extenso.live/sn_uploads/cours/create-site-page.mp4

Create a site page



Exercice

- Create a blank master page with grid widget
- Create a new site page based on this master page
- Add a text widget to your site page

Sncode : IF ELSEIF THEN ENDIF

```
if x == 1 then
    ...
elseif y eq "string" then
    ...
else
    ...
endif
```

Sncode : logical operator && || and !

- && for and
- || for or
- ! for not

```
if x == 5 && y == 5 then
    "Both x and y are equal to 5";
endif
if ! x == 5 && y == 5 then
    "x is not equal to 5 and y is equal to 5";
endif
```

Sncode : Priority of operators and grouping with ()

```
if ! ( x == 5 && y == 5) then  
    "x or y are not equal to 5";  
endif
```

() can be used to change the order or priority

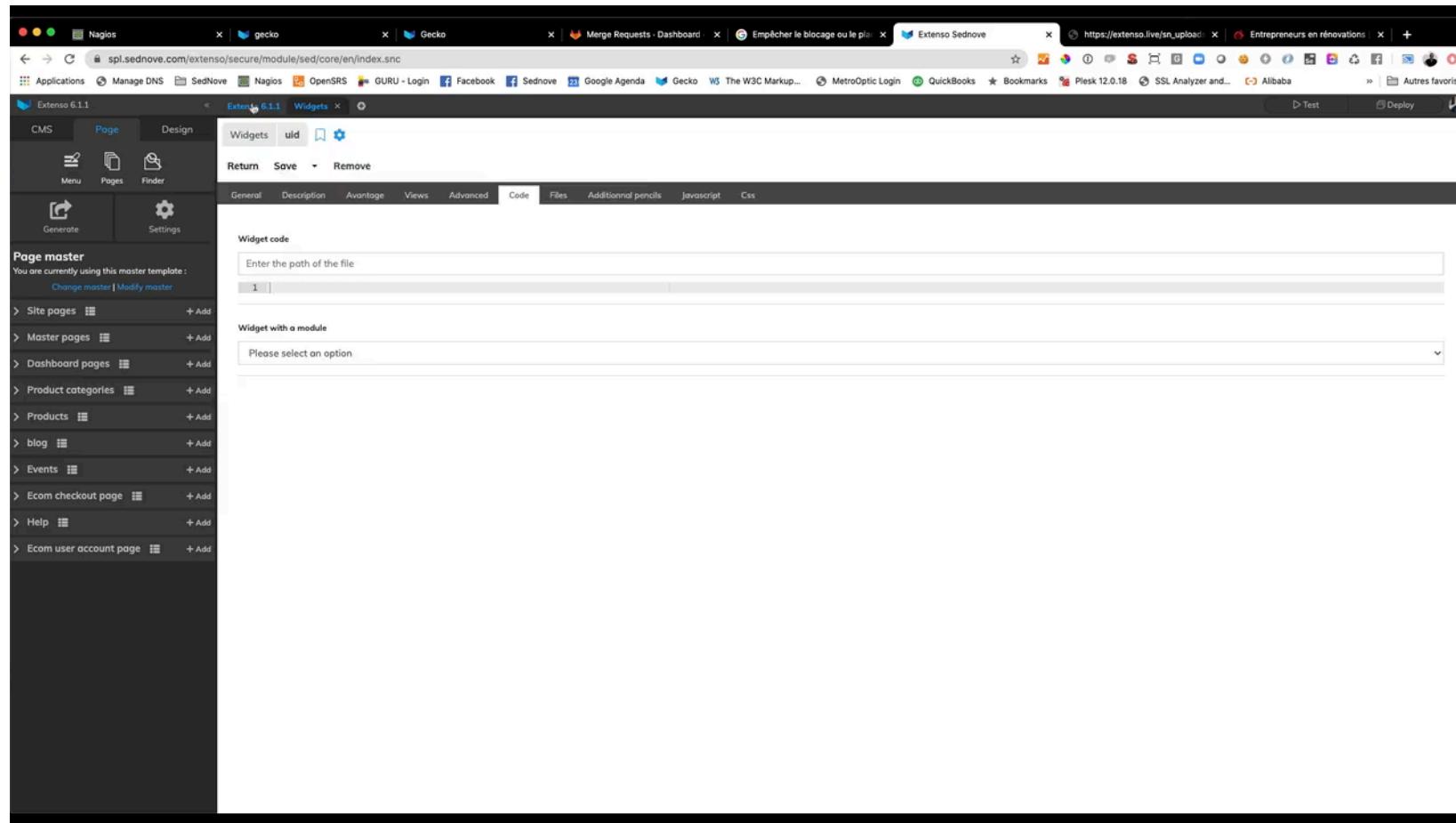


Extenso : Create a
widget

Extenso : Widget

- CMS / DEV / Module Management / Widgets
- Click add
- Click Active
- Enter code name : w1
- Select category : Custom made
- Specify a widget name in fr and en

Video



Extenso : Widget

- Goto tab code
 - Type /site/widget/w1.sn
 - Type <h2>Widget W1</h2>
- Click Save and return
- Add the widget to your page
- Video: https://extenso.live/sn_uploads/cours/add-widget.mp4