

How to integrate 3D models in the OBI website.

First of all, in this tutorial we're gonna look at some web code so a good web code editor is necessary. I use 'Brackets' a free and open source editor from Adobe. <http://brackets.io/>

The most elegant and straight forward solution is probably using iframes.

First we're gonna look to the Sweethome3D exports.

If you haven't installed the exporter yet just [click here](#)

<http://www.sweethome3d.com/plugins/ExportToHTML5-1.1.sh3p>



Open it with Sweet Home 3D.

Now you have 'Export to HTML5' available under Tools.

When you click that a window opens and you can save a zipped-directory. After unzipping and opening the directory you see this content.

lib	16/06/2016 15:10	Bestandsmap	
Studio_16x16	16/06/2016 14:35	Gecomprimeerde ...	971 kB
viewHome	16/06/2016 13:27	Firefox HTML Doc...	6 kB
viewHomeInOverlay	16/06/2016 16:02	Firefox HTML Doc...	4 kB

This first exported directory we will use as a base.

We will only use the viewHomeInOverlay, delete viewHome.

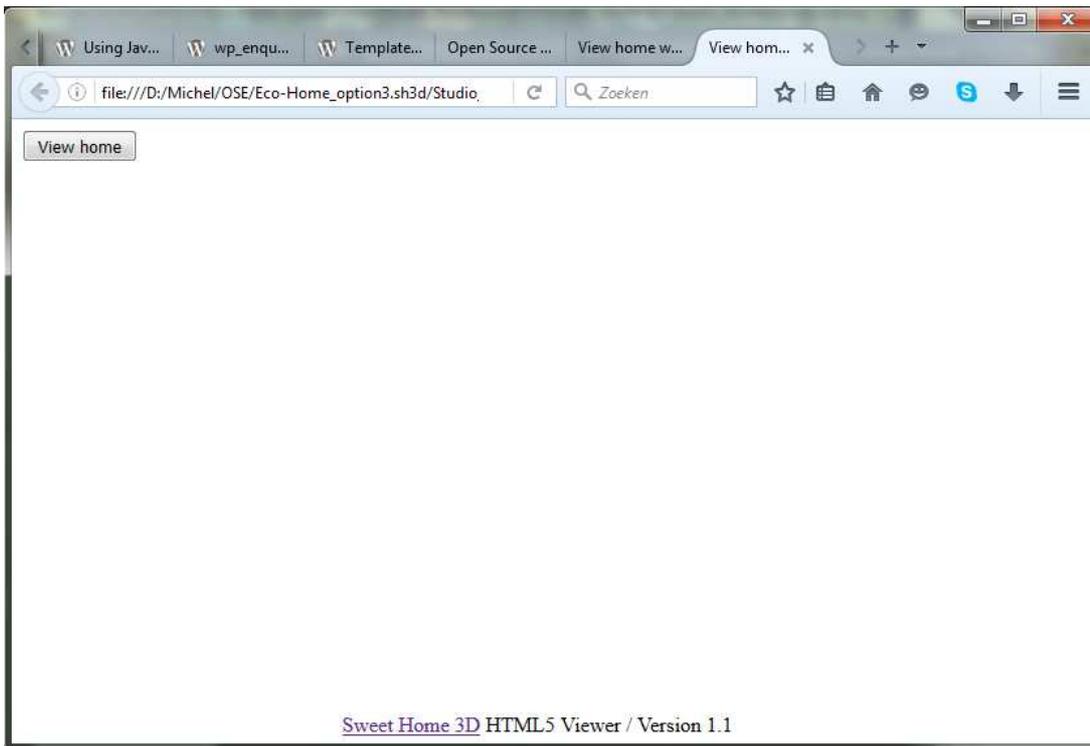
Rename 'viewHomeInOverlay' to the name of the actual house, in this case 'Studio_16x16'.

This way we can put future exports also in this directory.

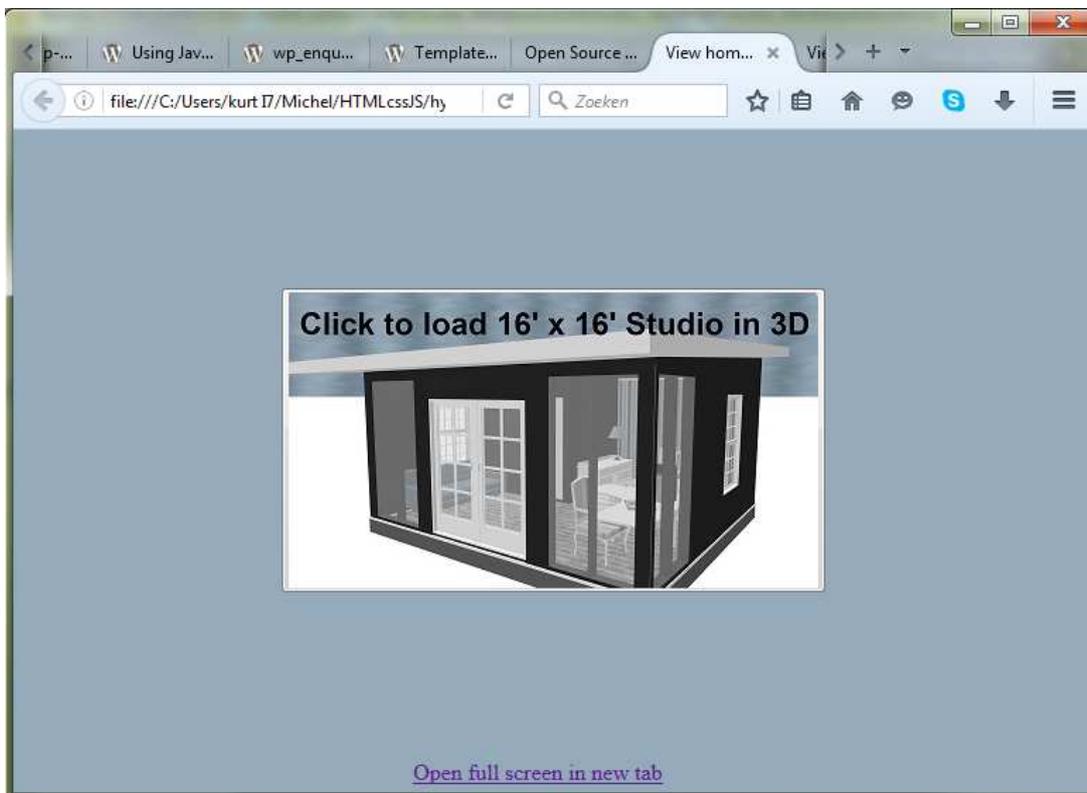
Every time we export a house the javascript libraries in the 'lib' directory will be the same so we can use these for all the exports.

lib	16/06/2016 15:10	Bestandsmap	
Studio_16x16	16/06/2016 16:02	Firefox HTML Doc...	4 kB
Studio_16x16	16/06/2016 14:35	Gecomprimeerde ...	971 kB

When you open the html file in a browser you just have a button to load the 3D model and a link to the SW3D website. All that we gonna do is change the background-color, put a picture in the button and position it and change the link.



Its gonna look like this.



Open the html file in the code editor.
If you gave installed 'Brackets' you should be able to right-click on the file and choose 'Open with >' then select 'Brackets'.
Ignore the top part and scroll down a bit.

```

18 Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1387 USA
19 -->
20 <html>
21 <head>
22 <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
23 <title>View home with Sweet Home 3D HTML5 Viewer</title>
24
25 <!-- Copy the following scripts in your page header -->
26 <script type="text/javascript" src="lib/big.min.js"></script>
27 <script type="text/javascript" src="lib/gl-matrix-min.js"></script>
28 <script type="text/javascript" src="lib/jzip.min.js"></script>
29 <script type="text/javascript" src="lib/core.min.js"></script>
30 <script type="text/javascript" src="lib/geom.min.js"></script>
31 <script type="text/javascript" src="lib/triangulator.min.js"></script>
32 <script type="text/javascript" src="lib/viewmodel.js"></script>
33 <script type="text/javascript" src="lib/viewhome.js"></script>
34
35 <style type="text/css">
36 /* The class of components handled by the viewer */
37 .viewerComponent {
38 }
39 </style>
40 </head>
41
42 <body>
43 <div>
44 <!-- Copy the following button in your page -->
45 <!-- Mouse and keyboard navigation explained at
46 http://sweethome3d.cvs.sf.net/viewvc/sweethome3d/SweetHome3D/src/com/eteks/sweethome3d/viewcontroller/resources/help/en/editing3DView.html
47 You may also switch between aerial view and virtual visit with the space bar -->
48 <!-- For browser compatibility, see http://caniuse.com/webgl -->
49 <button onclick='viewHomeInOverlay("Studio_16x16.zip",
50 {roundsPerMinute: 1, /* Rotation speed of the animation launched once home is loaded in
51 widthByHeightRatio: 4/3, /* Size ratio of the displayed canvas */
52 navigationPanel: "none", /* Displayed navigation arrows, "none" or "default" for default one or
53 an HTML string containing elements with data-simulated-key attribute set "UP", "DOWN", "LEFT", "RIGHT"... to replace the
54 default navigation panel, "none" if missing */
55 aerialViewButtonText: "Aerial view", /* Text displayed for aerial view radio button, no radio buttons if
56 missing */
57 virtualVisitButtonText: "Virtual visit", /* Text displayed for virtual visit radio button, no radio buttons if
58 missing */
59 /* selectableLevels: ["Level 0", "Level 1"], */ /* Uncomment to choose the list of displayed levels, no select
60 component if empty array */
61 viewerControlsAdditionalHTML: "", /* Additional HTML text appended to controls displayed below the
62 canvas 3D, by default empty */
63 readingHomeText: "Reading", /* Comment displayed while reading home */
64 readingModelText: "Model", /* Comment displayed while reading models */
65 noWebGLSupportError: "No WebGL support" /* Error message displayed if the browser do not support WebGL */
66 })>View home</button>
67
68 </div>
69
70 <div style="position: absolute; bottom: 5px; text-align: center; width: 95%">
71 <a href="http://www.sweethome3d.com">Sweet Home 3D</a> HTML5 Viewer / Version 1.1
72 </div>
73 </body>
74 </html>
75
76

```

If you're not used to code, don't be intimidated. Most of this is explanation.

First we're gonna change the image ratio from 3/4 to 16/9 (see arrow above).

Go to 'File' then click 'Save' or right-click on the file name and choose save or just do ctrl + s.

Now we're gonna make the image for our button.

Reload the file in the browser and click the button. Choose a nice position in 'Aerial view' or 'Virtual visit' and take a screen shot (PrintScreen). It depends on what system your using how you do that. Open 'Paint' or 'Gimp' or something similar, cut out the 3D screen, add some text (for instance: Click to load 3D model) and resize to about 375 x 211 px.

Now save the image as a jpeg in a new directory named 'images' in your base directory.

Give the images file the same name as the html file, in this case 'studio_16x16.jpeg'.

 images	18/06/2016 2:37	Bestandsmap	
 lib	17/06/2016 20:33	Bestandsmap	
 Studio_16x16	18/06/2016 2:37	Firefox HTML Doc...	5 kB
 Studio_16x16	16/06/2016 15:52	Gecomprimeerde ...	1.080 kB



In the style part of the code add this.

```
34
35 <style type="text/css">
36 /* The class of components handled by the viewer */
37   body {
38     background-color: #90a5b6;
39   }
40
41   button {
42     padding-left: 0;
43     padding-right: 0;
44     margin-left: auto;
45     margin-right: auto;
46     padding-top: 0;
47     padding-bottom: 0;
48     margin-top: 15%;
49     display: block;
50   }
51
52   .viewerComponent {
53   }
54 </style>
55 </head>
56
```

```
body {
  background-color: #90a5b6;
}

button {
  padding-left: 0;
  padding-right: 0;
  margin-left: auto;
  margin-right: auto;
  padding-top: 0;
  padding-bottom: 0;
  margin-top: 15%;
  display: block;
}
```

Copy paste it in.

Now scroll down and replace the text at the button tag with the image link.

Change the href link to html page you're working in and add target="_blank" so it will open in a new tab. Change the text from 'Sweet Home 3D' to 'Open full screen in a new tab' and remove the text after the tag.

From

```

    canvas 3D, by default empty */
58     readingHomeText: "Reading",           /* Comment displayed while reading h
59     readingModelText: "Model",           /* Comment displayed while reading m
60     noWebGLSupportError: "No WebGL support" /* Error message displayed if the br
61   })'>View home</button>
62
63 </div>
64
65 <div style="position: absolute; bottom: 5px; text-align: center; width: 95%">
66   <a href="http://www.sweethome3d.com">Sweet Home 3D</a> HTML5 Viewer / Version 1.1
67 </div>
68 </body>
69 </html>
70
```

To

```

component if empty array */
72     viewerControlsAdditionalHTML: "",           /* Additional HTML text appended
canvas 3D, by default empty */
73     readingHomeText: "Reading",               /* Comment displayed while readin
74     readingModelText: "Model",               /* Comment displayed while readin
75     noWebGLSupportError: "No WebGL support"   /* Error message displayed if the
76     })'></button>
77 </div>
78
79 <div style="position: absolute; bottom: 5px; text-align: center; width: 95%">
80     <a href="Studio_16x16.html" target="_blank">Open full screen in new tab</a>
81 </div>
82 </body>
83 </html>
84

```

Almost done.

You started with a unzipped directory named after the model you exported.
 Now you can rename that directory as you're gonna use it as a base directory.
 Maybe name it 'sweet_home_3d'.
 You can add as much exported houses as you want.

 images	18/06/2016 3:32	Bestandsmap	
 lib	17/06/2016 20:33	Bestandsmap	
 Eco-Home_option3	18/06/2016 3:21	Firefox HTML Doc...	5 kB
 Eco-Home_option3	17/05/2016 10:08	Gecomprimeerde ...	167 kB
 Seed-Home_16x20_v2	18/06/2016 3:33	Firefox HTML Doc...	5 kB
 Seed-Home_16x20_v2	18/06/2016 3:24	Gecomprimeerde ...	3.311 kB
 Studio_16x16	18/06/2016 3:20	Firefox HTML Doc...	5 kB
 Studio_16x16	16/06/2016 15:52	Gecomprimeerde ...	1.080 kB

Put the 'sweet_home_3d' directory somewhere on a server look what the URL is of the html files and use those as a 'src' for your iframes.
 Something like this:

```

<iframe src="http://opensourceecology.org/sweet_home_3d/Studio_16x16.html" width="800"
height="470"></iframe>

```

Have fun.