## 11. using modules (no npm)

// Can only use Sync for top-level code

Wednesday, June 7, 2023 3:43 PM

Creating our own custom modules for other script.js to call:

```
mkdir ./modules cd ./modules touch replaceTemplate.js
```

\*\* This kind of Node.js templating is outdated in 2024 \*\* <a href="index.js">index.js</a>:

```
Cut the highlighted part => Paste to ./modules/replaceTemplate.js
// Server
// Arrow function to replace {\%} with product props in data.json
new var
    let output = temp.replace(/{%PRODUCTNAME%}/g,
product.productName);
    // this function mutates all {%%} in template-xx.html with each
obj in json
    // Start mutating now
   // Replacing all {%%} with
   output = output.replace(/{%IMAGE%}/g, product.image);
   output = output.replace(/{%DESCRIPTION%}/g, product.description);
   if (!product.organic) output = output.replace(/{%NOT ORGANIC%}/g
not-organic')
   return output; // output final Html after replacing
// Top-level code only executes once
```

const tempOverview = fs.readFileSync(`\${ dirname}/templates/template-

```
// Top-level code only executes once
// Can only use Sync for top-level code
const tempOverview = fs.readFileSync()
${ dirname}/templates/template-overview.html`, 'utf-8');
const tempCard = fs.readFileSync(`
${ dirname}/templates/template-card.html`, 'utf-8');
const tempProduct = fs.readFileSync()
${ dirname}/templates/template-product.html`, 'utf-8');
const data = fs.readFileSync(`${__dirname}/dev-data/data.json`,
'utf-8');
const dataObj = JSON.parse(data);
replaceTemplate.js:
// Export an Arrow function as a module
// Using module.exports = (arugment1, argument2) => {...} to
export
// an Arrow Function, without an ES6 package.json --> "type":
"module",
module.exports = (temp, product) => {
    // Avoid direct mutation of original template by storing
temp in a new var
    let output = temp.replace(/{%PRODUCTNAME%}/g,
product.productName);
    // this function mutates all {%%} in template-xx.html with
each obj in json
    // const cardsHtml = dataObj.map(element =>
replaceTemplate(tempCard, element)).join('');
    // Start mutating now
    // Replacing all {%%} with
    output = output.replace(/{%IMAGE%}/g, product.image);
    output = output.replace(/{%PRICE%}/g, product.price);
    output = output.replace(/{%FROM%}/g, product.from);
    output = output.replace(/{%NUTRIENTS%}/g,
product.nutrients);
    output = output.replace(/{%QUANTITY%}/g, product.quantity);
    output = output.replace(/{%DESCRIPTION%}/g,
product.description);
    output = output.replace(/{%ID%}/g, product.id);
    if (!product.organic) output = output.replace(/{%
NOT ORGANIC% }/g, 'not-organic')
    return output; // output final Html after replacing
```

}

## index.js:

```
// Read-Eval-Print-Loop (REPL)
// const repl = require('repl');
const fs = require('fs');
// Networking capabilities => Building a HTTP server
const http = require('http');
// URL module
const url = require('url');

// impert our custom module
const replaceTemplate = require('./modules/replaceTemplate');
```