

PHP: Tree graph generated from wiki articles

<https://wiki.ostrowski.net.pl/mindmap.php>

mindmap.php

```
<?php
header("Content-Type: text/html");

$pagesDir = __DIR__ . '/data/pages';
$excludedNamespaces = ['ns1', 'ns2'];
// here you should put namespaces that should be excluded from being
graphed by this script

function buildTree($dir, $namespace = '') {
    global $excludedNamespaces;
    $result = [];

    foreach (scandir($dir) as $file) {
        if ($file === '.' || $file === '..') continue;

        $path = $dir . '/' . $file;
        $fileWithoutExt = pathinfo($file, PATHINFO_FILENAME);
        $dokuwikiID = $namespace . $fileWithoutExt;

        if (is_dir($path)) {
            if (in_array($file, $excludedNamespaces)) continue;

            $children = buildTree($path, $namespace . $file . ':');
            if (!empty($children)) {
                $result[] = [
                    'name' => $file,
                    'id' => $namespace . $file,
                    'children' => $children
                ];
            }
        } elseif (pathinfo($file, PATHINFO_EXTENSION) === 'txt') {
            $result[] = [
                'name' => str_replace('_', ' ', $fileWithoutExt),
                'id' => $dokuwikiID
            ];
        }
    }

    return $result;
}

$treeData = [
    'name' => 'DokuWiki',
```

```
'id' => '',
'children' => buildTree($pagesDir)
];
?>
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>DokuWiki Tree Map</title>
  <script src="https://d3js.org/d3.v7.min.js"></script>
  <style>
    html, body {
      margin: 0;
      padding: 0;
      overflow: hidden;
      height: 100%;
    }
    svg {
      width: 100vw;
      height: 100vh;
      cursor: grab;
      background-color: #f9f9f9;
    }
    .node circle {
      fill: #6baed6;
    }
    .node text {
      font: 32px sans-serif;
    }
    .link {
      fill: none;
      stroke: #999;
      stroke-opacity: 0.6;
      stroke-width: 1.5px;
    }
    a {
      fill: black;
      text-decoration: none;
    }
  </style>
</head>
<body>
Wanna read how it is made click here: <a
href="">wiki.ostrowski.net.pl</a>
<svg></svg>
<script>
  const treeData = <?php echo json_encode($treeData); ?>;

  const width = 4000;
  const height = 3000;
```

```
const svg = d3.select("svg");
const g = svg.append("g").attr("transform", "translate(50,50)");

svg.call(d3.zoom()
  .scaleExtent([0.1, 2])
  .on("zoom", (event) => {
    g.attr("transform", event.transform);
  }));

const root = d3.hierarchy(treeData);
const treeLayout = d3.tree().nodeSize([30, 600]);
treeLayout(root);

// Links
g.selectAll(".link")
  .data(root.links())
  .enter().append("path")
  .attr("class", "link")
  .attr("d", d3.linkHorizontal()
    .x(d => d.y)
    .y(d => d.x));

// Nodes
const node = g.selectAll(".node")
  .data(root.descendants())
  .enter().append("g")
  .attr("class", "node")
  .attr("transform", d => `translate(${d.y},${d.x})`);

node.append("circle").attr("r", 6);

// Add clickable links to DokuWiki REPLACE THE URL
node.append("a")
  .attr("xlink:href", d => d.data.id ? `
```