

Trees

Build parent-linked array trees and extract keyed outlines with nesting levels

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ArrayTree

Rows into a Tree

`ArrayTree::fromRows($items, $parentField, $childrenField, $parentId = null)` uses the array keys as node identifiers. Each row's parent field refers to the key of its parent.

```
use Derafu\Array\ArrayTree;

$items = [
    1 => ['parent_id' => null, 'name' => 'root'],
    2 => ['parent_id' => 1, 'name' => 'child'],
    3 => ['parent_id' => 2, 'name' => 'leaf'],
];

$tree = ArrayTree::fromRows($items, 'parent_id', 'children');
// [1 => ['name' => 'root', 'children' => [
//     2 => ['name' => 'child', 'children' => [
//         3 => ['name' => 'leaf', 'children' => []],
//     ],
// ]] ]
```

Keys are preserved, parent fields are removed, and the children field is present even when empty. Parent comparisons are strict: integer `1` and string `'1'` are different parent values.

Rows without the parent field, and branches not reachable from the selected root parent, are omitted. Supply rows keyed by their identifiers; for database lists, `array_column($rows, null, 'id')` can prepare that structure.

Tree into an Outline

`toOutline($tree, $nameField, $childrenField)` traverses depth first and returns each node's name and nesting level, keeping its key:

```
ArrayTree::toOutline($tree, 'name', 'children');
// [
```

```
//      1 => ['name' => 'root', 'level' => 0],  
//      2 => ['name' => 'child', 'level' => 1],  
//      3 => ['name' => 'leaf', 'level' => 2],  
// ]
```

This is an outline, not a reconstruction of the original rows: other fields are not included. Node keys must be unique across the tree to avoid later nodes replacing earlier outline entries.

A non-array node or a node with a missing or null name is skipped with its descendants. A node whose children field is not an array is included, but those children are omitted. The optional `$level` and by-reference `$result` parameters support recursive accumulation; ordinary callers use the first three arguments.

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