

```

<?php
/**
 * Contain the CategoryNode class
 * Each Node maintain its parent, children Node and informations of self.
 *
 * @package MediaWiki
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 */

class CategoryInfo {
    var $category_id;
    var $category_name;

    function __construct($categoryId, $categoryName) {
        $this->category_id = $categoryId;
        $this->category_name = $categoryName;
    }
}

class CategoryNode {

    // The data structure support:
    //     1. Each category node should has only one parent or not.
    //     2. Each category node could has more than one child.
    var $parent;
    var $children;
    var $categoryInfo;

    // This variable is used to guarantee: There is no loop in parent/child relationship.
    //     After node is added to category tree, the variable should be set to true.
    //     If one node's "hasTravelled" is true, it should not be processed any more.
    var $hasTravelled;

    function __construct($categoryId, $categoryName) {
        $this->parent = false;
        $this->children = false;
        $this->categoryInfo = new CategoryInfo($categoryId, $categoryName);

        $this->hasTravelled = false;
    }

    function getCategoryName() {
        return $this->categoryInfo->category_name;
    }
}
?>

```