# Modul:Navbox

Vorlage:Lua Vorlage:Uses TemplateStyles Vorlage:Lua sidebar

This module implements the Vorlage:Tl template. Please see the template page for usage instructions.

## Tracking/maintenance categories

- Vorlage:Clc
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```
local p = {}
local navbar = require('Module:Navbar')._navbar
local cfg = mw.loadData('Module:Navbox/configuration')
local getArgs -- lazily initialized
local args
local format = string.format

local function striped(wikitext, border)
        -- Return wikitext with markers replaced for odd/even striping.
        -- Child (subgroup) navboxes are flagged with a category that is removed
        -- by parent navboxes. The result is that the category shows all pages
        -- where a child navbox is not contained in a parent navbox.
        local orphanCat = cfg.category.orphan
        if border == cfg.keyword.border_subgroup and args[cfg.arg.orphan] ~= cfg.
                -- No change; striping occurs in outermost navbox.
                return wikitext .. orphanCat
        end
        local first, second = cfg.class.navbox_odd_part, cfg.class.navbox_even_pa
        if args[cfg.arg.evenodd] then
                if args[cfg.arg.evenodd] == cfg.keyword.evenodd_swap then
                        first, second = second, first
                else
                        first = args[cfg.arg.evenodd]
                        second = first
                end
        end
        local changer
        if first == second then
                changer = first
        else
                local index = 0
                changer = function (code)
                        if code == '0' then
                                -- Current occurrence is for a group before a nes
                                -- Set it to first as a valid although pointless
                                -- The next occurrence will be the first row afte
                                -- in a subgroup and will also be first.
                                index = 0
                                return first
                        end
```

```
                        index = index + 1
                        return index % 2 == 1 and first or second
                end
        end
        local regex = orphanCat:gsub('([%[%]])', '%%%1')
        return (wikitext:gsub(regex, ''):gsub(cfg.marker.regex, changer)) -- () c
end

local function processItem(item, nowrapitems)
        if item:sub(1, 2) == '{|' then
                -- Applying nowrap to lines in a table does not make sense.
                -- Add newlines to compensate for trim of x in |parm=x in a templ
                return '\n' .. item ..'\n'
        end
        if nowrapitems == cfg.keyword.nowrapitems_yes then
                local lines = {}
                for line in (item .. '\n'):gmatch('([^\n]*)\n') do
                        local prefix, content = line:match('^([*:;#]+)%s*(.*)')
                        if prefix and not content:match(cfg.pattern.nowrap) then
                                line = format(cfg.nowrap_item, prefix, content)
                        end
                        table.insert(lines, line)
                end
                item = table.concat(lines, '\n')
        end
        if item:match('^[*:;#]') then
                return '\n' .. item ..'\n'
        end
        return item
end

-- we will want this later when we want to add tstyles for hlist/plainlist
local function has_navbar()
        return args[cfg.arg.navbar] ~= cfg.keyword.navbar_off
                and args[cfg.arg.navbar] ~= cfg.keyword.navbar_plain
                and (
                        args[cfg.arg.name]
                        or mw.getCurrentFrame():getParent():getTitle():gsub(cfg.p
                                ~= cfg.pattern.navbox
                )
end

local function renderNavBar(titleCell)
        if has_navbar() then
                titleCell:wikitext(navbar{
                        [cfg.navbar.name] = args[cfg.arg.name],
                        [cfg.navbar.mini] = 1,
                        [cfg.navbar.fontstyle] = (args[cfg.arg.basestyle] or '')
                                (args[cfg.arg.titlestyle] or '') ..
                                ';background:none transparent;border:none;box-sha
                })
        end

end

local function renderTitleRow(tbl)
        if not args[cfg.arg.title] then return end

        local titleRow = tbl:tag('tr')

        local titleCell = titleRow:tag('th'):attr('scope', 'col')

        local titleColspan = 2
        if args[cfg.arg.imageleft] then titleColspan = titleColspan + 1 end
```

```
        if args[cfg.arg.image] then titleColspan = titleColspan + 1 end

        titleCell
                :cssText(args[cfg.arg.basestyle])
                :cssText(args[cfg.arg.titlestyle])
                :addClass(cfg.class.navbox_title)
                :attr('colspan', titleColspan)

        renderNavBar(titleCell)

        titleCell
                :tag('div')
                        -- id for aria-labelledby attribute
                        :attr('id', mw.uri.anchorEncode(args[cfg.arg.title]))
                        :addClass(args[cfg.arg.titleclass])
                        :css('font-size', '114%')
                        :css('margin', '0 4em')
                        :wikitext(processItem(args[cfg.arg.title]))
end

local function getAboveBelowColspan()
        local ret = 2
        if args[cfg.arg.imageleft] then ret = ret + 1 end
        if args[cfg.arg.image] then ret = ret + 1 end
        return ret
end

local function renderAboveRow(tbl)
        if not args[cfg.arg.above] then return end

        tbl:tag('tr')
                :tag('td')
                        :addClass(cfg.class.navbox_abovebelow)
                        :addClass(args[cfg.arg.aboveclass])
                        :cssText(args[cfg.arg.basestyle])
                        :cssText(args[cfg.arg.abovestyle])
                        :attr('colspan', getAboveBelowColspan())
                        :tag('div')
                                -- id for aria-labelledby attribute, if no title
                                :attr('id', args[cfg.arg.title] and nil or mw.uri
                                :wikitext(processItem(args[cfg.arg.above], args[c
end

local function renderBelowRow(tbl)
        if not args[cfg.arg.below] then return end

        tbl:tag('tr')
                :tag('td')
                        :addClass(cfg.class.navbox_abovebelow)
                        :addClass(args[cfg.arg.belowclass])
                        :cssText(args[cfg.arg.basestyle])
                        :cssText(args[cfg.arg.belowstyle])
                        :attr('colspan', getAboveBelowColspan())
                        :tag('div')
                                :wikitext(processItem(args[cfg.arg.below], args[c
end

local function renderListRow(tbl, index, listnum, listnums_size)
        local row = tbl:tag('tr')

        if index == 1 and args[cfg.arg.imageleft] then
                row
                        :tag('td')
                                :addClass(cfg.class.noviewer)
```

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                                :addClass(cfg.class.navbox_image)
                                :addClass(args[cfg.arg.imageclass])
                                :css('width', '1px')                -- Minimize wi
                                :css('padding', '0 2px 0 0')
                                :cssText(args[cfg.arg.imageleftstyle])
                                :attr('rowspan', listnums_size)
                                :tag('div')
                                        :wikitext(processItem(args[cfg.arg.image
        end

        local group_and_num = format(cfg.arg.group_and_num, listnum)
        local groupstyle_and_num = format(cfg.arg.groupstyle_and_num, listnum)
        if args[group_and_num] then
                local groupCell = row:tag('th')

                -- id for aria-labelledby attribute, if lone group with no title
                if listnum == 1 and not (args[cfg.arg.title] or args[cfg.arg.abov
                        groupCell
                                :attr('id', mw.uri.anchorEncode(args[cfg.arg.grou
                end

                groupCell
                        :attr('scope', 'row')
                        :addClass(cfg.class.navbox_group)
                        :addClass(args[cfg.arg.groupclass])
                        :cssText(args[cfg.arg.basestyle])
                        -- If groupwidth not specified, minimize width
                        :css('width', args[cfg.arg.groupwidth] or '1%')

                groupCell
                        :cssText(args[cfg.arg.groupstyle])
                        :cssText(args[groupstyle_and_num])
                        :wikitext(args[group_and_num])
        end

        local listCell = row:tag('td')

        if args[group_and_num] then
                listCell
                        :addClass(cfg.class.navbox_list_with_group)
        else
                listCell:attr('colspan', 2)
        end

        if not args[cfg.arg.groupwidth] then
                listCell:css('width', '100%')
        end

        local rowstyle  -- usually nil so cssText(rowstyle) usually adds nothing
        if index % 2 == 1 then
                rowstyle = args[cfg.arg.oddstyle]
        else
                rowstyle = args[cfg.arg.evenstyle]
        end

        local list_and_num = format(cfg.arg.list_and_num, listnum)
        local listText = args[list_and_num]
        local oddEven = cfg.marker.oddeven
        if listText:sub(1, 12) == '</div><table' then
                -- Assume list text is for a subgroup navbox so no automatic stri
                oddEven = listText:find(cfg.pattern.navbox_title) and cfg.marker
        end

        local liststyle_and_num = format(cfg.arg.liststyle_and_num, listnum)
```

```
        local listclass_and_num = format(cfg.arg.listclass_and_num, listnum)
        listCell
                :css('padding', '0')
                :cssText(args[cfg.arg.liststyle])
                :cssText(rowstyle)
                :cssText(args[liststyle_and_num])
                :addClass(cfg.class.navbox_list)
                :addClass(cfg.class.navbox_part .. oddEven)
                :addClass(args[cfg.arg.listclass])
                :addClass(args[listclass_and_num])
                :tag('div')
                        :css('padding',
                                (index == 1 and args[cfg.arg.list1padding]) or ar
                        )
                        :wikitext(processItem(listText, args[cfg.arg.nowrapitems]

        if index == 1 and args[cfg.arg.image] then
                row
                        :tag('td')
                                :addClass(cfg.class.noviewer)
                                :addClass(cfg.class.navbox_image)
                                :addClass(args[cfg.arg.imageclass])
                                :css('width', '1px')                -- Minimize wi
                                :css('padding', '0 0 0 2px')
                                :cssText(args[cfg.arg.imagestyle])
                                :attr('rowspan', listnums_size)
                                :tag('div')
                                        :wikitext(processItem(args[cfg.arg.image]
        end
end

-- uses this now to make the needHlistCategory correct
-- to use later for when we add list styles via navbox
local function has_list_class(htmlclass)
        local class_args = { -- rough order of probability of use
                cfg.arg.bodyclass, cfg.arg.listclass, cfg.arg.aboveclass,
                cfg.arg.belowclass, cfg.arg.titleclass, cfg.arg.navboxclass,
                cfg.arg.groupclass, cfg.arg.imageclass
        }
        local patterns = {
                '^' .. htmlclass .. '$',
                '%s' .. htmlclass .. '$',
                '^' .. htmlclass .. '%s',
                '%s' .. htmlclass .. '%s'
        }

        for _, arg in ipairs(class_args) do
                for _, pattern in ipairs(patterns) do
                        if mw.ustring.find(args[arg] or '', pattern) then
                                return true
                        end
                end
        end
        return false
end

local function needsHorizontalLists(border)
        if border == cfg.keyword.border_subgroup or args[cfg.arg.tracking] == cfg
                return false
        end
        return not has_list_class(cfg.pattern.hlist) and not has_list_class(cfg.p
end

local function hasBackgroundColors()
```

```
        for _, key in ipairs({cfg.arg.titlestyle, cfg.arg.groupstyle,
                cfg.arg.basestyle, cfg.arg.abovestyle, cfg.arg.belowstyle}) do
                if tostring(args[key]):find('background', 1, true) then
                        return true
                end
        end
        return false
end

local function hasBorders()
        for _, key in ipairs({cfg.arg.groupstyle, cfg.arg.basestyle,
                cfg.arg.abovestyle, cfg.arg.belowstyle}) do
                if tostring(args[key]):find('border', 1, true) then
                        return true
                end
        end
        return false
end

local function isIllegible()
        local styleratio = require('Module:Color contrast')._styleratio
        for key, style in pairs(args) do
                if tostring(key):match(cfg.pattern.style) then
                        if styleratio{mw.text.unstripNoWiki(style)} < 4.5 then
                                return true
                        end
                end
        end
        return false
end

local function getTrackingCategories(border)
        local cats = {}
        if needsHorizontalLists(border) then table.insert(cats, cfg.category.hori
        if hasBackgroundColors() then table.insert(cats, cfg.category.background_
        if isIllegible() then table.insert(cats, cfg.category.illegible) end
        if hasBorders() then table.insert(cats, cfg.category.borders) end
        return cats
end

local function renderTrackingCategories(builder, border)
        local title = mw.title.getCurrentTitle()
        if title.namespace ~= 10 then return end -- not in template space
        local subpage = title.subpageText
        if subpage == cfg.keyword.subpage_doc or subpage == cfg.keyword.subpage_s
                or subpage == cfg.keyword.subpage_testcases then return end

        for _, cat in ipairs(getTrackingCategories(border)) do
                builder:wikitext('[[Category:' .. cat .. ']]')
        end
end

local function renderMainTable(border, listnums)
        local tbl = mw.html.create('table')
                :addClass(cfg.class.nowraplinks)
                :addClass(args[cfg.arg.bodyclass])

        local state = args[cfg.arg.state]
        if args[cfg.arg.title] and state ~= cfg.keyword.state_plain and state ~=
                if state == cfg.keyword.state_collapsed then
                        state = cfg.class.collapsed
                end
                tbl
                        :addClass(cfg.class.collapsible)
```

```
                        :addClass(state or cfg.class.autocollapse)
        end

        tbl:css('border-spacing', 0)
        if border == cfg.keyword.border_subgroup or border == cfg.keyword.border_
                tbl
                        :addClass(cfg.class.navbox_subgroup)
                        :cssText(args[cfg.arg.bodystyle])
                        :cssText(args[cfg.arg.style])
        else  -- regular navbox - bodystyle and style will be applied to the wrap
                tbl
                        :addClass(cfg.class.navbox_inner)
                        :css('background', 'transparent')
                        :css('color', 'inherit')
        end
        tbl:cssText(args[cfg.arg.innerstyle])

        renderTitleRow(tbl)
        renderAboveRow(tbl)
        local listnums_size = #listnums
        for i, listnum in ipairs(listnums) do
                renderListRow(tbl, i, listnum, listnums_size)
        end
        renderBelowRow(tbl)

        return tbl
end

local function add_navbox_styles()
        local frame = mw.getCurrentFrame()
        -- This is a lambda so that it doesn't need the frame as a parameter
        local function add_user_styles(templatestyles)
                if templatestyles and templatestyles ~= '' then
                        return frame:extensionTag{
                                name = 'templatestyles', args = { src = templates
                        }
                end
                return ''
        end

        -- get templatestyles. load base from config so that Lua only needs to do
        -- the work once of parser tag expansion
        local base_templatestyles = cfg.templatestyles
        local templatestyles = add_user_styles(args[cfg.arg.templatestyles])
        local child_templatestyles = add_user_styles(args[cfg.arg.child_templates

        -- The 'navbox-styles' div exists for two reasons:
        --  1. To wrap the styles to work around T200206 more elegantly. Instead
        --     of combinatorial rules, this ends up being linear number of CSS ru
        --  2. To allow MobileFrontend to rip the styles out with 'nomobile' such
        --     they are not dumped into the mobile view.
        return mw.html.create('div')
                :addClass(cfg.class.navbox_styles)
                :addClass(cfg.class.nomobile)
                :wikitext(base_templatestyles .. templatestyles .. child_templates
                :done()
end

function p._navbox(navboxArgs)
        args = navboxArgs
        local listnums = {}

        for k, _ in pairs(args) do
                if type(k) == 'string' then
```

```
                        local listnum = k:match(cfg.pattern.listnum)
                        if listnum then table.insert(listnums, tonumber(listnum))
                end
        end
        table.sort(listnums)

        local border = mw.text.trim(args[cfg.arg.border] or args[1] or '')
        if border == cfg.keyword.border_child then
                border = cfg.keyword.border_subgroup
        end

        -- render the main body of the navbox
        local tbl = renderMainTable(border, listnums)

        local res = mw.html.create()
        -- render the appropriate wrapper for the navbox, based on the border par

        if border == cfg.keyword.border_none then
                res:node(add_navbox_styles())
                local nav = res:tag('div')
                        :attr('role', 'navigation')
                        :node(tbl)
                -- aria-labelledby title, otherwise above, otherwise lone group
                if args[cfg.arg.title] or args[cfg.arg.above] or (args[cfg.arg.gr
                        and not args[cfg.arg.group2]) then
                        nav:attr(
                                'aria-labelledby',
                                mw.uri.anchorEncode(
                                        args[cfg.arg.title] or args[cfg.arg.above
                                )
                        )
                else
                        nav:attr('aria-label', cfg.aria_label)
                end
        elseif border == cfg.keyword.border_subgroup then
                -- We assume that this navbox is being rendered in a list cell of
                -- parent navbox, and is therefore inside a div with padding:0em
                -- We start with a </div> to avoid the padding being applied, and
                -- end add a <div> to balance out the parent's </div>
                res
                        :wikitext('</div>')
                        :node(tbl)
                        :wikitext('<div>')
        else
                res:node(add_navbox_styles())
                local nav = res:tag('div')
                        :attr('role', 'navigation')
                        :addClass(cfg.class.navbox)
                        :addClass(args[cfg.arg.navboxclass])
                        :cssText(args[cfg.arg.bodystyle])
                        :cssText(args[cfg.arg.style])
                        :css('padding', '3px')
                        :node(tbl)
                -- aria-labelledby title, otherwise above, otherwise lone group
                if args[cfg.arg.title] or args[cfg.arg.above]
                        or (args[cfg.arg.group1] and not args[cfg.arg.group2]) th
                        nav:attr(
                                'aria-labelledby',
                                mw.uri.anchorEncode(args[cfg.arg.title] or args[c
                        )
                else
                        nav:attr('aria-label', cfg.aria_label)
                end
        end
```

```
        if (args[cfg.arg.nocat] or cfg.keyword.nocat_false):lower() == cfg.keywo
                renderTrackingCategories(res, border)
        end
        return striped(tostring(res), border)
end

function p.navbox(frame)
        if not getArgs then
                getArgs = require('Module:Arguments').getArgs
        end
        args = getArgs(frame, {wrappers = {cfg.pattern.navbox}})

        -- Read the arguments in the order they'll be output in, to make referenc
        -- number in the right order.
        local _
        _ = args[cfg.arg.title]
        _ = args[cfg.arg.above]
        -- Limit this to 20 as covering 'most' cases (that's a SWAG) and because
        -- iterator approach won't work here
        for i = 1, 20 do
                _ = args[format(cfg.arg.group_and_num, i)]
                _ = args[format(cfg.arg.list_and_num, i)]
        end
        _ = args[cfg.arg.below]

        return p._navbox(args)
end

return p
```