

# Component Documentation

## Menu

A flexible and feature-rich dropdown menu component for creating context menus, navigation dropdowns, and action menus. Supports icons, descriptions, multi-column layout, various positioning options, and full accessibility.

## How to use

```
import { AavaMenuComponent } from "@aava/play-core" ;
```

## Basic Usage

The Menu component provides a dropdown interface that can be positioned relative to a trigger element. It supports various menu items with different states and configurations.

- Default behavior: Bottom positioning, single column layout, with icons and titles.
- Usage: Pass an array of menu items to the items input and control visibility with the visible input.

```

<div class="menu-container">
  <button (click)="toggleMenu()">Open Menu</button>

  <aava-menu
    [items]="menuItems"
    [visible]="showMenu"
    (itemSelected)="handleItemSelected($event)">
  </aava-menu>
</div>

---

import { Component } from "@angular/core";
import { AavaMenuComponent } from "@aava/play-core";

@Component({
  selector: "app-menu-basic",
  standalone: true,
  imports: [AavaMenuComponent],
})
export class MenuBasicComponent {
  showMenu = false;

  menuItems = [
    { label: "Dashboard", route: "/dashboard" },
    { label: "Profile", route: "/profile" },
    { label: "Settings", route: "/settings" },
    { label: "Help", route: "/help" },
    { label: "Logout", route: "/logout" },
  ];

  toggleMenu() {
    this.showMenu = !this.showMenu;
  }

  handleItemSelected(event: any) {
    console.log("Selected:", event.label);
    this.showMenu = false;
  }
}

```

## With Icons

Menu items can display icons alongside their labels for better visual recognition and user experience.

- **How:** Add an icon property to menu items with the icon name.
- **When to use:** For quick recognition, consistent visual language, or when space allows.

```

<div class="menu-container">
  <button (click)="toggleMenu()">Menu with Icons</button>

  <aava-menu
    [items]="menuItems"
    [visible]="showMenu"
    [displayOptions]="#{ showIcon: true, showTitle: true }"
    (itemSelected)="handleItemSelected($event)">
  </aava-menu>
</div>

---

import { Component } from "@angular/core";
import { AavaMenuComponent } from "@aava/play-core";

@Component({
  selector: "app-menu-with-icons",
  standalone: true,
  imports: [AavaMenuComponent],
})
export class MenuWithIconsComponent {
  showMenu = false;

  menuItems = [
    { label: "Dashboard", icon: "home", route: "/dashboard" },
    { label: "Profile", icon: "user", route: "/profile" },
    { label: "Settings", icon: "settings", route: "/settings" },
    { label: "Notifications", icon: "bell", route: "/notifications" },
    { label: "Help", icon: "help-circle", route: "/help" },
    { label: "Logout", icon: "log-out", route: "/logout" },
  ];

  toggleMenu() {
    this.showMenu = !this.showMenu;
  }

  handleItemSelected(event: any) {
    console.log("Selected:", event.label);
    this.showMenu = false;
  }
}

```

## With Descriptions

Menu items can include descriptions to provide additional context or information about each option.

- **How:** Add a description property to menu items.
- **When to use:** For complex menus where items need additional explanation or context.

```

<div class="menu-container">
  <button (click)="toggleMenu()">Menu with Descriptions</button>

  <aava-menu
    [items]="menuItems"
    [visible]="showMenu"
    [displayOptions]="#{ showIcon: true, showTitle: true, showDescription: true }"
    (itemSelected)="handleItemSelected($event)">
  </aava-menu>
</div>

---

import { Component } from "@angular/core";
import { AavaMenuComponent } from "@aava/play-core";

@Component({
  selector: "app-menu-with-descriptions",
  standalone: true,
  imports: [AavaMenuComponent],
})
export class MenuWithDescriptionsComponent {
  showMenu = false;

  menuItems = [
    {
      label: "Dashboard",
      icon: "home",
      description: "View your main dashboard and overview",
      route: "/dashboard",
    },
    {
      label: "Profile",
      icon: "user",
      description: "Manage your account settings and preferences",
      route: "/profile",
    },
    {
      label: "Settings",
      icon: "settings",
      description: "Configure application settings and options",
      route: "/settings",
    },
    {
      label: "Help",
      icon: "help-circle",
      description: "Get help and support documentation",
      route: "/help",
    },
  ];
}

toggleMenu() {
  this.showMenu = !this.showMenu;
}

handleItemSelected(event: any) {
  console.log("Selected:", event.label);
  this.showMenu = false;
}
}

```

## Disabled Items

Menu items can be disabled to indicate unavailable options or actions that require certain conditions.

- How: Set disabled: true on menu items.
- When to use: For conditional actions, permission-based menus, or unavailable features.

```

<div class="menu-container">
  <button (click)="toggleMenu()">Menu with Disabled Items</button>

  <aava-menu
    [items]="menuItems"
    [visible]="showMenu"
    [displayOptions]="#{ showIcon: true, showTitle: true, showDescription: true }"
    (itemSelected)="handleItemSelected($event)">
  </aava-menu>
</div>

---

import { Component } from "@angular/core";
import { AavaMenuComponent } from "@aava/play-core";

@Component({
  selector: "app-menu-disabled-items",
  standalone: true,
  imports: [AavaMenuComponent],
})
export class MenuDisabledItemsComponent {
  showMenu = false;

  menuItems = [
    {
      label: "Dashboard",
      icon: "home",
      description: "View your main dashboard",
      route: "/dashboard",
    },
    {
      label: "Profile",
      icon: "user",
      description: "Manage your account settings",
      route: "/profile",
    },
    {
      label: "Premium Features",
      icon: "star",
      description: "Upgrade to access premium features",
      disabled: true,
    },
    {
      label: "Advanced Analytics",
      icon: "bar-chart",
      description: "Advanced analytics (requires premium)",
      disabled: true,
    },
    {
      label: "Help",
      icon: "help-circle",
      description: "Get help and support",
      route: "/help",
    },
  ];
}

toggleMenu() {
  this.showMenu = !this.showMenu;
}

```

```

        handleItemSelected(event: any) {
            console.log("Selected:", event.label);
            this.showMenu = false;
        }
    }
}

```

## Features

### Flexible Positioning

- 8 Position Options : top, bottom, left, right, and their start/end variants
- Alignment Control : start, center, end alignment within positioned area
- Offset Configuration : Customizable spacing from trigger element
- Auto Flip : Automatic position adjustment when space is limited

### Rich Content Support

- Icons : Lucide icons with customizable size and colors
- Descriptions : Additional text for context and explanation
- Active States : Visual indication of currently active/selected items
- Disabled States : Clear indication of unavailable options

### Layout Options

- Multi-Column : Configurable column layout for extensive menus
- Responsive Design : Adapts to different screen sizes and orientations
- Flexible Sizing : Automatic width adjustment based on content
- Custom Styling : Extensive CSS custom properties for theming

### Accessibility

- Keyboard Navigation : Full keyboard support with arrow keys
- Screen Reader : Proper ARIA attributes and semantic structure
- Focus Management : Clear focus indicators and logical tab order
- High Contrast : Support for high contrast mode and color preferences

### API Reference

#### Inputs

Property	Type	Default	Description
items	MenuItem[]	[]	Array of menu items to display
visible	boolean	false	Controls menu visibility

Property	Type	Default	Description
itemsPerColumn	number	3	Number of items per column in multi-column layout
positionConfig	MenuPositionConfig	See default config below	Configuration for menu positioning
displayOptions	MenuItemDisplayOptions	See default options below	Configuration for item display
customStyles	Record	{}	Custom CSS styles to apply to the menu

## Outputs

Property	Type	Description
itemSelected	EventEmitter<{route?: string; label: string; item: MenuItem}>	Emitted when a menu item is clicked

## MenuItem Interface

```
interface MenuItem { label : string ; // Display text for the menu item description ? : string ; // Optional description text route ? : string ; // Optional route for navigation icon ? : string ; // Optional icon name (Lucide) disabled ? : boolean ; // Whether the item is disabled divider ? : boolean ; // Whether to show a divider line customData ? : Record < string , unknown > ; // Custom data for the item }
```

## MenuPositionConfig Interface

```
interface MenuPositionConfig { position ? : MenuPosition ; // Position relative to trigger alignment ? : MenuAlignment ; // Alignment within positioned area offset ? : number ; // Distance from trigger element autoFlip ? : boolean ; // Auto-adjust position if needed } type MenuPosition = "top" | "bottom" | "left" | "right" | "top-start" | "top-end" | "bottom-start" | "bottom-end" ; type MenuAlignment = "start" | "center" | "end" ;
```

## MenuItemDisplayOptions Interface

```
interface MenuItemDisplayOptions { showIcon ? : boolean ; // Whether to show icons showTitle ? : boolean ; // Whether to show item titles showDescription ? : boolean ; // Whether to show descriptions iconSize ? : number ; // Size of icons in pixels titleWeight ? : "normal" | "medium" | "semibold" | "bold" ; // Font weight for titles descriptionSize ? : "xs" | "sm" | "md" | "lg" ; // Font size for descriptions }
```

## Default Configurations

```
// Default position config { position : 'bottom' , alignment : 'start' , offset : 8 , } // Default display options {  
showIcon : true , showTitle : true , showDescription : true , iconSize : 24 , titleWeight : 'medium' ,  
descriptionSize : 'sm' , }
```

## CSS Custom Properties

The component uses CSS custom properties for theming:

Property	Description
--menu-min-width	Minimum width of the menu
--menu-background	Background color of the menu
--menu-border-radius	Border radius of the menu
--menu-shadow	Box shadow of the menu
--menu-border	Border of the menu
--menu-padding	Padding inside the menu
--menu-margin-top	Top margin for positioning
--menu-transform-y	Transform distance for animations
--menu-transition	Transition timing for animations
--menu-z-index	Z-index for layering
--menu-columns-gap	Gap between columns
--menu-column-min-width	Minimum width of each column
--menu-item-gap	Gap between icon and content
--menu-item-padding	Padding of menu items
--menu-item-border-radius	Border radius of menu items
--menu-item-background	Background of menu items
--menu-item-color	Text color of menu items
--menu-item-hover-background	Background on hover
--menu-item-hover-color	Text color on hover
--menu-item-active-background	Background when active
--menu-item-active-color	Text color when active
--menu-item-disabled-background	Background when disabled
--menu-item-disabled-color	Text color when disabled
--menu-item-margin	Margin of menu items
--menu-item-first-margin-top	Top margin of first item
--menu-item-last-margin-bottom	Bottom margin of last item

Property	Description
--menu-item-transition	Transition timing for items
--menu-item-icon-size	Size of item icons
--menu-item-icon-color	Color of item icons
--menu-item-icon-active-color	Color of active item icons
--menu-item-icon-transition	Transition timing for icons
--menu-item-hover-icon-filter	Icon filter on hover
--menu-item-active-icon-filter	Icon filter when active
--menu-item-content-gap	Gap between title and description
--menu-item-title-font-weight	Font weight of titles
--menu-item-title-font-size	Font size of titles
--menu-item-title-color	Color of titles
--menu-item-title-active-color	Color of active titles
--menu-item-title-active-font-weight	Font weight of active titles
--menu-item-title-line-height	Line height of titles
--menu-item-title-transition	Transition timing for titles
--menu-item-description-font-size	Font size of descriptions
--menu-item-description-color	Color of descriptions
--menu-item-description-active-color	Color of active descriptions
--menu-item-description-line-height	Line height of descriptions
--menu-item-description-transition	Transition timing for descriptions

## Best Practices

### Content Guidelines

- Clear Labels : Use concise, descriptive labels for menu items
- Consistent Icons : Use consistent iconography throughout the menu
- Helpful Descriptions : Provide context when items need explanation
- Logical Grouping : Group related items together in the menu

### Interaction Design

- Trigger Elements : Ensure trigger elements are clearly identifiable
- Positioning : Choose positioning that doesn't obscure important content
- Keyboard Support : Test keyboard navigation thoroughly
- Touch Support : Consider touch interactions on mobile devices

## Accessibility

- ARIA Labels : Provide appropriate ARIA labels for screen readers
- Focus Management : Ensure proper focus handling when menu opens/closes
- Color Contrast : Maintain sufficient contrast for all text and icons
- Motion Sensitivity : Respect user motion preferences

## Performance

- Efficient Rendering : Use OnPush change detection for better performance
- Event Handling : Properly handle click events to prevent bubbling
- Memory Management : Clean up event listeners and subscriptions
- Lazy Loading : Consider lazy loading for large menus

## Use Cases

### Context Menus

Right-click context menus for actions on selected items:

```
< aava - menu [ items ] = "contextMenuItems" [ visible ] = "showContextMenu" [ positionConfig ] = "{ position: 'bottom-start' }" ( itemSelected ) = "handleContextMenuAction($event)" > < / aava - menu >
```

### Navigation Dropdowns

Dropdown navigation menus for main navigation:

```
< aava - menu [ items ] = "navigationItems" [ visible ] = "showNavMenu" [ positionConfig ] = "{ position: 'bottom', alignment: 'center' }" [ displayOptions ] = "{ showIcon: true, showDescription: false }" > < / aava - menu >
```

### Action Menus

Action menus for buttons or toolbar items:

```
< aava - menu [ items ] = "actionItems" [ visible ] = "showActionMenu" [ positionConfig ] = "{ position: 'bottom-end' }" [ itemsPerColumn ] = "1" > < / aava - menu >
```

### Application Launchers

Multi-column menus for application or feature launchers:

```
< aava - menu [ items ] = "appItems" [ visible ] = "showAppMenu" [ positionConfig ] = "{ position: 'bottom', alignment: 'center' }" [ itemsPerColumn ] = "4" [ displayOptions ] = "{ showIcon: true, showDescription: true }" > < / aava - menu >
```

## Accessibility Guidelines

### Keyboard Navigation

The menu supports full keyboard navigation:

- Enter/Space : Activate the currently focused menu item
- Arrow Keys : Navigate between menu items
- Escape : Close the menu
- Tab : Move focus to next focusable element

## Screen Reader Support

The component provides comprehensive screen reader support:

- ARIA Labels : Proper labeling for menu and menu items
- Role Attributes : Correct ARIA roles for menu structure
- State Announcements : Clear announcements of menu state changes
- Focus Indicators : Visible focus indicators for keyboard users

## Color and Contrast

- WCAG Compliance : All text and icons meet WCAG AA contrast ratios
- High Contrast Mode : Component works with system high contrast settings
- Color Independence : Information is not conveyed by color alone

## Motion and Animation

- Respects Preferences : Animation respects user motion preferences
- Reduced Motion : Provides alternative interaction for motion-sensitive users
- Clear Feedback : Visual feedback is immediate and clear