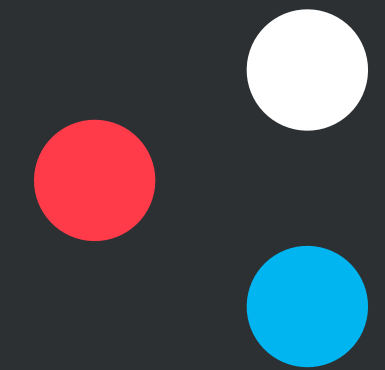# Vaadin Fact Sheet: Components

A modern set of web components
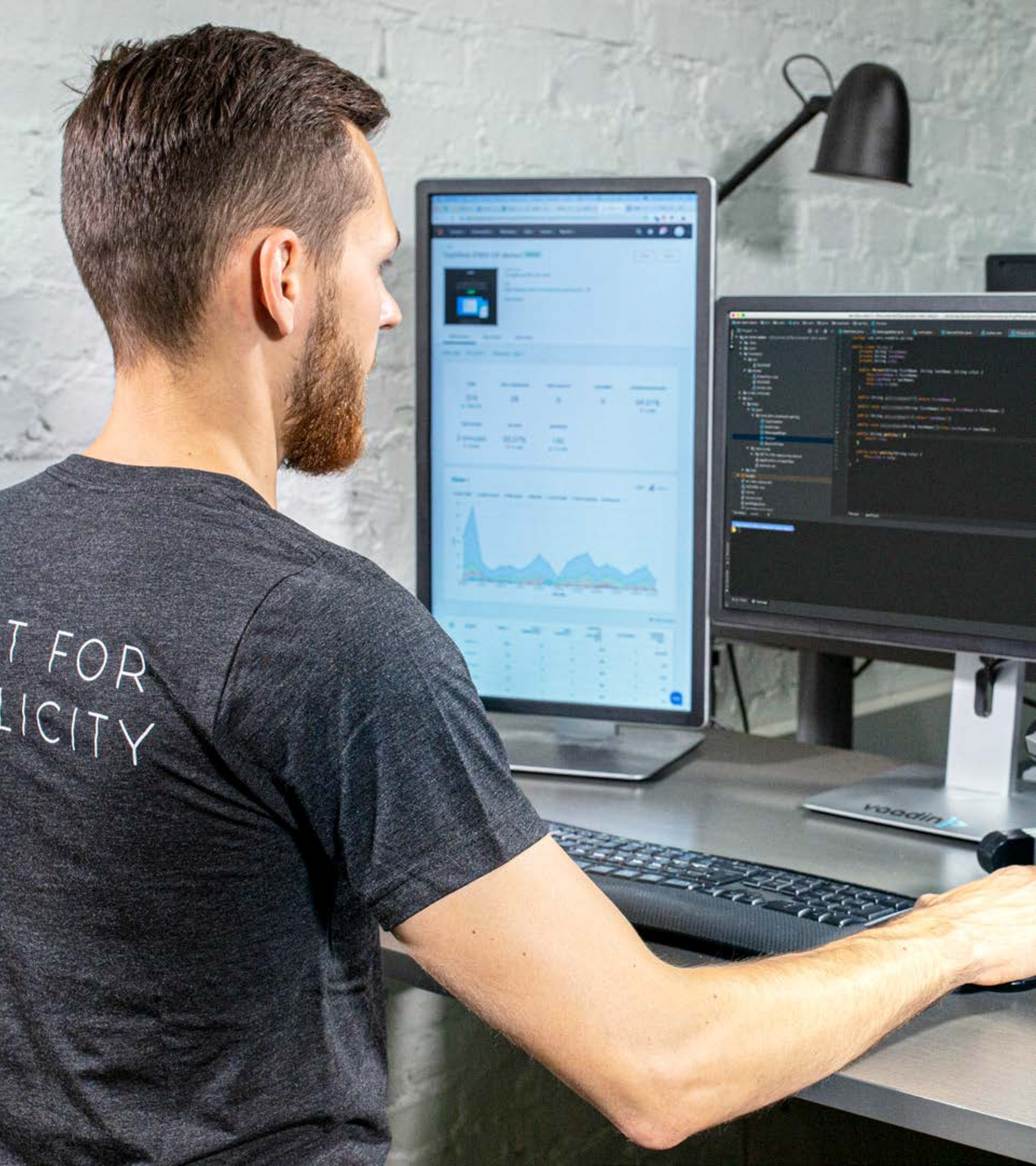for business applications.

What are Vaadin components?

Vaadin components are **reusable and customizable web components that you can use as building blocks to create great web apps**. The comprehensive component library is full of high-performing and adaptable UI components created by our seasoned developers.

The open-source Vaadin Core includes free components and additional commercial components are available with our professional subscriptions. There is also an open library of components contributed by members of the Vaadin community. The components include features that vary from enterprise-grade chart visualizations to a common deck of cards.

Based on web standards for performance and stability

Vaadin components are **based on the W3C Web Components standards**; a collection of web standards that allow you to create new HTML tags with custom names. The components encapsulate their logic and styles in a single reusable HTML element. Because Vaadin components comply with these standards, they work natively in all modern browsers. They can be used with the Vaadin framework, or independently.

Features

Reliable: The components are constantly updated and vigorously tested to ensure that they work seamlessly together and stay up to date. The components that are part of the LTS releases come with a 5-year warranty.

Themeable: The components have a modern, professional look and feel that can easily be styled and adapted to suit your application.

Integrated: You can run the components directly in the Vaadin framework.

Benefits

Speed: Build professional looking UIs faster with pre-made components.

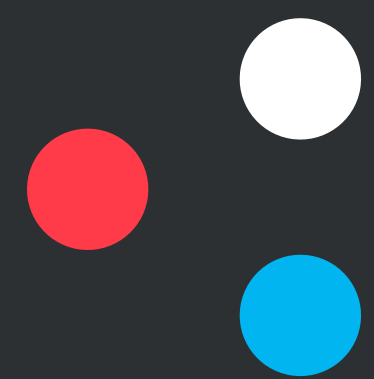**Reduced cost:** Save valuable time and money by writing less code.

Reliable performance: Vaadin components are of the best quality and thoroughly tested for a great UX.

Consistency: Achieve a coherent professional appearance throughout your separate web applications.

Cross-platform compatibility: Just like the Vaadin framework, all components are designed to work equally well with mobile touch screens and desktop mouse and keyboard input.
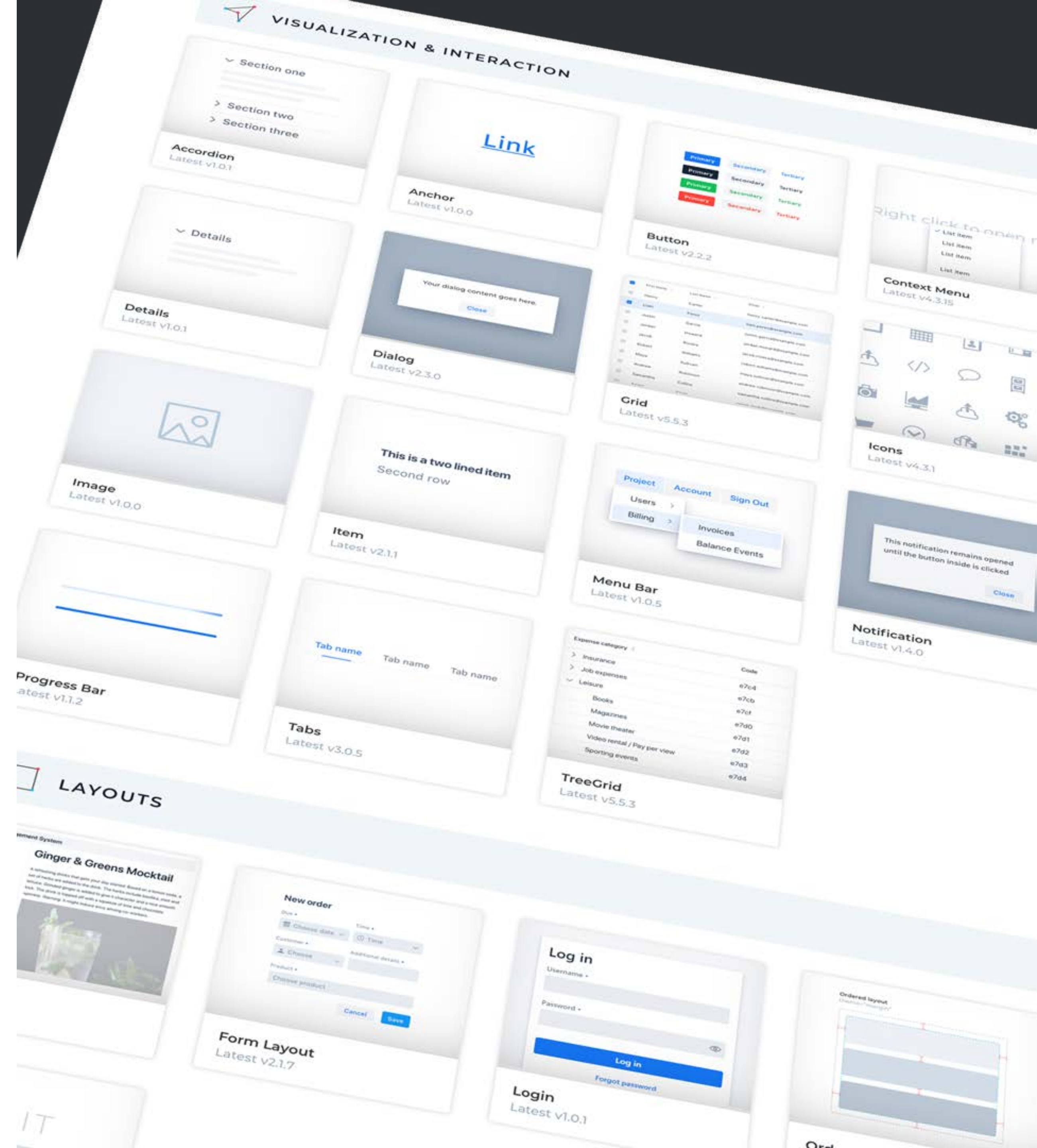
Component Categories

Free Components

Components in the Vaadin Core and Core+ are open source and free to use and modify. These include:

• **Form input components**, such as checkboxes, date and time pickers, text and password fields, and file uploads (with a progress bar).

• **Visualization & interaction components**, such as dialogs and notification popups, data grids, tabs, icons, and more.

• **Layout components**, including complete app layout templates with login, split and form layout options.

All free open-source components operate under the Apache 2.0 license and their code can be found on GitHub.

You can find the full list of free components on the Components page.

Component Highlight - Vaadin Grid

Vaadin Grid is a popular web component for displaying tabular data. You can find installation instructions and examples of Vaadin Grid [here](#). Example image of a Vaadin grid application:

Grid features:

Lazy loading: Lazily load data from any data source.

Large volume handling: Present and scroll through hundreds of thousands of lines of data in a single UI component.

Custom headers: Combine multiple rows and display components in your grid headers.

Smooth scrolling: Achieve lightning-fast and smooth hardware-accelerated scrolling by reusing DOM elements.

Super efficiency: Use custom renderers to present custom data.

Expanding rows: Display hidden data with expandable detail rows.

Touch and keyboard input: Support mobile touch events and desktop keyboard navigation.

Customizable themes: Choose between the Lumo and Material theme, or add custom styles to suit your application.

Professional Components

Commercial components included in **Pro, Prime and Enterprise subscriptions** are advanced and add even more functionality. Current professional components include:

Board: Flexible and responsive layouts for building dashboard views.

CRUD: Easily handle Create, Read, Update and Delete operations.

Charts: A library of feature-rich and interactive graphs for data visualization.

Confirm Dialog: A straightforward web component asking the user to confirm an action.
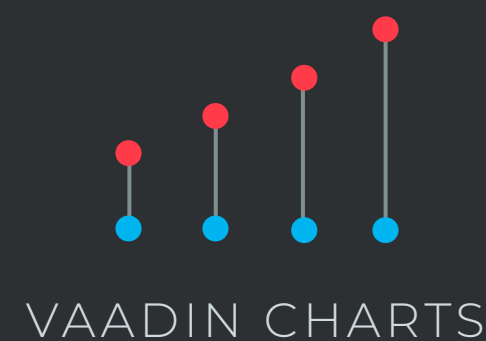
Cookie Consent: A customizable cookie-consent banner for first-time visitors to your application.

Grid Pro: An extension to Vaadin Grid with grid cell inline editing and smooth keyboard navigation.

Rich Text Editor: Text input with formatting in a rich text editor.

Spreadsheet: Excel file integration into your web applications. Read, write and edit XLSX files, supports Excel formulas, protected cells, freeze panes, simple conditional formatting and more (Vaadin 8 only).

You can find a detailed description of every component on the Components page.
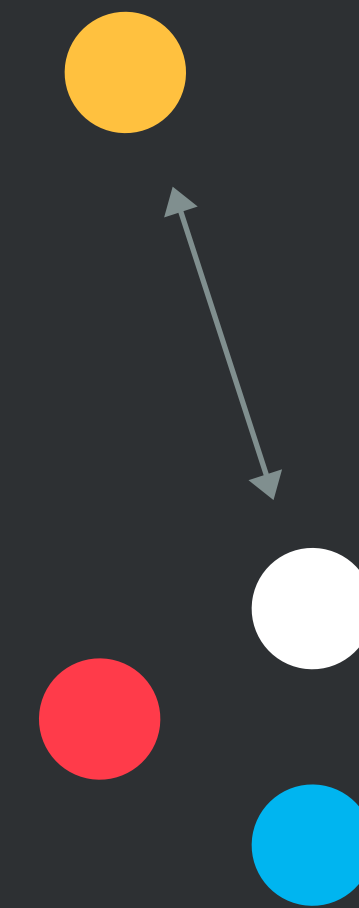
VAADIN CHARTS

A feature-rich interactive graph library that answers
the data visualization needs of modern web applications

Custom components

If you can't find a component that suits your specific needs, you can request a **custom-made component from our Vaadin experts** who have developed hundreds of Java and web components. We have built many components for customers, including Autocomplete and Chat components. You can either order a component directly from us, or through our Component Factory at a discounted rate.

Component Factory

The Component Factory is a service that shares your custom-made component with other Prime and Enterprise customers and provides you with a discount in return. You can save up to 60% of the development cost for your component and you also get access to other shared customer components.

The Component Factory is included in Prime and Enterprise subscriptions. You can find more information, including a downloadable handout and examples of custom-made components, on the [Component Factory page](#).

Community Components

Members of the Vaadin developer community regularly contribute their own components. Several Vaadin employees publish their components in this way. These 3rd-party components are free to use and can be found, along all other components, in the [Vaadin directory](#).