vaadin }>

Vaadin
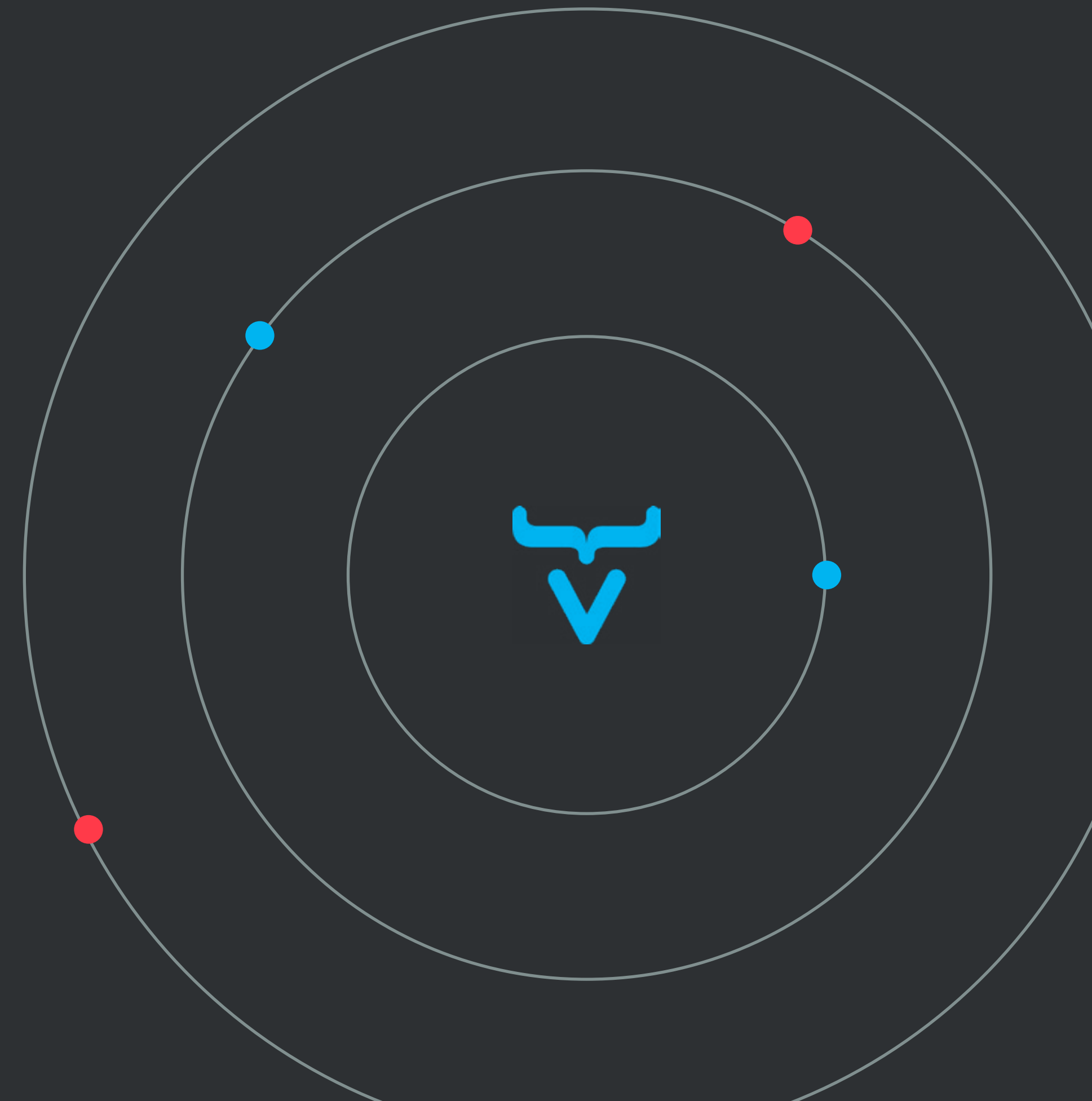# Fact Sheet

An open-source framework
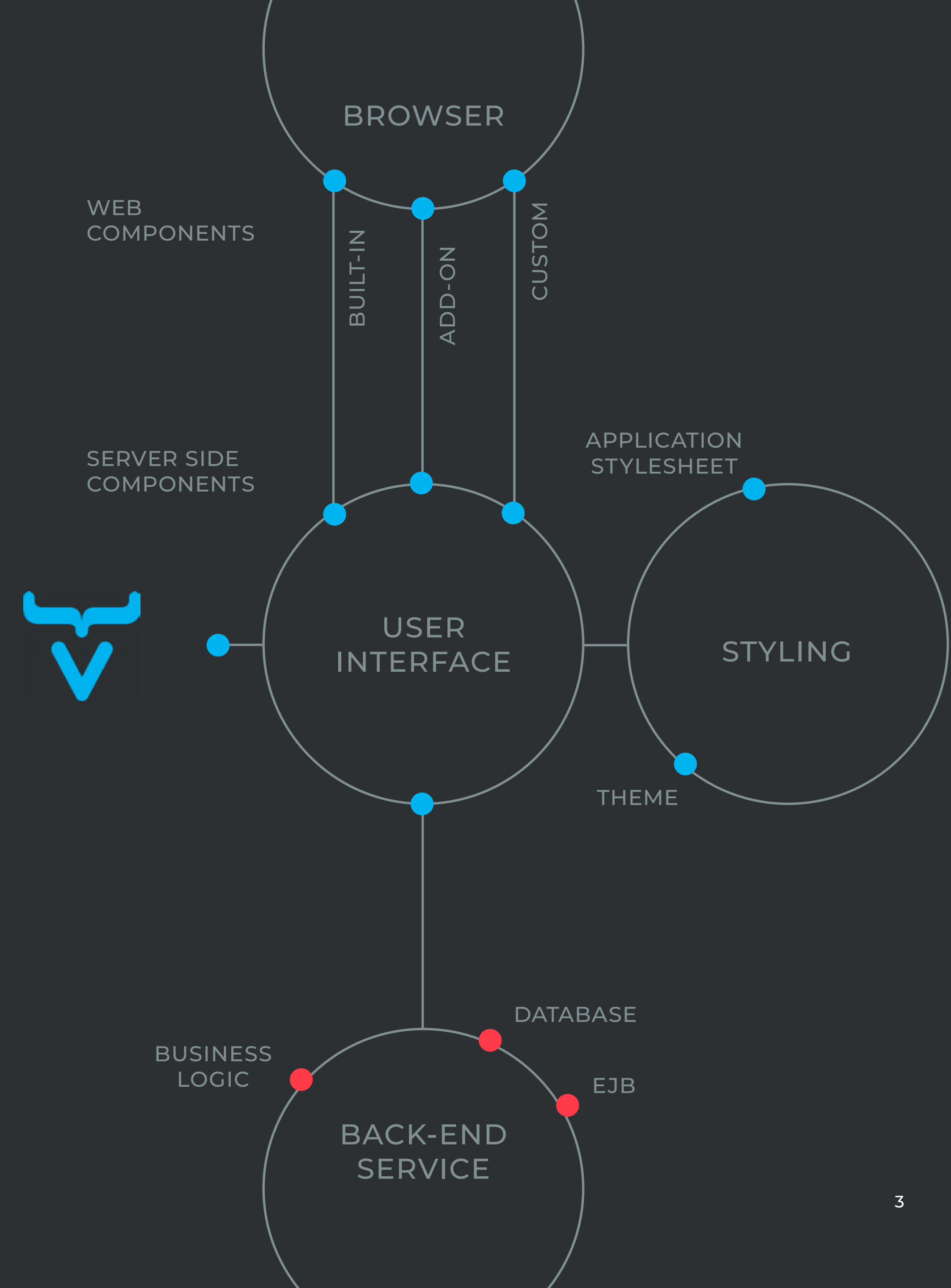for building web apps in Java.

Vaadin is a web framework
that enables developers to write web applications in Java,
without the need to use client-side technologies like HTML or JavaScript.
It's built specifically for business applications with a focus on accessible,
good-looking and intuitive UIs.

How does Vaadin work?

Vaadin allows you to build your entire application, from backend to frontend, with an **intuitive Java API**. The included tools and components **help you craft an attractive UI**, offering a great user experience that is accessible on all devices, and allow you to focus on building functionality.

With Vaadin, your UI code runs on the server alongside your business logic. It takes care of routing and client-server communication transparently, quickly and securely. **Vaadin applications are designed to work seamlessly on all platforms**, enabling you to code once and run everywhere, instead of programming separate applications for different devices or operating systems.

Vaadin differs from other web frameworks by running most of the logic on the server-side with powerful abstraction capabilities that reduce the complexity of your code. Its components allow you to build functionality quickly on a stable API. **Vaadin applications are simple and secure to develop and use**.

BROWSER

WEB COMPONENTS

BUILT-IN

ADD-ON

CUSTOM

SERVER SIDE COMPONENTS

APPLICATION STYLESHEET

USER INTERFACE

STYLING

THEME

DATABASE

BUSINESS LOGIC

EJB

BACK-END SERVICE

What is Vaadin used for?

Vaadin is used for building modern web applications. These are examples of companies successfully using Vaadin in their mission-critical software:

- PERSEO: A visual analytics solution for the aeronautical industry by Crida.

- FA Platform: A modern web-based solution for investment management by FA Solutions.

- KemConnect: A platform for collecting, viewing and analyzing customer data from multiple sources by Kemira.

Vaadin has a growing community of about 150 000 developers from around the globe and is used by 40% of Fortune 100 companies. You can read more about them on the Customer stories page.

Progressive web applications

Vaadin applications can be deployed as installable **progressive web applications (PWAs) that run in the browser, but look and feel like native software**.

Companies are often required to have their business applications accessible on multiple platforms. However, deploying and maintaining several versions of the same application is time consuming and expensive. **PWAs decrease development cost** by reducing the amount of code that needs to be written. They also have an increased reach, thanks to the **cross-platform compatibility** that is lacking in native applications. These features make PWAs a great and cost-effective solution, especially for business applications.

How can Vaadin help you?

These are some of the advantages of using the Vaadin framework:

+ **Faster development:** Create applications faster with ready-made components with a single code base that uses one programming language for both mobile and desktop.

+ **Flat learning curve:** Develop web applications as if they were desktop applications using the Java programming language.

+ **Reduced cost:** Since a Vaadin application is a web application, you only need to deploy your application in one place to let your customers access the latest version on any device.

+ **Reliability:** Web and Java standards guarantee a stable and battle-proven platform to build on for the long term.

+ **Security:** Vaadin applications run on the server, while handling communication with the client securely.

+ **Compatibility:** Code once and run everywhere instead of programming different versions for different platforms.

+ **No lock-ins**: Enjoy open-source transparency backed by long-term support and professional tools and services.

+ **Flexibility:** Take advantage of the high-quality libraries, frameworks, and tools from the Java ecosystem directly in your presentation layer.

Key Features

Java UI - Vaadin is the only framework that allows you to build a UI that runs on the server side completely in Java. Vaadin apps run securely and handle client-server communication automatically.

Flexible development models - You can use Java, templates or mix and match both approaches to develop the UI. This ensures your development team finds an option that works best for them.

Web Components - A library of feature-rich and customizable UI components that allow you to build UIs with a great look and feel. The components support both touch, and mouse and keyboard input for comfortable operation on mobile and desktop browsers.

Data Binding - Built for business applications with extensive support for binding data to forms and grids.

Stable API - Well suited for business-critical applications and longevity by ensuring your code remains compatible with new releases.

First-party support - A direct hotline to the experts and the team that built the framework.

Progressive web applications - The option to deploy your web application as an installable PWA that looks and feels like native software. PWAs can also enable offline functionality.
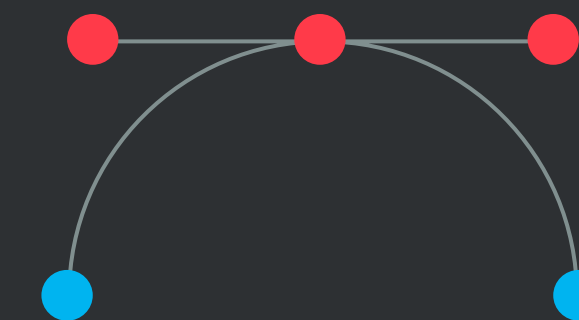
Commercial services

The Vaadin core is open source and free under the Apache 2.0 license. A commercial subscription offers you add-on products and services, such as:

Professional tools - An extended library of additional high-quality components, Vaadin Designer for visual UI building and Vaadin TestBench for rigorous testing.

Expert support - Hands-on help directly from the developers that build Vaadin.

Extended support - Enterprise customers have the option to extend support of a Vaadin version for an additional 10 years.

Collaboration - Have Vaadin experts join your development team for increased productivity and accelerated application deployment.

VAADIN DESIGNER

Build your Vaadin UI:s
faster with drag & drop editor

Consulting - Vaadin has decades of experience in consulting work for both big and small companies. The Vaadin team can also implement a complete application for you.

Component factory - Custom components built by an expert team that has built over a hundred Java and web components.

Learning materials - Plenty of text and video resources to learn Vaadin. Vaadin also offers tailored training for your business' development.

You can find the subscription tiers on the Pricing page.

VAADIN CHARTS

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

Versions

Vaadin is continually updated to support the latest standards in web development. It comes in both long-term-support (LTS) versions and non-LTS feature releases:

LTS versions: The current LTS version is Vaadin 14.x. A new LTS version is released roughly every 2 years. This version is recommended for most users, by default.

Non-LTS versions: Feature releases introduce new technologies that eventually end up in the following LTS version. The latest feature release version is Vaadin 15 for users who want TypeScript support.

Vaadin 8: An older LTS version that is maintained until February 2022, or with extended support for an additional 10 years. This version supports old technology stacks and is therefore not recommended for new users.

Vaadin 7 and older versions are only supported under enterprise subscriptions.