

VAADIN FUNDAMENTALS

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Agenda

What is Vaadin

Architecture

Setup & Tools

- Hello Vaadin

Application Window

Components

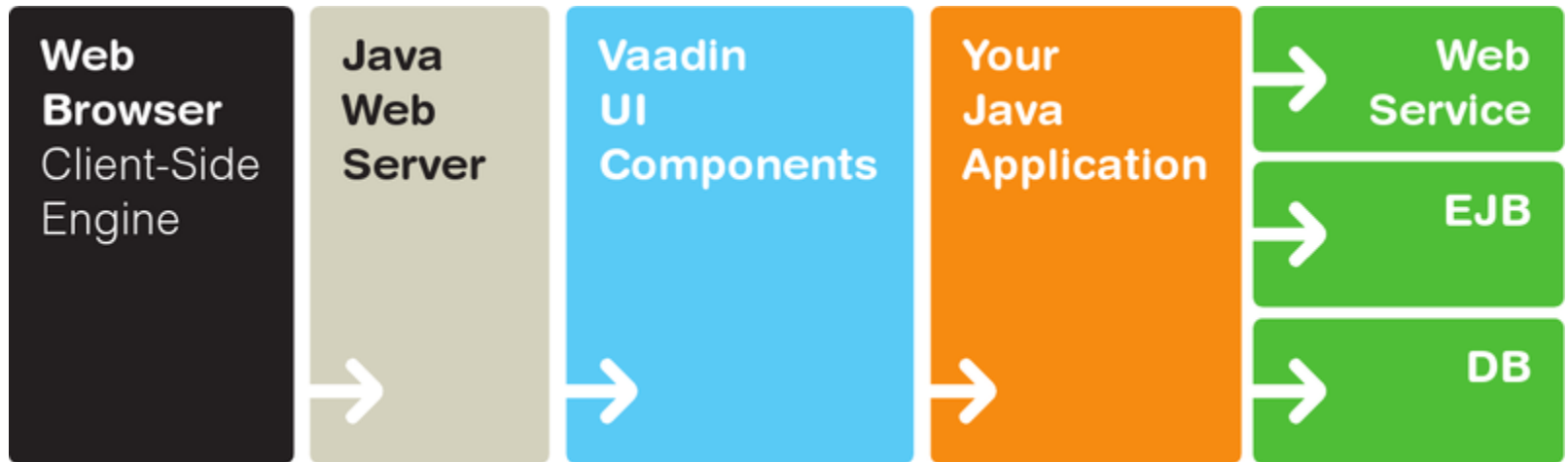
Data Binding

What is VAADIN?

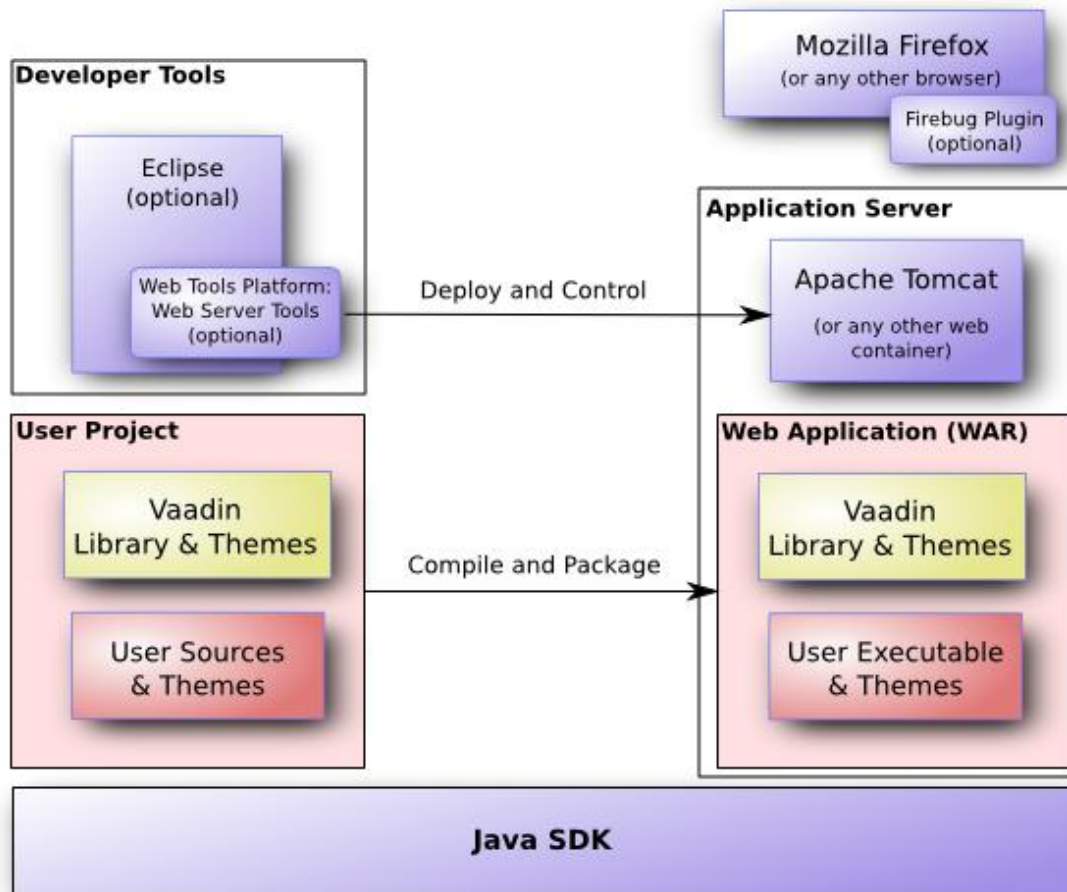
- A web application framework for Rich Internet Applications (RIA)
- A framework for building a Web Application through Java
- The Web Application runs on a Java Server (Tomcat, Websphere etc).
- Ajax, HTML and other web presentations are generated by Vaadin (No need to learn and debug javascript, html)
- Relies on Google Web Toolkit framework to create graphic components

Vaadin means an adult female semi-domesticated
mountain reindeer in Finnish

VAADIN Architecture



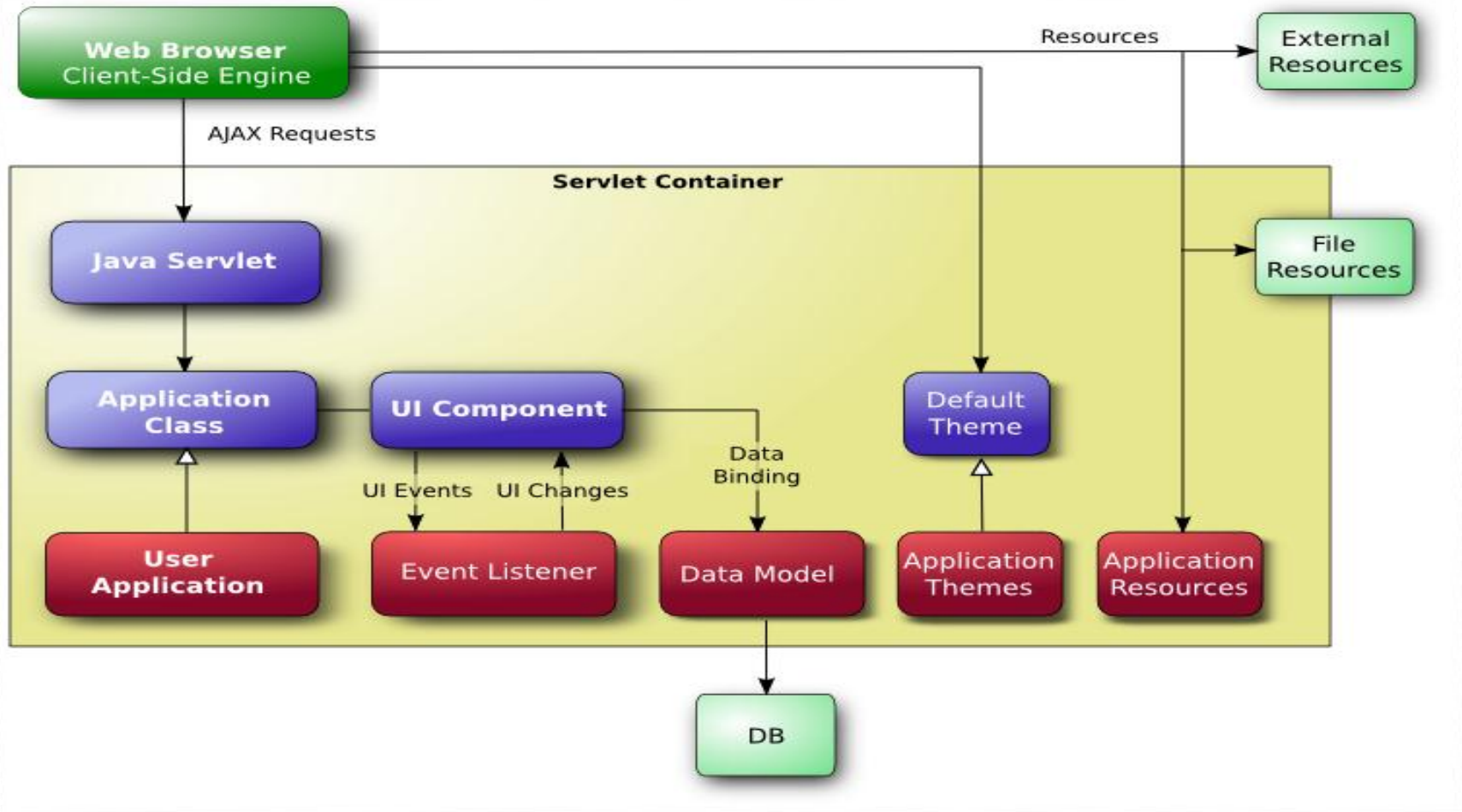
Vaadin Setup & Tools



Necessary to get started

- 1 Personal Computer with any OS
- JDK
- Eclipse or Netbeans (to add a Vaadin Plugin)
- Web Browser
- GOOD TO GO!

Hello Vaadin



Managing the Main Window

- A `Window` is the top-level container of a user interface displayed in a browser window
- An AJAX web application usually runs in a single "web page" in a browser window. The page is generally not reloaded after it is opened initially, but it communicates user interaction with the server through AJAX communications. A window in an AJAX application is therefore more like a window in a desktop application and less like a web page.
- The main window can be accessed using the URL of the application.
- Components are added via `window.addComponent(component)` syntax

Layout Components

- Vaadin main window makes use of a general Layout container
- Inner elements make use of either a `VerticalLayout` or a `HorizontalLayout` containers
- `VerticalLayout` and `HorizontalLayout` are containers for laying components out either vertically or horizontally, respectively. By default, most of the components make use of the `VerticalLayout`.



Additional Layout Components

- `GridLayout`
 - `GridLayout` container lays components out on a grid, defined by the number of columns and rows.
- `FormLayout`
 - Is the default layout of a Form component. It lays the form fields and their captions out in two columns, with optional indicators for required fields and errors that can be shown for each field.
- `Panel`
 - Is a simple container with a frame and an optional caption
- `HorizontalSplitPanel` **and** `VerticalSplitPanel`
 - containers that divide the available space into two areas to accommodate the two components. `HorizontalSplitPanel` makes the split horizontally with a vertical splitter bar, and `VerticalSplitPanel` vertically with a horizontal splitter bar. The user can drag the bar to adjust its position.
- `TabSheet`
 - Is a multicomponent container that allows switching between the components with "tabs". Same functionality is provided for `Accordion`

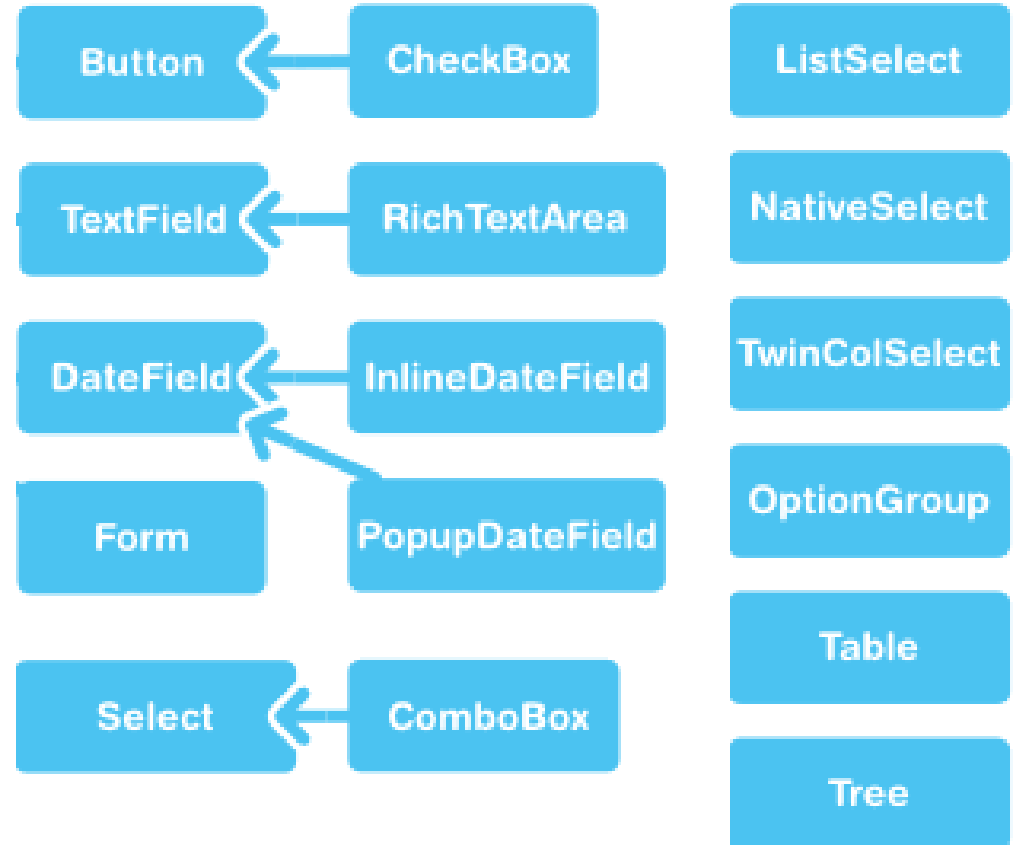
Additional Layouts

(more control over the design and elements positioning)

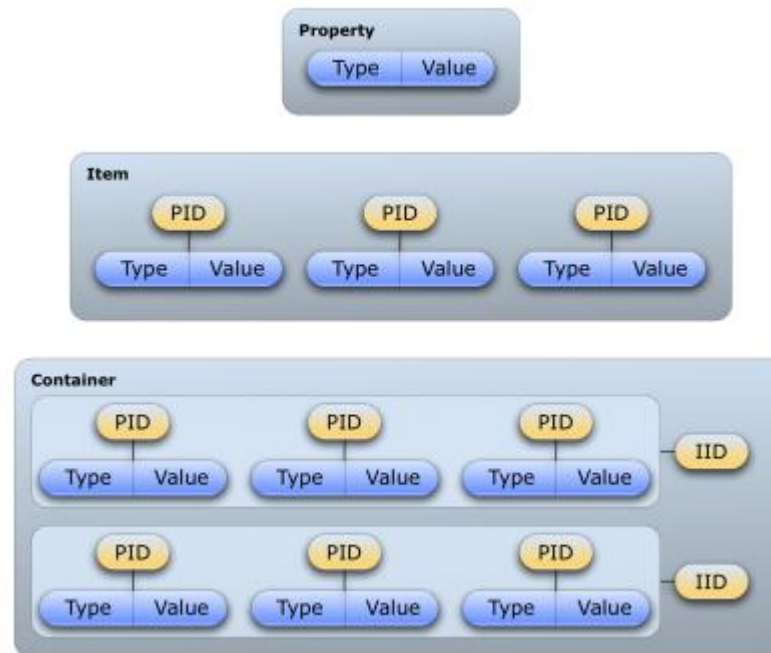
- `CssLayout`
 - `CssLayout` allows strong control over styling of the components contained inside the layout. The components are contained in a simple DOM structure consisting of `<div>` elements.
- `CustomLayouts`
 - Positioning of inner elements is done via HTML coding.

Components

Vaadin provides simple implementation of field components as below.



Data Binding



Good Documentation

Why Vaadin?

eSciDoc
ClientLib

Why Vaadin?

Java

Why Vaadin?

Tools

Why Vaadin?

Refactoring

Why Vaadin?

Add-Ons

Why Vaadin?

> 165 Add-Ons

RIA / WebApp

VS

Website

Caveats

Layout

CssLayout

Custom Layout

Caveats

!SEO

Network Traffic

Intranet

Back Button

Thank you !



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