Website Latency

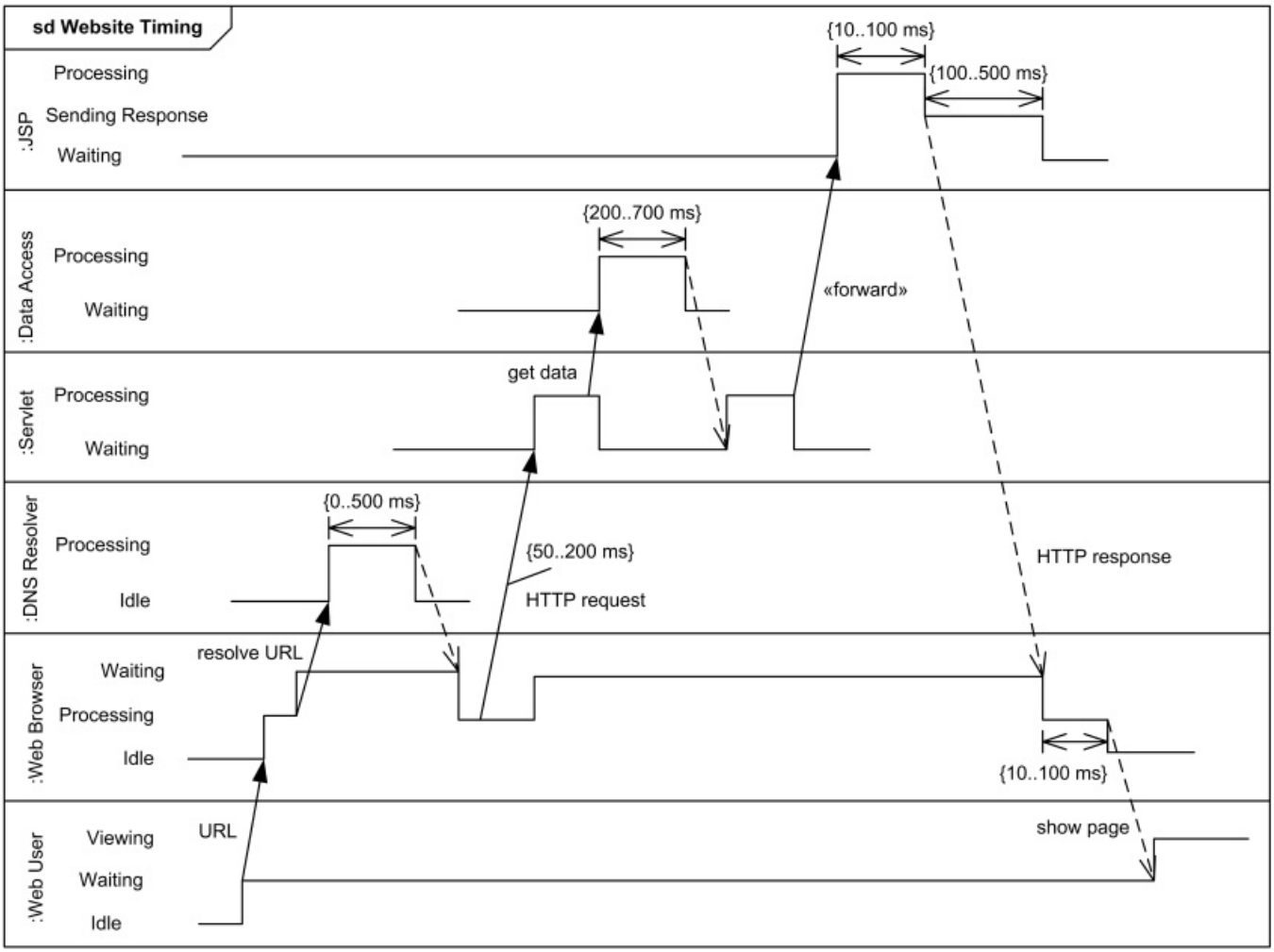
UML Timing Diagram Example

An example of **timing diagram** which shows some **duration constraints** for a fabricated website to evaluate how long web user should wait to see something rendered on his/her display.

After web user enters web page URL, the URL should be resolved to some IP address. DNS resolution can add some tangible waiting time to the response latency as perceived by user. Latency delays related to DNS resolution could range from 1 ms (local DNS cache) to several seconds.

With simple Model–View–Control (MVC) implementation, Java servlet gets control and requests some data from "model". Communication with data sources usually takes some discernible time. After data is received and processed, servlet forwards request processing to JSP ("view"). Buffered HTTP response is sent back to the browser.

Web browser takes some time to process HTTP response and HTML page to start rendering the page view to the web client. (Note, that after that it could take even more time for the web browser to request other resources like CSS, JavaScript, images, which is not shown on the diagram.)



Timing Diagram Example - User Experience Website Latency

Noticed a spelling error? Select the text using the mouse and press Ctrl + Enter.

by Kirill Fakhroutdinov

This document describes UML versions up to *UML 2.5* and is based on the corresponding **OMG™ Unified Modeling Language™ (OMG UML®)** specifications. UML diagrams were created in **Microsoft® Visio®** 2007-2016 using *UML 2.x Visio Stencils*. *Lucidchart* is a nice, free UML tool that I recommend for students.

You can send your comments and suggestions to webmaster at **webmaster@uml-diagrams.org**.