

Evolution of web application frameworks

Currently just a braindump... feel free to improve - at least keep the positive attitude towards REST, please 😊

1. Webserver delivering static files
2. CGI - calling dynamic scripts, mapping configured by eg. regexps in static webserver
3. Templating languages allow meshing logic with Markup: PHP, ASP, simplifies the generation of HTML
4. Java servlets - fully Java interface to server-side HTTP, own "dynamic" webserver = servlet container
 - Base mapping with servlets: context path to separate servlets
 - Various mappings implemented in Java behind the servlet api (eg. Cocoon)
 - JSP as a template language for JavaServlets
5. Concentration of backends and server-to-server communication ("Enterprise" segment): J2EE with Java beans, RMI, JDBC, ORM
 - did not make any use of the advantages of REST present in HTTP and the web
6. Inter-server communication: webservices, XML-RPC, SOAP
 - frameworks with focus on automated generation of service endpoints
 - no HTML, no REST
 - no improvements for making it easier to quickly create nice user interfaces
 - tons of files (one resource = interface, bean implementation, dao object, etc., see [here](#))
7. More standards: Java server faces, a full MVC object model inside the server
 - makes things more complicated, especially when considering a [thin server architecture](#)
8. Ruby on Rails: large improvement for the developer through scaffolding files, following the DRY principle
 - considered state-of-the-art
 - can be done with java as well: [Grails](#)
 - scaffolding (both through CLI scripts and method-not-found-interceptors in dynamic languages) make it easier to work with this large bunch of objects/classes/files on the server side
9. Sling: TNGWAF - the next generation web application framework
 - server-side made thinner through resources as a first-class concept
 - no need for complicated MVC patterns just to get from URL to relational database
 - flexibility through scripting
 - power of 10+ year development of Java VMs
 - OSGi for better software lifecycle management and more uptime (updates without restart)