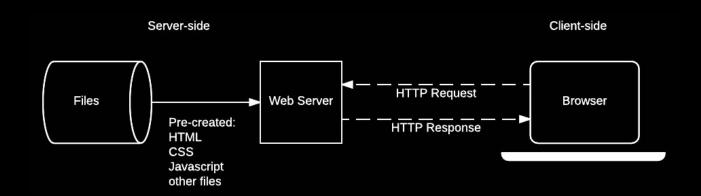


Jetty and Servlets

CS 272 Software Development

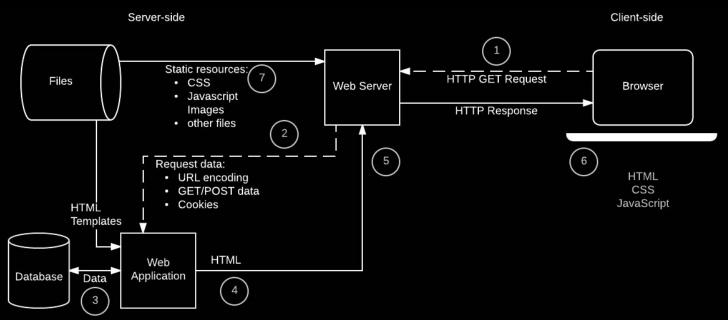
Static Web Site



https://developer.mozilla.org/en-US/docs/Learn/Server-side/First_steps/Client-Server_overview

Department of Computer Science https://www.cs.usfca.edu/

Dynamic Website



https://developer.mozilla.org/en-US/docs/Learn/Server-side/First_steps/Client-Server_overview

Dynamic Server-Side Code in Java



https://www.eclipse.org/jetty/

Java Servlets and Jetty

- Servlets
 - Java Jakarta (EE) package for servicing HTTP requests
 - Generates HTML for dynamic web pages
 - Used by web servers, not a web server itself
- Jetty
 - Embeddable, multithreaded web server in Java
 - Good for single-purpose applications or prototyping

Jetty Powered

Eclipse · Google AppEngine · Google Web Toolkit Google Refine · Hadoop · Grails · Heroku · IGN Atlassian JIRA • Maven • MongoDB MMS • VMWare

https://www.eclipse.org/jetty/powered/powered.html

Jetty Architecture

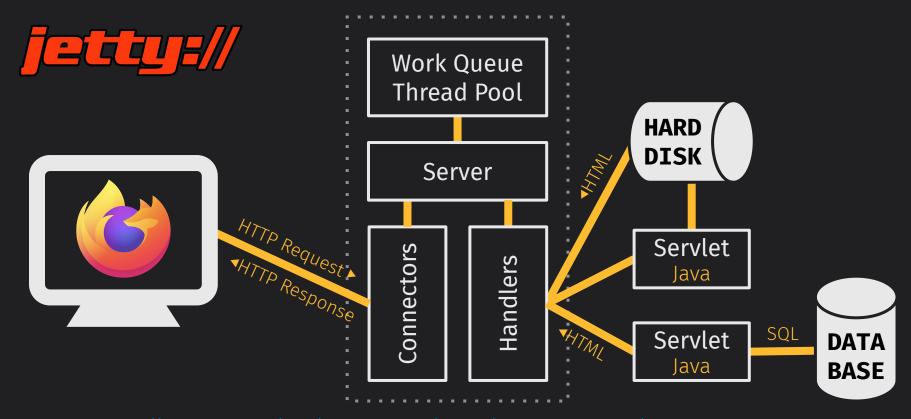
Connectors

- Handles TCP/IP network connections
- Supports HTTP, HTTP/2,
 SSL protocols
- Uses socket connections

Handlers

- Supports static resources (media, css, scripts, etc.)
- Supports different contexts and sessions
- Supports servlets

https://www.eclipse.org/jetty/documentation/jetty-11/programming-guide/index.html#pg-server



https://www.eclipse.org/jetty/documentation/jetty-11/programming-guide/index.html#pg-server-http

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Configuring Server

```
public static void main(String[] args) {
  Server server = new Server(8080);
  server.setHandler(new HelloWorld());
  server.start();
  server.join();
```

https://www.eclipse.org/jetty/documentation/jetty-11/programming-guide/ index.html#configuring-embedded-jetty-with-maven

Configuring Servlet

```
public class HelloServlet extends HttpServlet {
protected void doGet(HttpServletRequest request,
    HttpServletResponse response) throws Exception {
  response.setContentType("text/html");
  response.setStatus(HttpServletResponse.SC_OK);
  response.getWriter().println("<h1>Hello</h1>");
```

https://www.eclipse.org/jetty/documentation/jetty-11/programming-guide/ index.html#configuring-embedded-jetty-with-maven

Documentation

- Servlet Documentation
 - Jakarta Servlet API: <u>javadoc.io/doc/jakarta.servlet/jakarta.servlet-api/latest/</u>
- Jetty Documentation
 - Operations Guide: www.eclipse.org/jetty/documentation/ jetty-11/operations-guide/
 - Programming Guide: www.eclipse.org/jetty/documentation/ jetty-11/programming-guide/
 - API Documentation: www.eclipse.org/jetty/javadoc/jetty-11/

Questions?