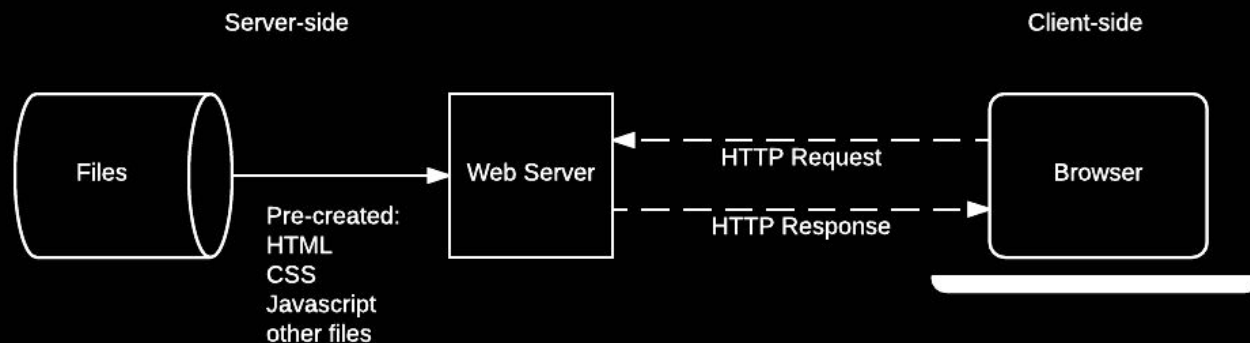


Jetty and Servlets

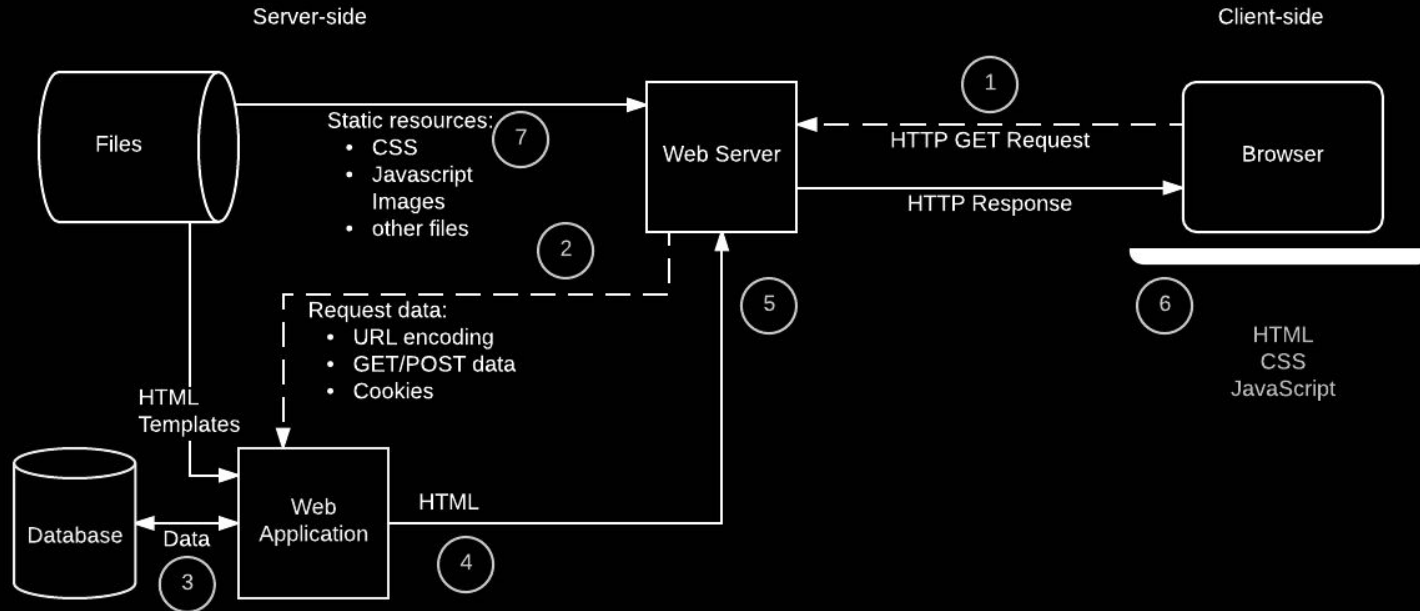
CS 272 Software Development

Static Web Site



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

Dynamic Website



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

Dynamic Server-Side Code in Java

jetty://

<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 · WikiLeaks

<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

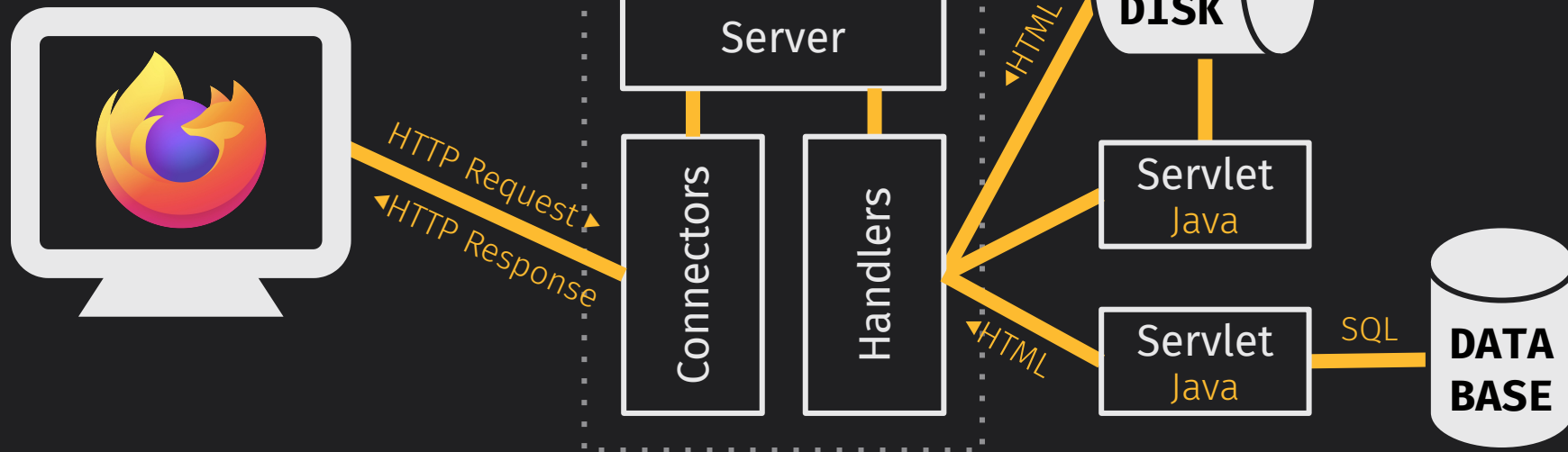
Handlers

- 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>



jetty://



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

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: javadoc.io/doc/jakarta.servlet/jakarta.servlet-api/latest/

- 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?

