Request(HttpRequest)

Parameter Handling

- request.getParameter() method only takes a String type values.

- Client

  – Name : <input type="text" name="UserName">

- Servlet

  – String name =request.getParameter("UserName");

Multi parameters

- request.getParameterValues() method only takes a String type values.
- Client
  - <input name="options" type="checkbox" value="opt1" />
  - <input name="options" type="checkbox" value="opt2" />
  - <input name="options" type="checkbox" value="opt3" />
- Servlet
  - String[] values=request.getParameterValues("options");

Multipart

- multipart/form-data encoded requests are indeed not by default supported by the Servlet API prior to version 3.0.

- The Servlet API parses the parameters by default using application/x-www-form-urlencoded encoding.

- When using a different encoding, the request.getParameter() calls will all return null.

- Prior to Servlet 3.0, a de facto standard to parse multipart/form-data requests would be using Apache Commons FileUpload.

Multipart

- Download http://jakarta.Apache.org/commons/fileupload/
  - Invoke readHeaders() in org.apache.commons.fileupload.MultipartStream
- Client
  - ```
    <form method="POST" action="upload"
    enctype="multipart/form-data">
    ```
- Servlet

```
final Part filePart = request.getPart("file");

final String fileName = getFileName(filePart);

final String serverFilePath = getUploadFolder() +
          File.separator + fileName;

filePart.write(serverFilePath);
```

MIME

- MIME stand for Multipurpose internet Mail Extension. It is a HTTP header that provides the description about what are you sending to the browser (like send image, text, video etc.).
  - response.setcontentType("text/html");
- MIME type have two parts,
- They are:
  - Base name: It is the generic name of file.
  - Extension name: It is extension name for specific file type.

MIME

File	MIME Type	Extension
xml	text/xml.	.xml.
HTML	text/html.	.html.
Plaintext File	text/plain.	.txt.
PDF	application/pdf.	.pdf.
gif Image	image/gif.	.gif.
JPEG Image	image/jpeg.	.jpeg.
PNG Image	image/x-png.	.png.
MP3 Music File	audio/mpeg.	.mp3.
MS Word Document	application/msword.	.doc.
Excel work sheet	application/vnd.ms-sheet.	.xls.
Power Point Document	application/vnd.ms-powerpoint.	.ppt.

URL Fetching

- http://localhost:8080/helloservlet/echo?userName=ABC+DEF&pass=12345....

- A '?' follows the URL, which separates the URL and the so-called query string (or query parameters, request parameters) followed.

- The "name=value" pairs are separated by an '&'

- This is because special characters are not permitted in the URL and have to be encoded (known as URL-encoding). Blank is encoded as '+'

- Some input elements such as checkboxes may trigger multiple parameter values, e.g., "language=java&language=c&language=cs" if all three boxes are checked. Get & Post