

1. Build a Servlet to display your Student Information (your name, roll no etc..) depicting the lifecycle process of Servlet.
2. Build a Servlet to display the information from the database using database connectivity and vice-versa.

- a. The browser uses two methods to pass this information to web server. These methods are GET Method and POST Method.

b. GET Method

- i. The GET method sends the encoded user information appended to the page request. The page and the encoded information are separated by the? (question mark) symbol as follows –
- ii. `http://www.test.com/hello?key1 = value1&key2 = value2`
- iii. The GET method is the default method to pass information from browser to web server and it produces a long string that appears in your browser's Location: box. Never use the GET method if you have password or other sensitive information to pass to the server. The GET method has size limitation: only 1024 characters can be used in a request string.
- iv. This information is passed using QUERY_STRING header and will be accessible through QUERY_STRING environment variable and Servlet handles this type of requests using `doGet()` method.

c. POST Method

- i. A generally more reliable method of passing information to a backend program is the POST method. This packages the information in exactly the same way as GET method, but instead of sending it as a text string after a ? (question mark) in the URL it sends it as a separate message. This message comes to the backend program in the form of the standard input which you can parse and use for your processing. Servlet handles this type of requests using `doPost()` method.
- ii. Reading Form Data using Servlet
- iii. Servlets handles form data parsing automatically using the following methods depending on the situation –
- iv. `getParameter()` – You call `request.getParameter()` method to get the value of a form parameter.
- v. `getParameterValues()` – Call this method if the parameter appears more than once and returns multiple values, for example checkbox.

- vi. `getParameterNames()` – Call this method if you want a complete list of all parameters in the current request.
- vii. GET Method Example using URL