

Лабораторные работы 9, 10

Отправка HTTP-запроса серверу методом POST с помощью клиентов telnet и cURL

Цель: освоить операции отправки запросов серверу с помощью клиентов telnet и cURL.

Подготовка данных для отправки запроса

```
>> encodeURIComponent('Федор')
<< "%D0%A4%D0%B5%D0%B4%D0%BE%D1%80"

>> encodeURIComponent('Мельников')
<< "%D0%9C%D0%B5%D0%BB%D1%8C%D0%BD%D0%B8%D0%BA%D0%BE%D0%B2"
```

Отправка запроса с помощью telnet

Заголовки и тело запроса:

```
fyoodor@fyoodor-virtualbox:~$ telnet 151.248.115.32 80
Trying 151.248.115.32...
Connected to 151.248.115.32.
Escape character is '^]'.
POST /api/req/%D0%A4%D0%B5%D0%B4%D0%BE%D1%80/%D0%9C%D0%B5%D0%BB%D1%8C%D0%BD%D0%B8%D0%BA%D0%BE%D0%B2/ HTTP/1.1
Host:kodaktor.ru
Content-Type:application/x-www-form-urlencoded
Content-Length:101

name=%D0%A4%D0%B5%D0%B4%D0%BE%D1%80&familyname=%D0%9C%D0%B5%D0%BB%D1%8C%D0%BD%D0%B8%D0%BA%D0%BE%D0%B2
```

Ответ сервера:

```
HTTP/1.1 200 OK
Access-Control-Allow-Origin: *
Access-Control-Allow-Methods: GET,POST,DELETE,PUT,OPTIONS
Access-Control-Expose-Headers: X-Resp,Content-Type, Accept, Access-Control-Allow-Headers, Access-Control-Expose-Headers
Access-Control-Allow-Headers: X-Resp,Content-Type, Accept, Access-Control-Allow-Headers, Access-Control-Expose-Headers
Content-Type: application/json; charset=utf-8
X-By: Ilya Goss (c)2017
X-Test: POST0b63c4e574b64e2a9359be0340b1447b
Content-Length: 93
ETag: W/"5d-gtzra0vx Dz+xyy/8+vw3Ew"
set-cookie: connect.sid=s%3A08CMQmCeWT3jN0lhVT6KsuxuGMtZNbsq.qwBmGa2wDvxc%2FfZBXtgjJV3C6UxHKXETj43WMDAEoiE; Path=/; Expires=Sat, 03 Apr 2021 11:36:42 GMT; HttpOnly
Date: Sat, 03 Apr 2021 08:50:02 GMT
Connection: keep-alive

{"name":"Федор","familyname":"Мельников","_METHOD":"POST","_NAME":"Федор"}Connection closed by foreign host.
```

X-Test: POST0b63c4e574b64e2a9359be0340b1447b

Отправка запроса с помощью cURL

Вывод тела ответа:

```
fyoodor@fyoodor-virtualbox:~$ curl -X POST -d 'name=%D0%A4%D0%B5%D0%B4%D0%BE%D1%80&familyname=%D0%9C%D0%B5%D0%BB%D1%8C%D0%BD%D0%B8%D0%BA%D0%BE%D0%B2' http://kodaktor.ru/api/req/{"name":"Федор","familyname":"Мельников","_METHOD":"POST","_NAME":"Федор"}fyoodor@fyoodor-virtualbox:~$
```

Вывод заголовков ответа:

Для вывода заголовков ответа необходимо указать ключ -i.

```
fyoodor@fyoodor-virtualbox:~$ curl -X POST -i -d 'name=%D0%A4%D0%B5%D0%B4%D0%BE%D1%80&familyname=%D0%9C%D0%B5%D0%BB%D1%8C%D0%BD%D0%B8%D0%BA%D0%BE%D0%B2' http://kodaktor.ru/api/req/HTTP/1.1 200 OK
Access-Control-Allow-Origin: *
Access-Control-Allow-Methods: GET,POST,DELETE,PUT,OPTIONS
Access-Control-Expose-Headers: X-Resp,Content-Type, Accept, Access-Control-Allow-Headers, Access-Control-Expose-Headers
Access-Control-Allow-Headers: X-Resp,Content-Type, Accept, Access-Control-Allow-Headers, Access-Control-Expose-Headers
Content-Type: application/json; charset=utf-8
X-By: Ilya Goss (c)2017
X-Test: POST0b63c4e574b64e2a9359be0340b1447b
Content-Length: 93
ETag: W/"5d-gtzra0vxDz+xyy/8+vw3Ew"
set-cookie: connect.sid=s%3Ai3MZC-eKQxXHTocXRzVq-bZ8lh0lvdKo.ZNyelsXNVqN41yRFRNmE%2Bd0fdbCte9uU7bBr936Ss0Q; Path=/; Expires=Sat, 03 Apr 2021 11:45:49 GMT; HttpOnly
Date: Sat, 03 Apr 2021 08:59:09 GMT
Connection: keep-alive

{"name":"Федор","familyname":"Мельников","_METHOD":"POST","_NAME":"Федор"}fyoodor@fyoodor-virtualbox:~$
```

X-Test: POST0b63c4e574b64e2a9359be0340b1447b

Вывод: в ходе работы были отправлены запросы на сервер методом POST с помощью клиентов telnet и cURL, освоены операции отправки данных на сервер.