

ajax intro

rely on jQuery

1. add urls

```
path('task/list/', views.task_list),
path('task/ajax/', views.task_ajax),
```

2. add function

```
def task_list(request):
    return render(request, 'task_list.html')

def task_ajax(request):
    return HttpResponse('success!^_^')
```

3. send GET request

```
{% extends 'layout.html' %}

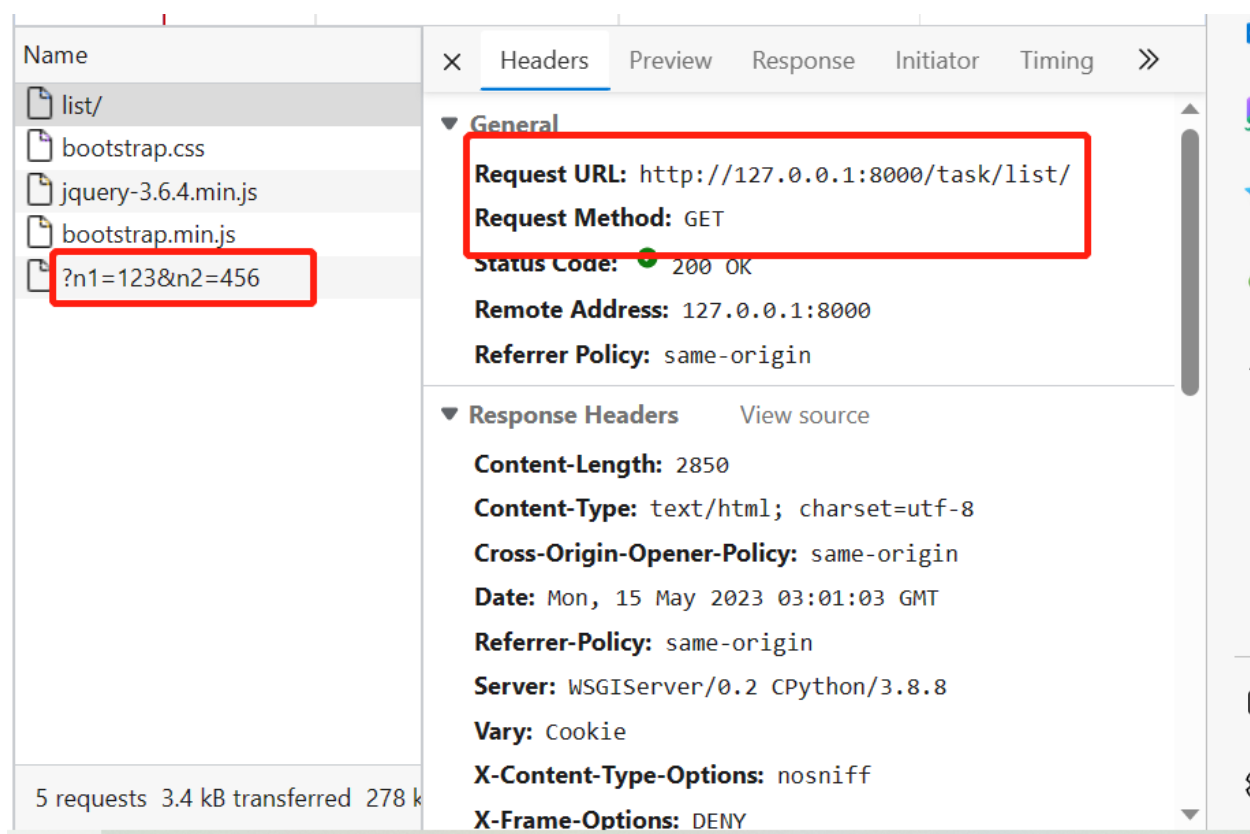
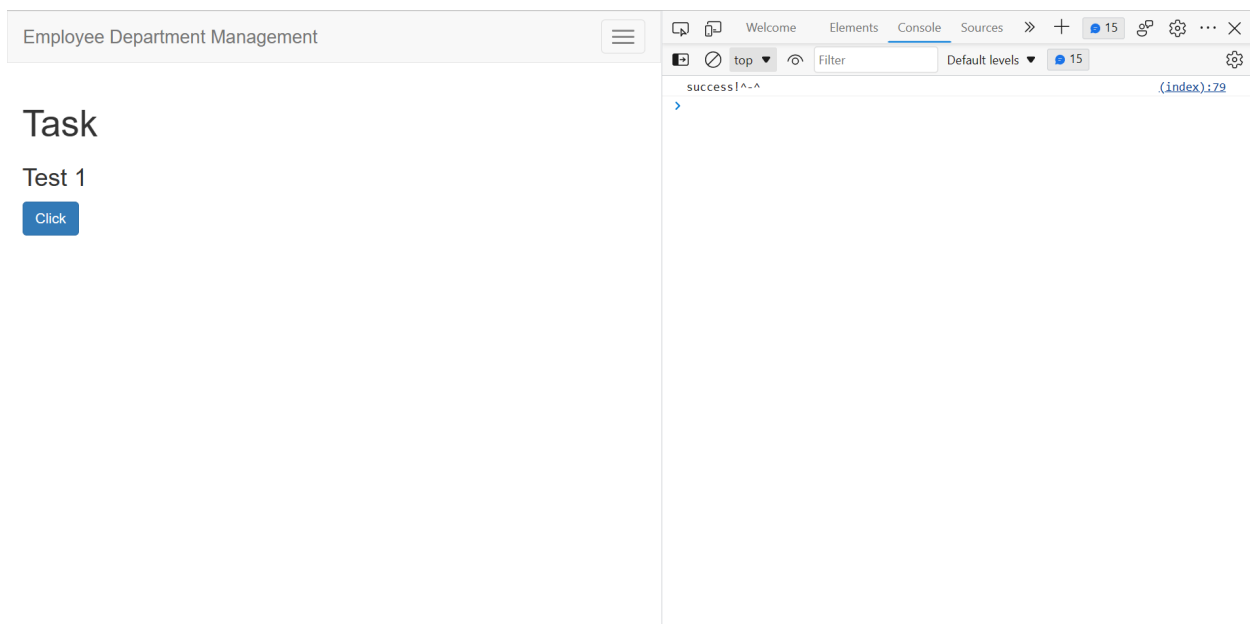
{% block content %}
    <div class="container">
        <h1>Task</h1>
        <h3>Test 1</h3>

        <input type="button" class="btn btn-primary" value="Click" onclick="clickMe()">

    </div>
{% endblock %}

{% block js %}

    <script type="text/javascript">
        function clickMe() {
            $.ajax({
                url: '/task/ajax/',
                type: "get",
                data: {
                    n1: 123,
                    n2: 456
                }, success: function (res) {
                    console.log(res)
                }
            })
        }
    </script>
{% endblock %}
```



4. send POST request

if simply change request type

```
{% block js %}

<script type="text/javascript">
    function clickMe() {
        $.ajax({
            url: '/task/ajax/',
            type: "post",
            data: {
                n1: 123,
                n2: 456
            }, success: function (res) {
                console.log(res)
            }
        })
    }
}
```

```
</script>
{% endblock %}
```

Task

Test 1

Click

Network

Filter

Fetch/XHR JS CSS Img Media Font Doc WS Wasm Manifest Other

Has blocked cookies

Blocked Requests

3rd-party requests

20 ms

40 ms

60 ms

80 ms

100 ms

Name

ajax/

General

Request URL: http://127.0.0.1:8000/task/ajax/

Request Method: POST

Status Code: 403 Forbidden

Remote Address: 127.0.0.1:8000

Referrer Policy: same-origin

Response Headers

Content-Length: 2506

Content-Type: text/html; charset=utf-8

Cross-Origin-Opener-Policy: same-origin

Date: Mon, 15 May 2023 21:06:01 GMT

Referrer-Policy: same-origin

Server: WSGIServer/0.2 CPython/3.8.8

Vary: Cookie

X-Content-Type-Options: nosniff

X-Frame-Options: DENY

1 requests

2.8 kB transferred

2.5 k

Please do remember csrf token for POST request we used in form before.

```
from django.views.decorators.csrf import csrf_exempt
@csrf_exempt
def task_ajax(request):
    print(request.POST)
    return HttpResponse('success!^_^')
```

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Task

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Has blocked cookies

Blocked Requests

3rd-party requests

50000 ms

100000 ms

150000 ms

200000 ms

250000 ms

Name

ajax/

General

Request URL: http://127.0.0.1:8000/task/ajax/

Request Method: POST

Status Code: 200 OK

Remote Address: 127.0.0.1:8000

Referrer Policy: same-origin

Response Headers

Content-Length: 11

Content-Type: text/html; charset=utf-8

Cross-Origin-Opener-Policy: same-origin

Date: Mon, 15 May 2023 21:10:20 GMT

Referrer-Policy: same-origin

Server: WSGIServer/0.2 CPython/3.8.8

Vary: Cookie

X-Content-Type-Options: nosniff

X-Frame-Options: DENY

2 requests

3.1 kB transferred

2.5 k

ajax intro

3

```
task_ajax()

Run: Django_user_manage x
System check identified no issues (0 silenced).
May 15, 2023 - 16:11:25
Django version 4.2.1, using settings 'Django_user_manage.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CTRL-BREAK.

[15/May/2023 16:11:28] "GET /task/list/ HTTP/1.1" 200 2851
<QueryDict: {'n1': ['123'], 'n2': ['456']}>
[15/May/2023 16:11:29] "POST /task/ajax/ HTTP/1.1" 200 11
```

5. use id

```
{% extends 'layout.html' %}

{% block content %}
    <div class="container">
        <h1>Task</h1>
        <h3>Test 1</h3>

        <input id="btn1" type="button" class="btn btn-primary" value="Click">

    </div>
{% endblock %}

{% block js %}

    <script type="text/javascript">
        $(function () {
            bindBtn1Event();

        })

        function bindBtn1Event() {
            $("#btn1").click(function () {
                $.ajax({
                    url: '/task/ajax/',
                    type: "post",
                    data: {
                        n1: 123,
                        n2: 456
                    }, success: function (res) {
                        console.log(res)
                    }
                })
            })
        }

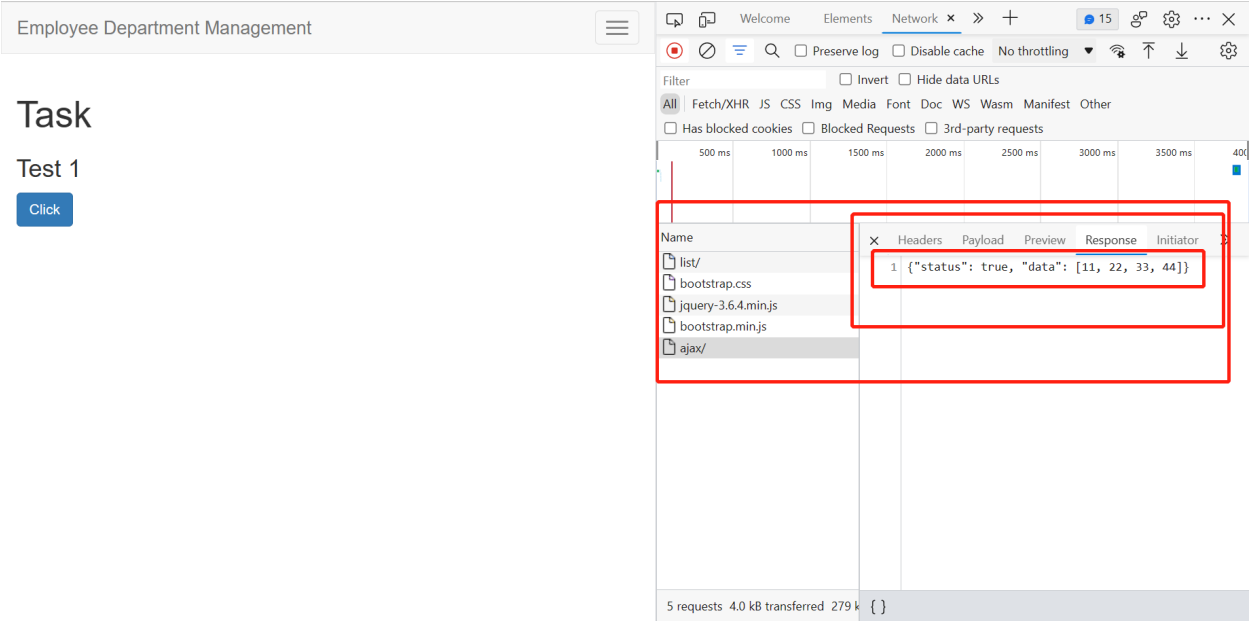
        function clickMe() {
            $.ajax({
                url: '/task/ajax/',
                type: "post",
                data: {
                    n1: 123,
                    n2: 456
                }, success: function (res) {
                    console.log(res)
                }
            })
        }
    </script>
{% endblock %}
```

```
</script>
{% endblock %}
```

6. ajax return value

return in JSON

```
from django.views.decorators.csrf import csrf_exempt
@csrf_exempt
def task_ajax(request):
    print(request.POST)
    data_dict = {"status": True, "data": [11, 22, 33, 44]}
    json_string = json.dumps(data_dict)
    return HttpResponse(json_string)
```



Also Django has function JsonResponse

```
# POST
from django.views.decorators.csrf import csrf_exempt
from django.http import JsonResponse
@csrf_exempt
def task_ajax(request):
    print(request.POST)
    data_dict = {"status": True, "data": [11, 22, 33, 44]}
    # json_string = json.dumps(data_dict)
    # return HttpResponse(json_string)
    return JsonResponse(data_dict)
```

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Task

Test 1

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Network

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Filter

Fetch/XHR JS CSS Img Media Font Doc WS Wasm Manifest Other

Has blocked cookies Blocked Requests 3rd-party requests

500 ms 1000 ms 1500 ms 2000 ms

Name

list/

bootstrap.css

jquery-3.6.4.min.js


bootstrap.min.js

ajax/

1

{ "status": true, "data": [11, 22, 33, 44]}

5 requests 4.0 kB transferred 279 k { }

 @csrf_exempt

do not need {% csrf token %} in html

```
# POST
from django.views.decorators.csrf import csrf_exempt
import json
# from django.http import JsonResponse
@csrf_exempt
def task_ajax(request):
    print(request.POST)
    data_dict = {"status": True, "data": [11, 22, 33, 44]}

    return HttpResponse(json.dumps(data_dict))
# return JsonResponse(data_dict)
```

```
{% extends 'layout.html' %}

{% block content %}
    <div class="container">
        <h1>Task</h1>
        <h3>Test 1</h3>

        <input id="btn1" type="button" class="btn btn-primary" value="Click">

    </div>
{% endblock %}

{% block js %}

    <script type="text/javascript">
        $(function () {
            bindBtn1Event();

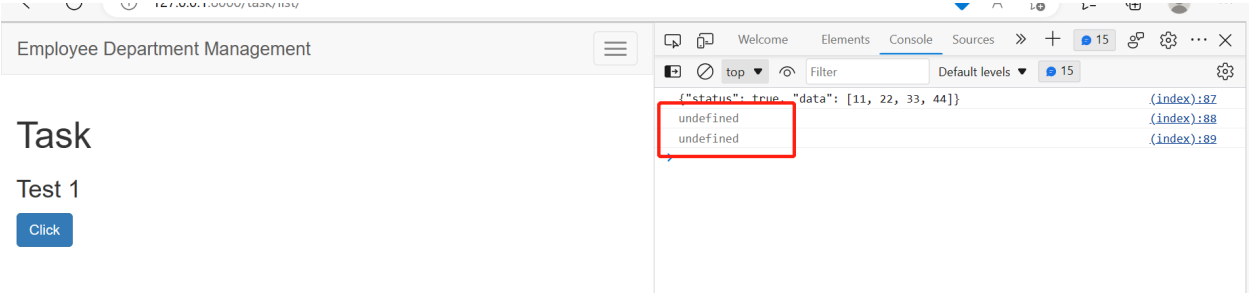
        })

        function bindBtn1Event() {
            $("#btn1").click(function () {
                $.ajax({
                    url: '/task/ajax/',
                    type: "post",
                    data: {
                        n1: 123,
                        n2: 456
```

```
        },
        dataType: "JSON",
        success: function (res) {
            console.log(res);
            console.log(res.status);
            console.log(res.data);
        }
    })
})
}

function clickMe() {
    $.ajax({
        url: '/task/ajax/',
        type: "post",
        data: {
            n1: 123,
            n2: 456
        }, success: function (res) {
            console.log(res);
        }
    })
}
</script>
{% endblock %}
```

If we have undefine (cannot get value through dot)



This might because:

```
22  $( "#btn1" ).click(function () {
23
24      $.ajax({
25          url: '/task/ajax/',
26          type: "post",
27          data: {
28              n1: 123,
29              n2: 456
30          },
31          datatype: "JSON",
32          success: function (res) {
33              console.log(res);
34              console.log(res.status);
35              console.log(res.data);
36          }
37      })
38  })
39  }
```

script > clickMe()

Run: Django_user_manage

```
[15/May/2023 17:08:53] "GET /task/list/ HTTP/1.1" 200 3491
[15/May/2023 17:08:55] "POST /task/ajax/ HTTP/1.1" 200 42
<QueryDict: {'n1': ['123'], 'n2': ['456']}>
```

Please be attention to capital letter
data**T**ype

Employee Department Management

Task

Test 1

Click

Console

▼ {status: true, data: Array(4)} (index):87

▼ data: Array(4)

0: 11

1: 22

2: 33

3: 44

length: 4

▶ [[Prototype]]: Array(0)

status: true

▶ [[Prototype]]: Object

true (index):88

▼ (4) [11, 22, 33, 44] (index):89

0: 11

1: 22

2: 33

3: 44

length: 4

▶ [[Prototype]]: Array(0)

7. POST input by ajax


```

{% extends 'layout.html' %}

{% block content %}
    <div class="container">
        <h1>Task</h1>
        <h3>Test 1</h3>
        <input id="btn1" type="button" class="btn btn-primary" value="Click">

        <h3>Test 2</h3>
        <input id="textUser1" type="text" placeholder="Username">
        <input id="textAge1" type="text" placeholder="Age">
        <input id="btn2" type="button" class="btn btn-primary" value="Click">

        <h3>Test 3</h3>
        <form id="form1">
            <input name="User2" type="text" placeholder="Username">
            <input name="Age2" type="text" placeholder="Age">
            <input name="Email2" type="text" placeholder="Email">
            <input name="Mobile2" type="text" placeholder="Mobile">
            <input name="More2" type="text" placeholder="More">

        </form>
        <input id="btn3" type="button" class="btn btn-primary" value="Click">

    </div>
{% endblock %}

{% block js %}

    <script type="text/javascript">
        $(function () {
            bindBtn1Event();

            bindBtn2Event();

            bindBtn3Event();

        })

        function bindBtn1Event() {
            $("#btn1").click(function () {
                $.ajax({
                    url: '/task/ajax/',
                    type: "post",
                    data: {
                        n1: 123,
                        n2: 456
                    },
                    dataType: "JSON",
                    success: function (res) {
                        console.log(res);
                        console.log(res.status);
                        console.log(res.data);
                    }
                })
            })
        }

        function bindBtn2Event() {
            $("#btn2").click(function () {
                $.ajax({
                    url: '/task/ajax/',
                    type: "post",
                    data: {
                        status: 'aaaaaaaa',
                        name: $("#textUser1").val(),
                        age: $("#textAge1").val()
                    },
                    dataType: "JSON",
                    success: function (res) {

```

```

        console.log(res);
        console.log(res.status);
        console.log(res.data);
        console.log(res.name);
    }
})
})
}

function bindBtn3Event() {
    $("#btn3").click(function () {
        $.ajax({
            url: '/task/ajax/',
            type: "post",
            data: $("#form1").serialize(),
            dataType: "JSON",
            success: function (res) {
                console.log(res);
                console.log(res.status);
                console.log(res.data);
                console.log(res.name);
            }
        })
    })
}

function clickMe() {
    $.ajax({
        url: '/task/ajax/',
        type: "post",
        data: {
            n1: 123,
            n2: 456
        }, success: function (res) {
            console.log(res);
        }
    })
}
}
</script>
{% endblock %}

```

Employee Department Management

☰

Task

Test 1

Click

Test 2

asdf

20

Click

Test 3

asdf

1234567

Click

20

asdfkjhjyhb

asdf@123.com

Welcome

Elements

Console

Sources

»

+

15

⚙

⚙

⋮

×

🔍

🔄

top

▼

🔄

Filter

Default levels

▼

15

⚙

▶ {status: true, data: Array(4)}

(index):126

true

(index):127

▶ (4) [11, 22, 33, 44]

(index):128

undefined

(index):129

▶ {status: true, data: Array(4)}

(index):143

true

(index):144

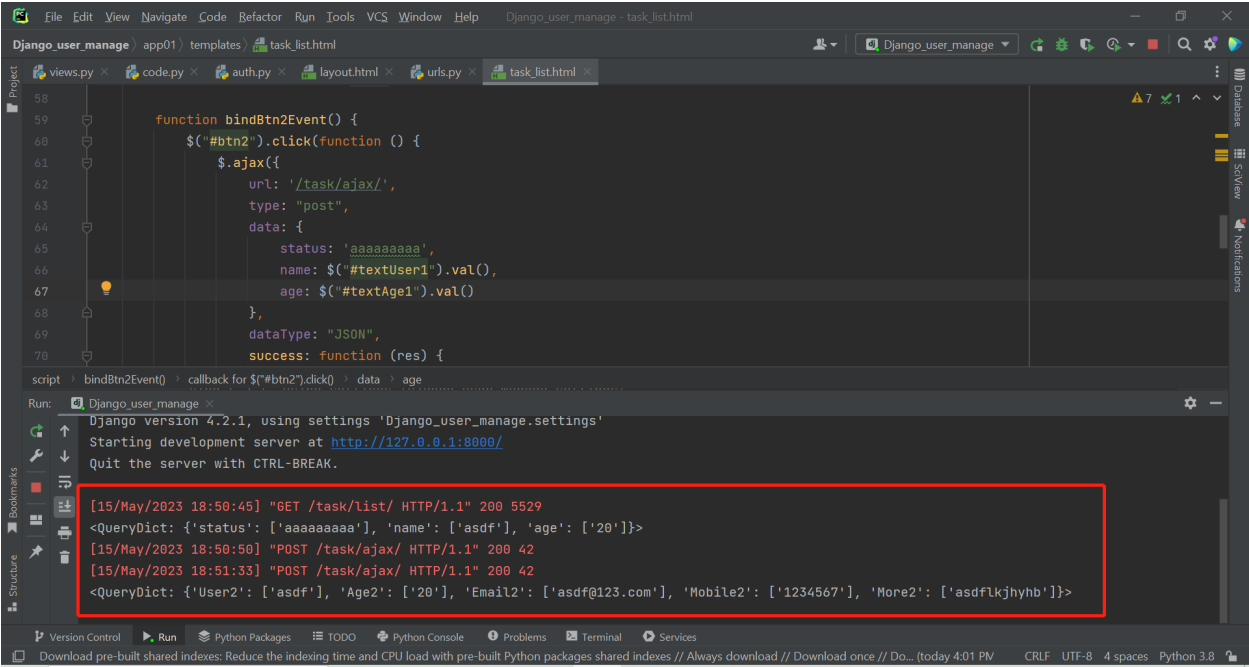
▶ (4) [11, 22, 33, 44]

(index):145

undefined

(index):146

>



ajax example

ajax in js

chart

File upload