

1■■■ Why do we need the get_csrf_token endpoint?

Explanation:

Django's CSRF protection uses a cookie named 'csrftoken' to verify that POST/PUT/DELETE requests come from your frontend app. But when React is separate from Django, React never automatically receives this cookie because no Django-rendered HTML page is loaded. So you create this special endpoint that forces Django to send the 'csrftoken' cookie to the browser.

Code: Django view to set CSRF cookie

```
```python
from django.views.decorators.csrf import ensure_csrf_cookie
from django.http import JsonResponse
```

```
@ensure_csrf_cookie
def get_csrf_token(request):
 # This endpoint sets the CSRF cookie on the client
 return JsonResponse({'detail': 'CSRF cookie set'})
```

### 2■■■ How do you call this from React?

Explanation:

When your React app loads, it must call the above endpoint once so the browser receives and stores the 'csrftoken' cookie.

Code: React useEffect to fetch CSRF cookie

```
import { useEffect } from 'react';

function App() {
 useEffect(() => {
 fetch('https://your-backend-url.com/api/get-csrf-token/', {
 credentials: 'include' // Important to receive and save the cookie
 });
 }, []);

 return (
 // Your app JSX here
);
}

export default App;
```

### 3■■■ How do you read the CSRF cookie in React?

Explanation:

Now that the 'csrftoken' cookie is in the browser, React needs to read that cookie's value to include it in the X-CSRFToken header.

Code: Helper function to get the CSRF token from cookie

```
function getCookie(name) {
 let cookieValue = null;
 if (document.cookie && document.cookie !== '') {
 const cookies = document.cookie.split(';');
 for (let cookie of cookies) {
```

```

 cookie = cookie.trim();
 if (cookie.startsWith(name + '=')) {
 cookieValue = decodeURIComponent(cookie.substring(name.length + 1));
 break;
 }
}
}
return cookieValue;
}

```

// Usage:

```
const csrftoken = getCookie('csrftoken');
```

#### 4 ■ How do you send the CSRF token in fetch POST requests?

Explanation:

Django expects every unsafe HTTP request (POST, PUT, DELETE) that uses session authentication to have the CSRF token sent in the request header.

Code: Example POST fetch with CSRF token included

```

const csrftoken = getCookie('csrftoken');

fetch('https://your-backend-url.com/createUser/', {
 method: 'POST',
 credentials: 'include', // send cookies (sessionid) with the request
 headers: {
 'Content-Type': 'application/json',
 'X-CSRFToken': csrftoken, // <-- send the CSRF token here
 },
 body: JSON.stringify({
 username: 'john',
 email: 'john@example.com',
 password: '1234'
 }),
})
.then(response => response.json())
.then(data => {
 console.log('Success:', data);
})
.catch(error => {
 console.error('Error:', error);
});

```

Summary of the flow:

1. React calls `/api/get-csrf-token/` → Django sends `csrftoken` cookie to browser
2. React reads the `csrftoken` cookie from `document.cookie`
3. React sends POST requests with header `X-CSRFToken: csrftoken`
4. Django verifies CSRF token and accepts the request