

Laboratorul 11

Tehnologii Web

Obiectivele laboratorului



Restful API Overview



REST Methods



Response Codes



Exercitii

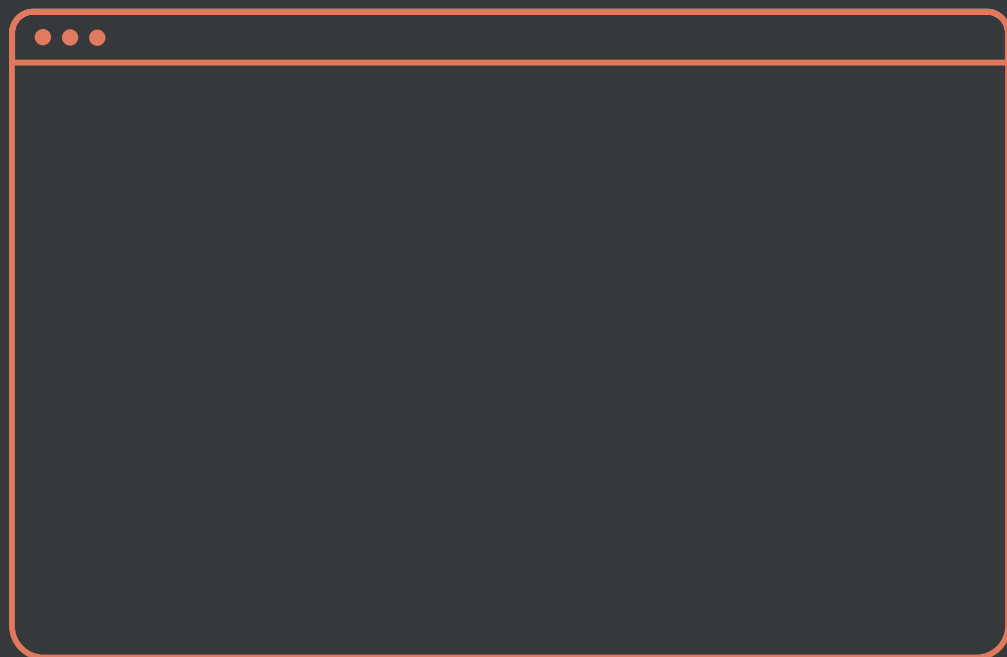
RESTFUL API

Representational
E
State
Transfer



Rest Overview

Client

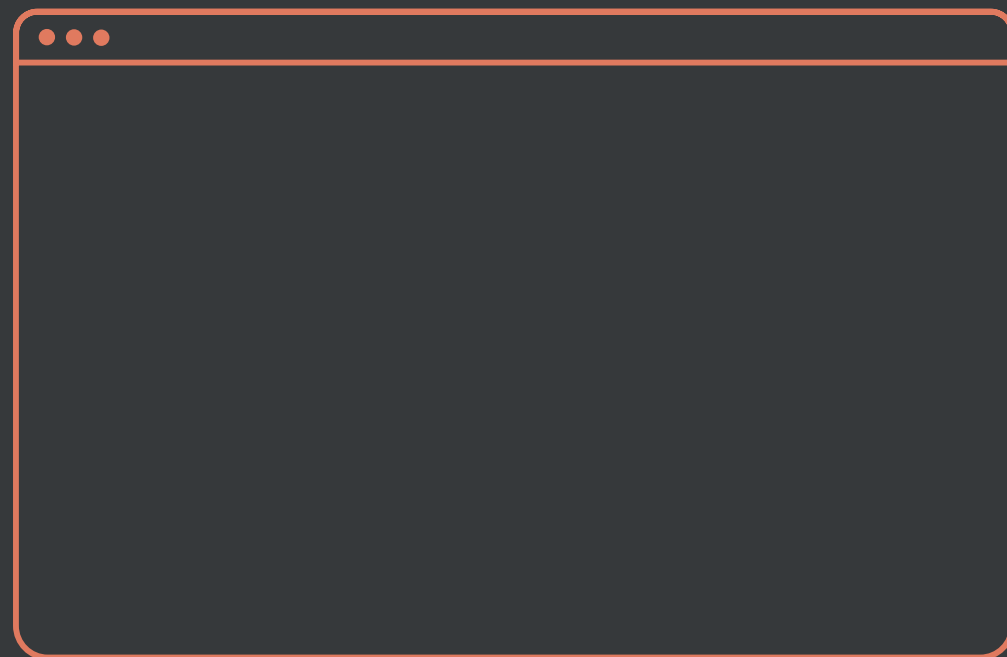


Server



Rest Overview

Client



Request



Server



Rest Overview

Request



```
<form action="myForm.php" id="myForm" method="POST">
```

Rest Overview

```
<form action="myForm.php" id="myForm" method="POST">
```

Rest Overview

```
<form action="myForm.php" id="myForm" method="POST">
```


Rest Methods

GET

Accesarea unei resurse sau
apelarea unei functii

```
<form action="myForm.php" id="myForm" method="POST">
```

Rest Methods

GET

Accesarea unei resurse sau
apelarea unei functii

POST

Este cel mai adesea folosit
pentru a crea resurse noi

```
<form action="myForm.php" id="myForm" method="POST">
```

Rest Methods

GET

Accesarea unei resurse sau
apelarea unei functii

POST

Este cel mai adesea folosit
pentru a crea resurse noi

```
<form action="myForm.php" id="myForm" method="POST">
```

PUT

Utilizat pentru inlocuirea unei
resurse

Rest Methods

GET

Accesarea unei resurse sau
apelarea unei functii

POST

Este cel mai adesea folosit
pentru a crea resurse noi

```
<form action="myForm.php" id="myForm" method="POST">
```

PUT

Utilizat pentru inlocuirea unei
resurse

DELETE

Stergerea unei resurse

Rest Methods

GET

Accesarea unei resurse sau
apelarea unei functii

POST

Este cel mai adesea folosit
pentru a crea resurse noi

PATCH

Actualizare
resursa

```
<form action="myForm.php" id="myForm" method="POST">
```

PUT

Utilizat pentru inlocuirea unei
resurse

DELETE

Stergerea unei resurse

Rest Methods

GET

Accesarea unei resurse sau
apelarea unei functii

POST

Este cel mai adesea folosit
pentru a crea resurse noi

PATCH

Actualizare
resursa

```
<form action="myForm.php" id="myForm" method="POST">
```

CRUD

PUT

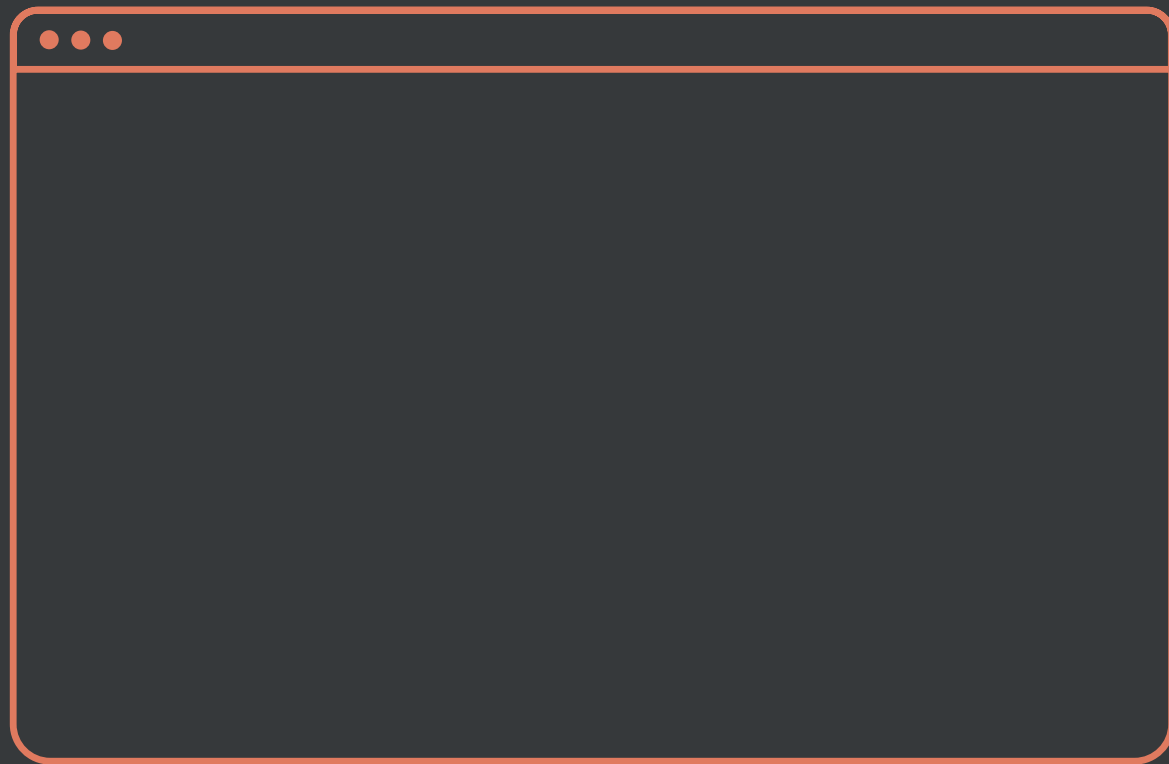
Utilizat pentru inlocuirea unei
resurse

DELETE

Stergerea unei resurse

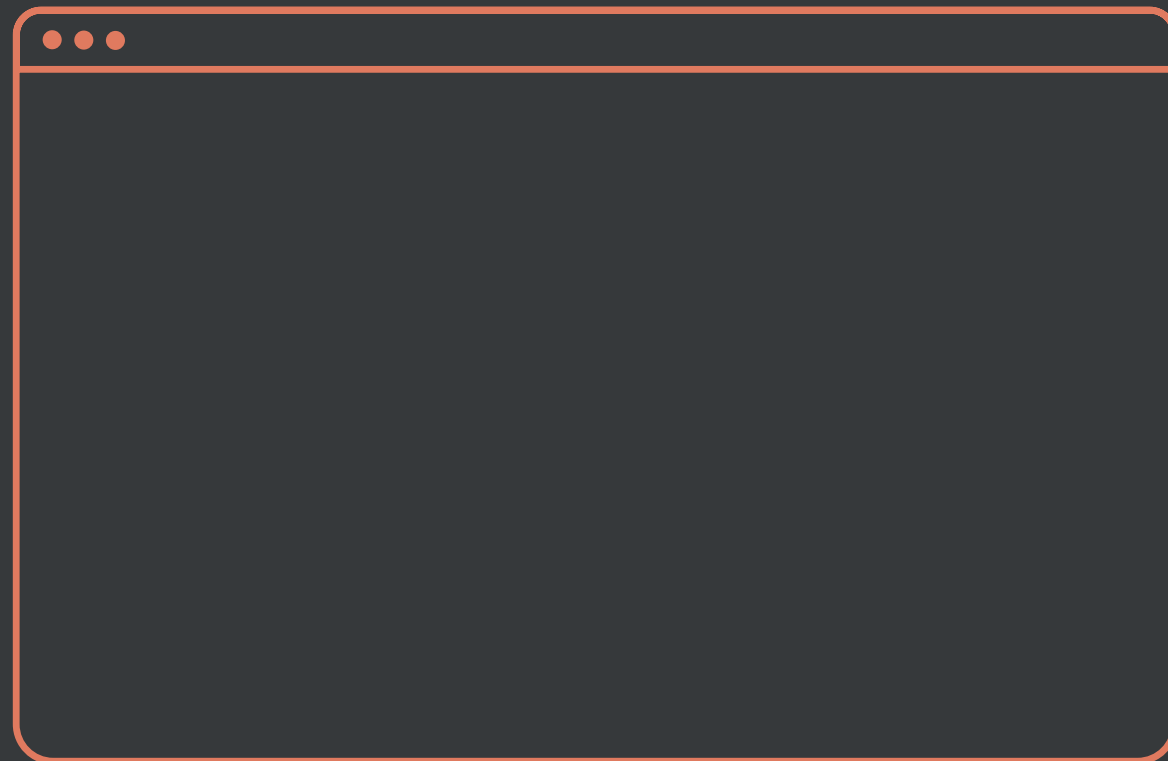
Rest Overview

Client



Rest Overview

Client



REST Controller

- GET /cats
- POST /createCat
- PUT /updateCat
- DELETE /putCatToSleep

Rest Overview

Client



REST Controller

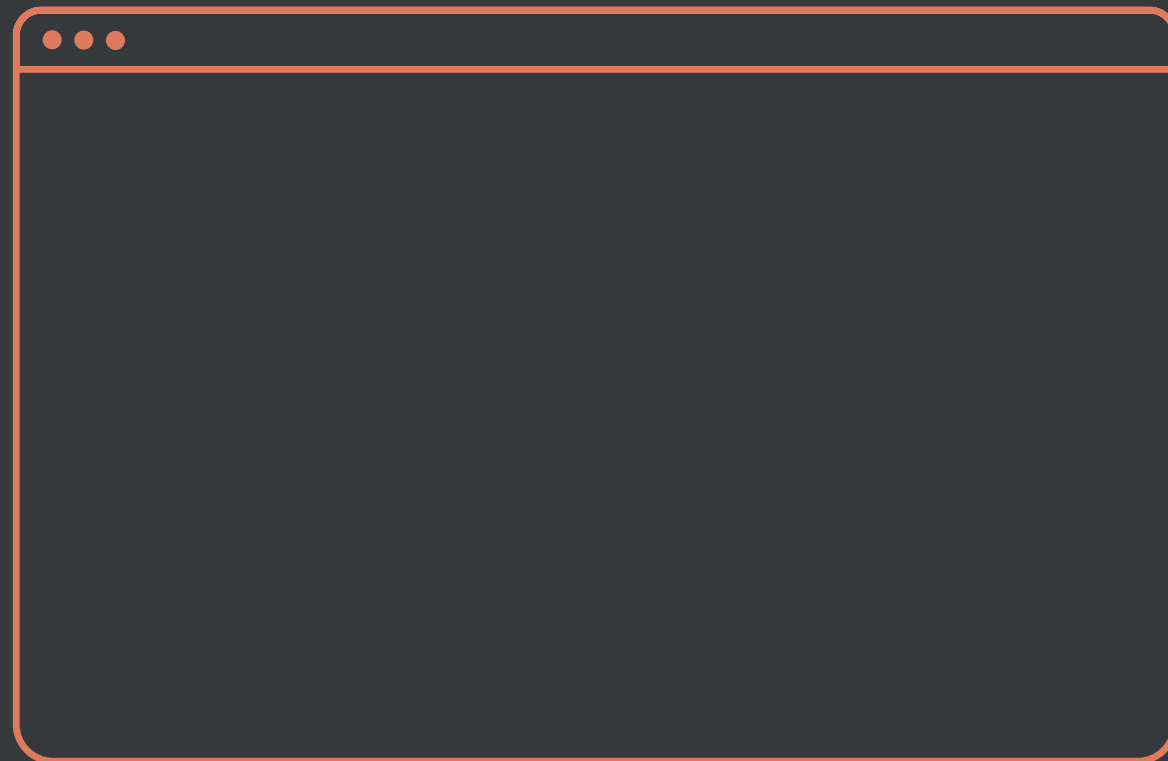
- GET /cats
- POST /createCat
- PUT /updateCat
- DELETE /putCatToSleep

Server



Rest Overview

Client



REST Controller

- GET /cats
- POST /createCat
- PUT /updateCat
- DELETE /putCatToSleep

Server



Response Codes

100

Informational

300

Redirect

Response

200

Success

400

Client Error

500 Server

Error



Cum funcționează

Cum funcționează

```
$uri = parse_url($_SERVER['REQUEST_URI'], PHP_URL_PATH);  
$uri = explode('/', $uri);  
  
if ($uri[1] !== 'cats') {  
    header("HTTP/1.1 404 Not Found");  
    exit();  
}  
  
$catId = null;  
if (isset($uri[2])) {  
    $catId = (int) $uri[2];  
}  
  
$requestMethod = $_SERVER["REQUEST_METHOD"];  
  
$controller = new PersonController($dbConnection, $requestMethod, $catId);  
$controller->processRequest();
```

Cum funcționează

```
public function processRequest()
{
    switch ($this->requestMethod) {
        case 'GET':
            if ($this->catId) {
                $response = $this->getCat($this->catId);
                // Rezolve for a cat
            } else {
                // Rezolve for all cats
            };
            break;
        case 'POST':
            // ...
            break;
        case 'PUT':
            // ...
            break;
        case 'DELETE':
            // ...
            break;
        default:
            $response = $this->notFoundResponse();
            break;
    }
    header($response['status_code_header']);
    if ($response['body']) {
        echo $response['body'];
    }
}
```

Cum funcționează

```
private function notFoundResponse()  
{  
    $response['status_code_header'] = 'HTTP/1.1 404 Not Found';  
    $response['body'] = null;  
    return $response;  
}
```

Cum funcționează

```
private function getAllCats()  
{  
    $result = $this->catsDB->findAll();  
    $response['status_code_header'] = 'HTTP/1.1 200 OK';  
    $response['body'] = json_encode($result);  
    return $response;  
}
```


Exerciții

**“EDUCATION IS LEARNING
WHAT YOU DIDN'T EVEN
KNOW YOU DIDN'T KNOW .”**

— Daniel J. Boorstin