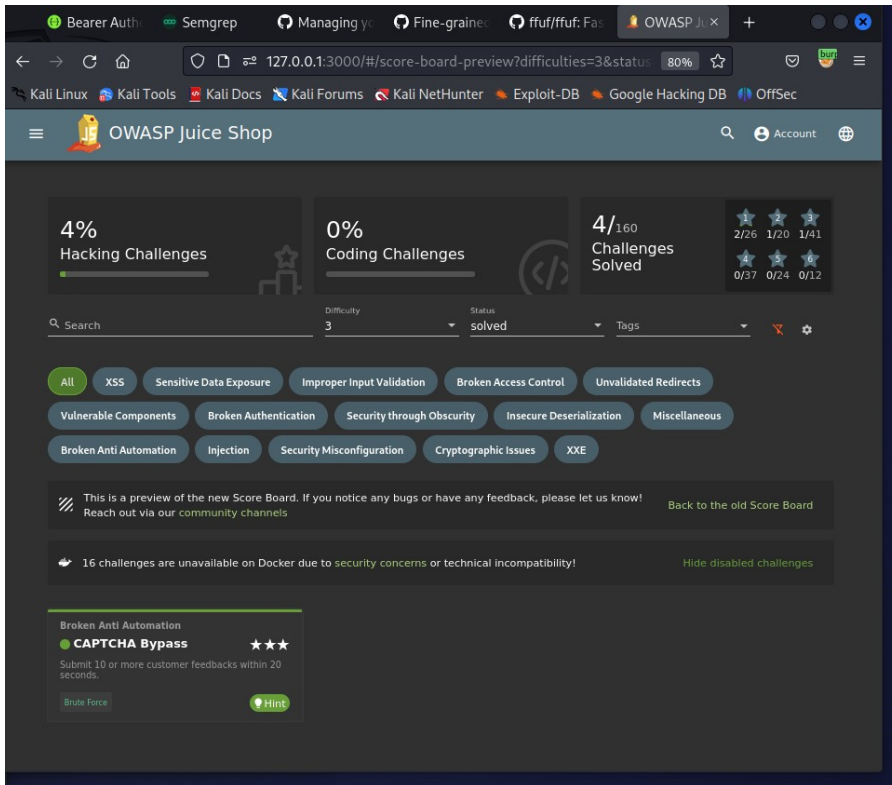
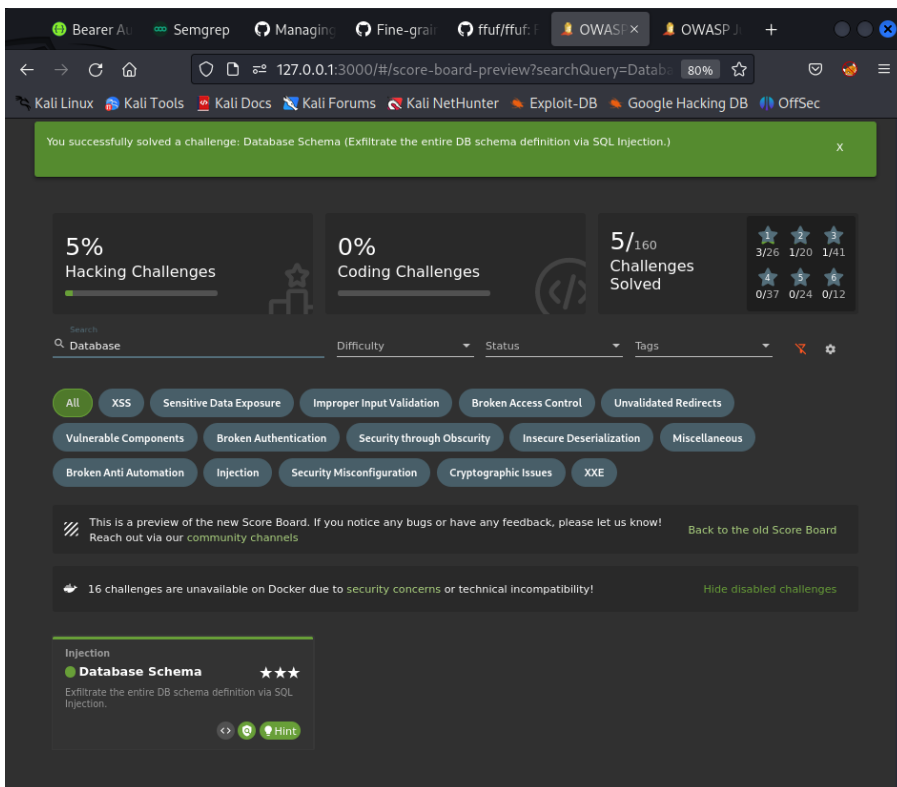


# Лабораторные работы в Juice Shop

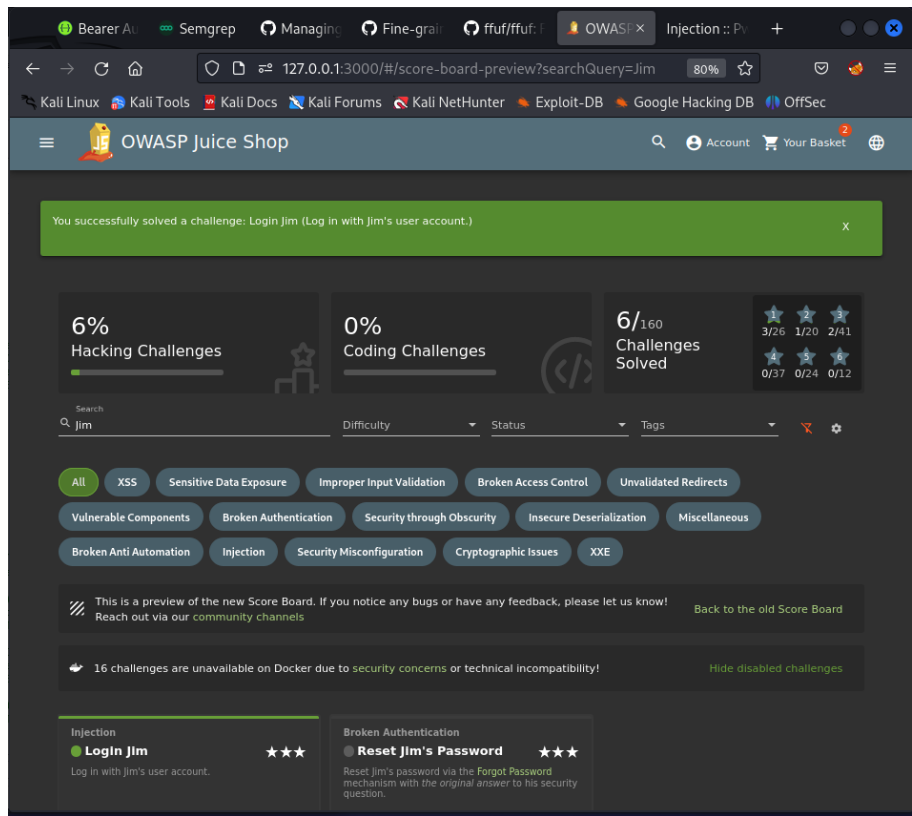
## 1. CAPTCHA ByPass



## 2. Database Schema



### 3. Login Jim



## Сканирование уязвимостей

### Команда:

```
$ semgrep scan --config="p/javascript" --config="p/php" --config="p/python"
```

### Результаты:

Scan Status				
Scanning 3 files tracked by git with 432 Code rules, 0 Supply Chain rules, 202 Pro rules:				
CODE RULES				
Language	Rules	Files	Origin	Rules
python	255	1	Community	230
js	126	1	Pro rules	202
php	43	1		
SUPPLY CHAIN RULES				
Run `semgrep ci` to find dependency vulnerabilities and advanced cross-file findings.				

## PROGRESS

100% 0:00:00

7 Code Findings |

### find\_vuln6.py

python.django.security.injection.command.command-injection-os-system.command-injection-os-system

Request data detected in os.system. This could be vulnerable to a command injection and should be avoided. If this must be done, use the 'subprocess' module instead and pass the arguments as a list. See [https://owasp.org/www-community/attacks/Command\\_Injection](https://owasp.org/www-community/attacks/Command_Injection) for more information.

Details: <https://sg.run/Gen2>

```
9 | os.system(request.remote_addr)
  | :
  | : -----
```

python.flask.security.audit.debug-enabled.debug-enabled

Detected Flask app with debug=True. Do not deploy to production with this flag enabled as it will leak sensitive information. Instead, consider using Flask configuration variables or setting 'debug' using system environment variables.

Details: <https://sg.run/dKrd>

```
14 | app.run(debug=True)
    | :
    | : -----
```

python.flask.security.injection.os-system-injection.os-system-injection

User data detected in os.system. This could be vulnerable to a command injection and should be avoided. If this must be done, use the 'subprocess' module instead and pass the arguments as a list.

Details: <https://sg.run/4xzz>

```
9 | os.system(request.remote_addr)
```

### find\_vuln7.js

javascript.express.express-child-process.express-child-process

Untrusted input might be injected into a command executed by the application, which can lead to a command injection vulnerability. An attacker can execute arbitrary commands, potentially gaining complete control of the system. To prevent this vulnerability, avoid executing OS commands with user input. If this is unavoidable, validate and sanitize the user input, and use safe methods for executing the commands. For more information, see [Command injection prevention for JavaScript ](<https://semgrep.dev/docs/cheat-sheets/javascript-command-injection/>).

Details: <https://sg.run/9p1R>

```
8 | exec(`${req.body.url}`, (error) => {
  | :
  | : -----
19 | 'gzip ' + req.query.file_path,
```

## find\_vuln8.php

php.lang.security.tainted-command-injection.tainted-command-injection

Untrusted input might be injected into a command executed by the application, which can lead to a command injection vulnerability. An attacker can execute arbitrary commands, potentially gaining complete control of the system. To prevent this vulnerability, avoid executing OS commands with user input. If this is unavoidable, validate and sanitize the user input, and use safe methods for executing the commands. In PHP, it is possible to use ``escapeshellcmd(...)`` and ``escapeshellarg(...)`` to correctly sanitize input that is used respectively as system commands or command arguments.

Details: <https://sg.run/Bpj2>

```
11 | system("whois " . $_POST["domain"]);  
   | : | -----
```

php.laravel.security.laravel-command-injection.laravel-command-injection

Untrusted input might be injected into a command executed by the application, which can lead to a command injection vulnerability. An attacker can execute arbitrary commands, potentially gaining complete control of the system. To prevent this vulnerability, avoid executing OS commands with user input. If this is unavoidable, validate and sanitize the user input, and use safe methods for executing the commands. In PHP, it is possible to use ``escapeshellcmd(...)`` and ``escapeshellarg(...)`` to correctly sanitize input when used respectively as system commands or command arguments.

Details: <https://sg.run/JPYR>

```
11 | system("whois " . $_POST["domain"]);
```

Scan Summary
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Ran 432 rules on 3 files: 7 findings.