

# NodeJS Security



# Agenda\_

- 01** Introduction
- 02** Application Security
- 03** Error & Exception handling
- 04** Server Security
- 05** Platform Security

# Application Security

## Application Security.

- Use flat promise chain.
- Set request size limits.
- Perform input validation.
- Perform output escaping

## Application Security.

- Perform application actively logging.
- monitor the event loop.
- Take precautions against brute forcing attack.
- use anti CSRF tokens.
- Remove unnecessary routes

## Application Security.

- Prevent HTTP parameter pollution.
- Only return what is necessary.

# Error and Exception handling

## Error and Exception handling.

- Handle uncaught Exception.
- Listen to errors when using EventEmitter.



# Server Security

## Server Security

- Setting cookie flag appropriately.
- Use Appropriate security headers .

## Server Security

```
HTTP/1.1 200 OK
X-Powered-By: Express
Content-Type: text/html; charset=utf-8
Content-Length: 20
ETag: W/"14-SsoazAlSF4H46953FT6rSL7/tvU"
Date: Fri, 29 Jul 2022 10:47:59 GMT
Connection: keep-alive
Keep-Alive: timeout=5
```

## Server Security

```
Content-Security-Policy: default-src 'self';base-uri  
'self';block-all-mixed-content;font-src 'self' https:  
data:;form-action 'self';frame-ancestors 'self';img-src 'self'  
data:;object-src 'none';script-src 'self';script-src-attr  
'none';style-src 'self' https:  
'unsafe-inline';upgrade-insecure-requests
```

## Server Security

- X-DNS-Prefetch-Control: off
- Expect-CT: max-age=0
- X-Frame-Options: SAMEORIGIN
- Strict-Transport-Security: max-age=15552000; includeSubDomains
- X-Download-Options: noopen
- X-Content-Type-Options: nosniff
- X-XSS-Protection: 0

# Platform Security

## Platform Security.

- Keep your packages upto date.
- Don't use dangerous functions.
- Stay away from evil regexs.
- Run security linters.
- use strict mode

The image features a dark blue background with abstract geometric shapes in the corners. The top-left corner contains three parallel diagonal stripes in red, blue, and white. The bottom-right corner contains two parallel diagonal stripes in red and blue.

THANK YOU.