



Higher School of Technology-Safi
Departement : Computer Science
Major : Computer Ingineering/Option Systems and Network
Administration

Unveiling CSRF Vulnerabilities

Understanding CSRF: Safeguarding Against Unauthorized Actions

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PLAN



Cross-Site Request Forgery

Definition, CSRF WorkFlow



Introduction

Intoduction & Exemples Of Various Web Attacks



Demonstration

Practicing in a Laravel Environement



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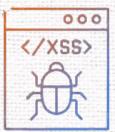
Exemples Of Various Web Attacks:











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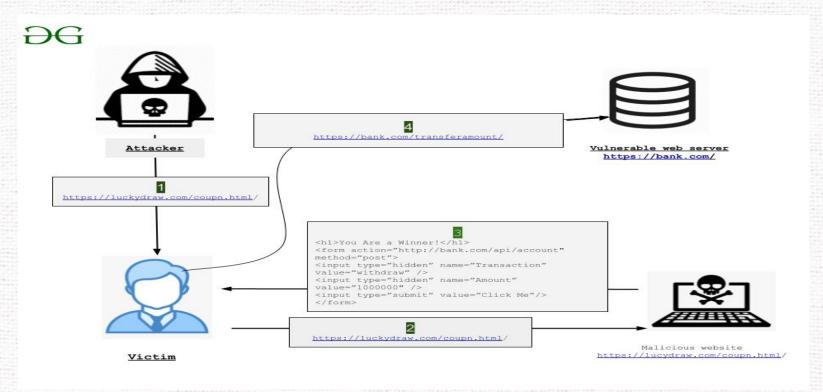
Cross-Site Request Forgery

Definition, CSRF WorkFlow



- CSRF involves executing unauthorized actions on a web application by exploiting the trust between a user's browser and the targeted site.
- -It includes inserting unauthorized requests, often triggered by malicious scripts.
- -CSRF aims to manipulate the application state, causing unintended actions.

CSRF WorkFlow:





Generate Token:

Server creates a unique CSRF token upon user login.

Associate with Session:

Token is linked to the user's session or cookie.

Include in Forms:

CSRF token is added as a hidden field in all forms.

Validate Server-Side:

Server checks if the token in the request matches the stored one.

Reject Unauthorized Requests:

If token is missing or incorrect, the server rejects the request.



Demonstraction

Practicing in a Laravel Environement

LARAVEL CSRF Protection:



CSRF Tokens in Forms:

Laravel generates unique CSRF tokens for user sessions, preventing unauthorized actions when forms are submitted.

Verify CSRF Token Middleware:

Laravel's VerifyCsrfToken middleware checks incoming requests, rejecting them if the CSRF token doesn't match the user's session token.

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DEMO

THANK'S FOR YOUR ATTENTION