

Development Secure Website

Secure Programming – CW2

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INTRODUCTION

OVERVIEW

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- In order to study Secure Programming, I studied where vulnerabilities occur and how to make them safe by developing directly without using Framework or CMS.
- This study was focused on secure programming rather than attack, and furthermore, it was conducted to study web development.

DEVELOPMENT ENVIROMENT

LANGUAGE



JSP &
Servlet



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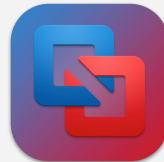
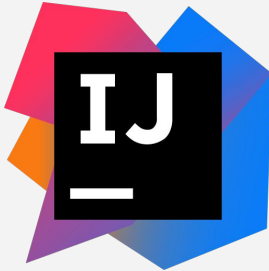
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TOOL &
PLATFORM

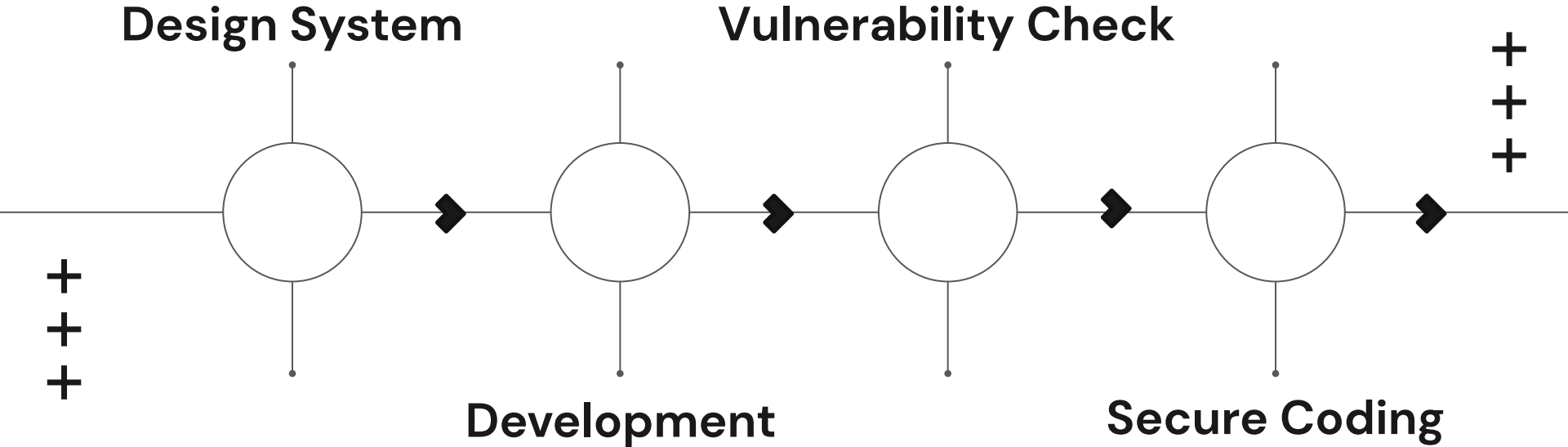
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DEVELOPMENT PROCESS



MODELLING

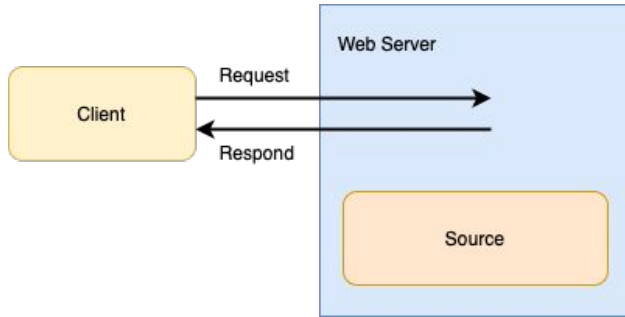
STRIDE

- Spoofing
- Tampering + + +
- Repudiation
- Information Disclosure
- Denial of Service

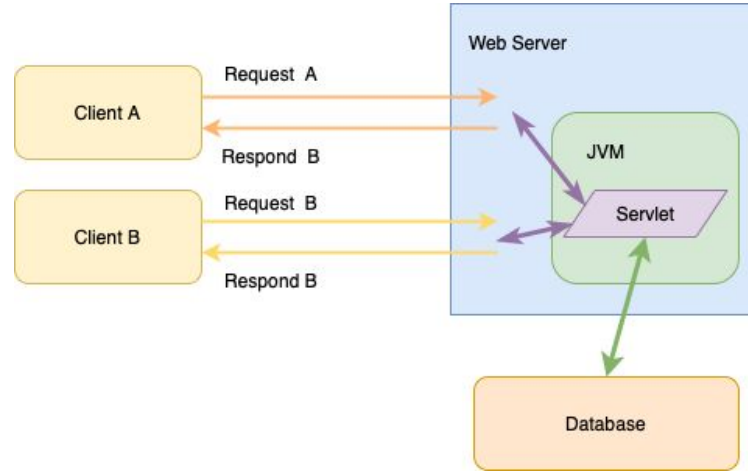
02

DESIGN AND SECURING

STATIC AND DYNAMIC PAGES

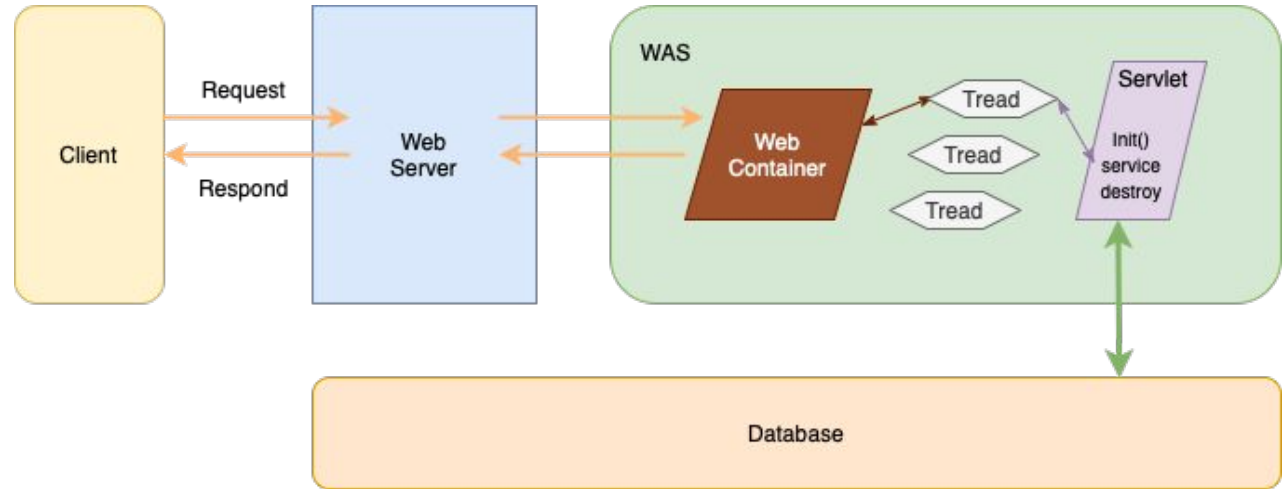


Static Pages



Dynamic Pages

ARCHITECTURE



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DEFAULT CHECK LIST



XSS/SQLi

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Basic for web hacking



Security Misconfiguration

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Indexing documents,
and permissions



Encrypt

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Encrypting packet data and
user's passwords in the
database



ETC.

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Remote Control, DOS/DDOS,
Brute-force, and etc.

HOW TO CHECK?

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- Manual attack
- Automated attack
- Server Security

MAIN 6 SECURE PART

Apache

More secure with the server's security settings

Security

Firewall, SELinux setup and output one time Ping

Authority

Strong security with Linux permission settings

Database

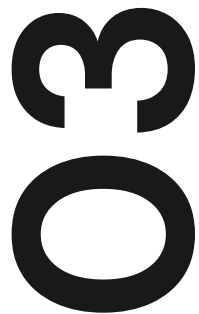
No external connection allowed and dedicated ID/PW

Encrypt

SSL connection and password encryption of DB

AWS

Secure platform with protect remote control and DDOS attack



PROJECT DEMO

You can try in here:

- Demo – <https://bbsjsp.tryto.be>
- Git – <https://github.com/leelsey/BBSJSP>

THANKS

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The end of presentation

Do you have any questions?

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