

SWE 550 Threat Modeling for Web Application

Owner: Simon Codrington
Reviewer:
Contributors:
Date Generated: Thu Oct 31 2024

Executive Summary

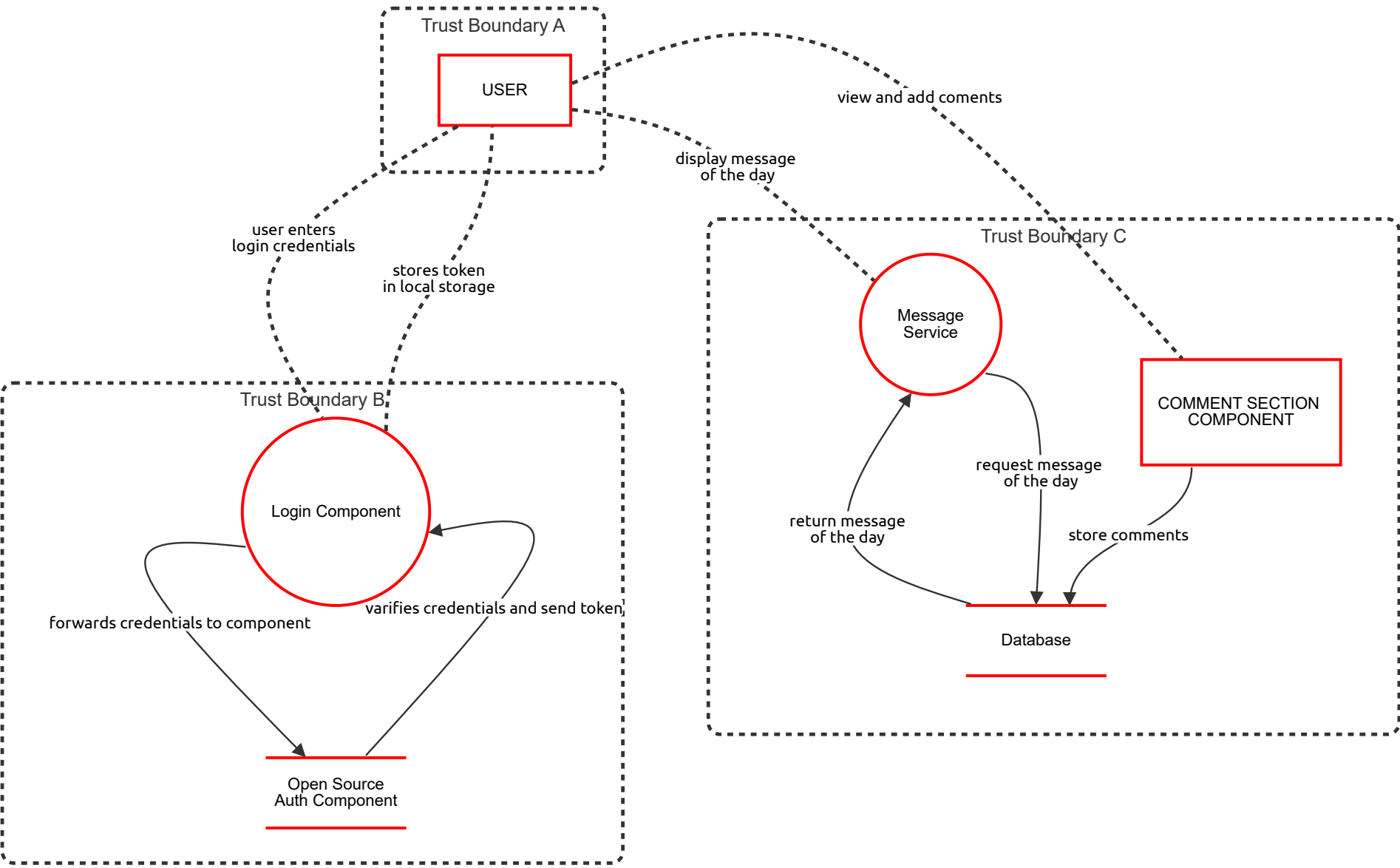
High level system description

Not provided

Summary

Total Threats	6
Total Mitigated	0
Not Mitigated	6
Open / High Priority	0
Open / Medium Priority	6
Open / Low Priority	0
Open / Unknown Priority	0

New STRIDE diagram



New STRIDE diagram

USER (Actor)

Number	Title	Type	Priority	Status	Score	Description	Mitigations
17	New STRIDE threat	Spoofing	Medium	Open		Ensuring that the user identity is genuine	Use HTTPS to encrypt communications and consider multi-factor authentication

COMMENT SECTION COMPONENT (Actor)

Number	Title	Type	Priority	Status	Score	Description	Mitigations
27	New STRIDE threat	Spoofing	Medium	Open		Ensuring that only authorized users can alter data.	Provide remediation for this threat or a reason if status is N/A

forwards credentials to component (Data Flow)

Number	Title	Type	Priority	Status	Score	Description	Mitigations
--------	-------	------	----------	--------	-------	-------------	-------------

varifies credentials and send token (Data Flow)

Number	Title	Type	Priority	Status	Score	Description	Mitigations
--------	-------	------	----------	--------	-------	-------------	-------------

return message of the day (Data Flow)

Number	Title	Type	Priority	Status	Score	Description	Mitigations
--------	-------	------	----------	--------	-------	-------------	-------------

request message of the day (Data Flow)

Number	Title	Type	Priority	Status	Score	Description	Mitigations
--------	-------	------	----------	--------	-------	-------------	-------------

store comments (Data Flow)

Number	Title	Type	Priority	Status	Score	Description	Mitigations
--------	-------	------	----------	--------	-------	-------------	-------------

Database (Store)

Number	Title	Type	Priority	Status	Score	Description	Mitigations
--------	-------	------	----------	--------	-------	-------------	-------------

24	New STRIDE threat	Information disclosure	Medium	Open		Protecting stored data from unauthorized access	Use database encryption
----	-------------------	------------------------	--------	------	--	---	-------------------------

Open Source Auth Component (Store)

Number	Title	Type	Priority	Status	Score	Description	Mitigations
--------	-------	------	----------	--------	-------	-------------	-------------

20	New STRIDE threat	Denial of service	Medium	Open		Preventing unauthorized access if credentials are compromised	Ensuring that data isn't altered between the login component and the authentication module
----	-------------------	-------------------	--------	------	--	---	--

Login Component (Process)

Number	Title	Type	Priority	Status	Score	Description	Mitigations
--------	-------	------	----------	--------	-------	-------------	-------------

18	New STRIDE threat	Tampering	Medium	Open		Ensuring that data isn't altered between the login component and the authentication module	Implement input validation, access controls, and secure token handling
----	-------------------	-----------	--------	------	--	--	--

Message Service (Process)

Number	Title	Type	Priority	Status	Score	Description	Mitigations
--------	-------	------	----------	--------	-------	-------------	-------------

26	New STRIDE threat	Denial of service	Medium	Open		Protecting against high-traffic or malicious requests	input sanitization, and rate limiting
----	-------------------	-------------------	--------	------	--	---	---------------------------------------