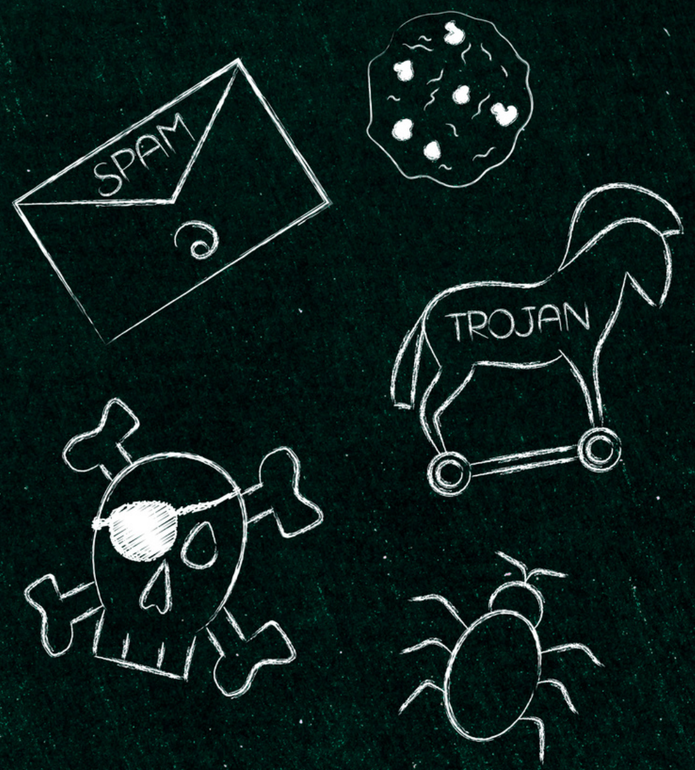
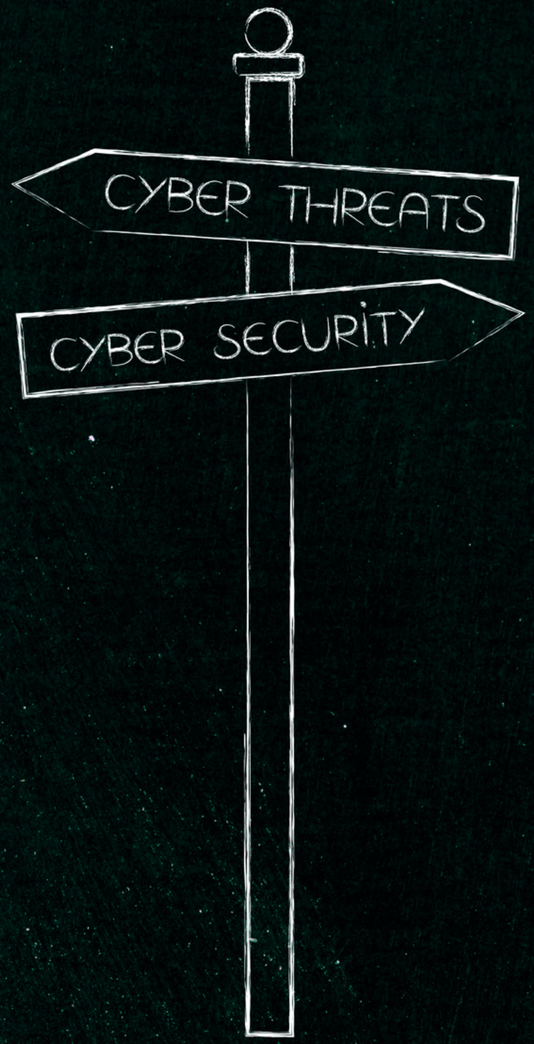
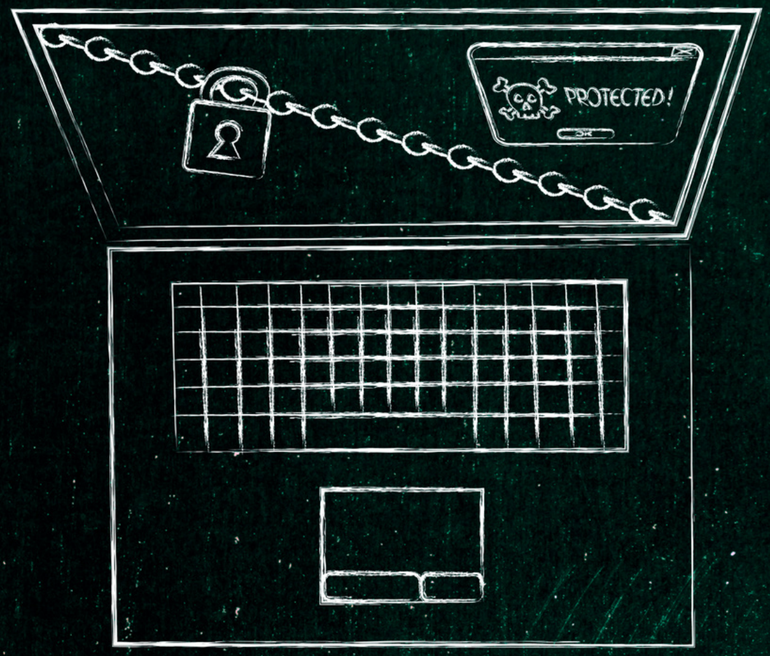
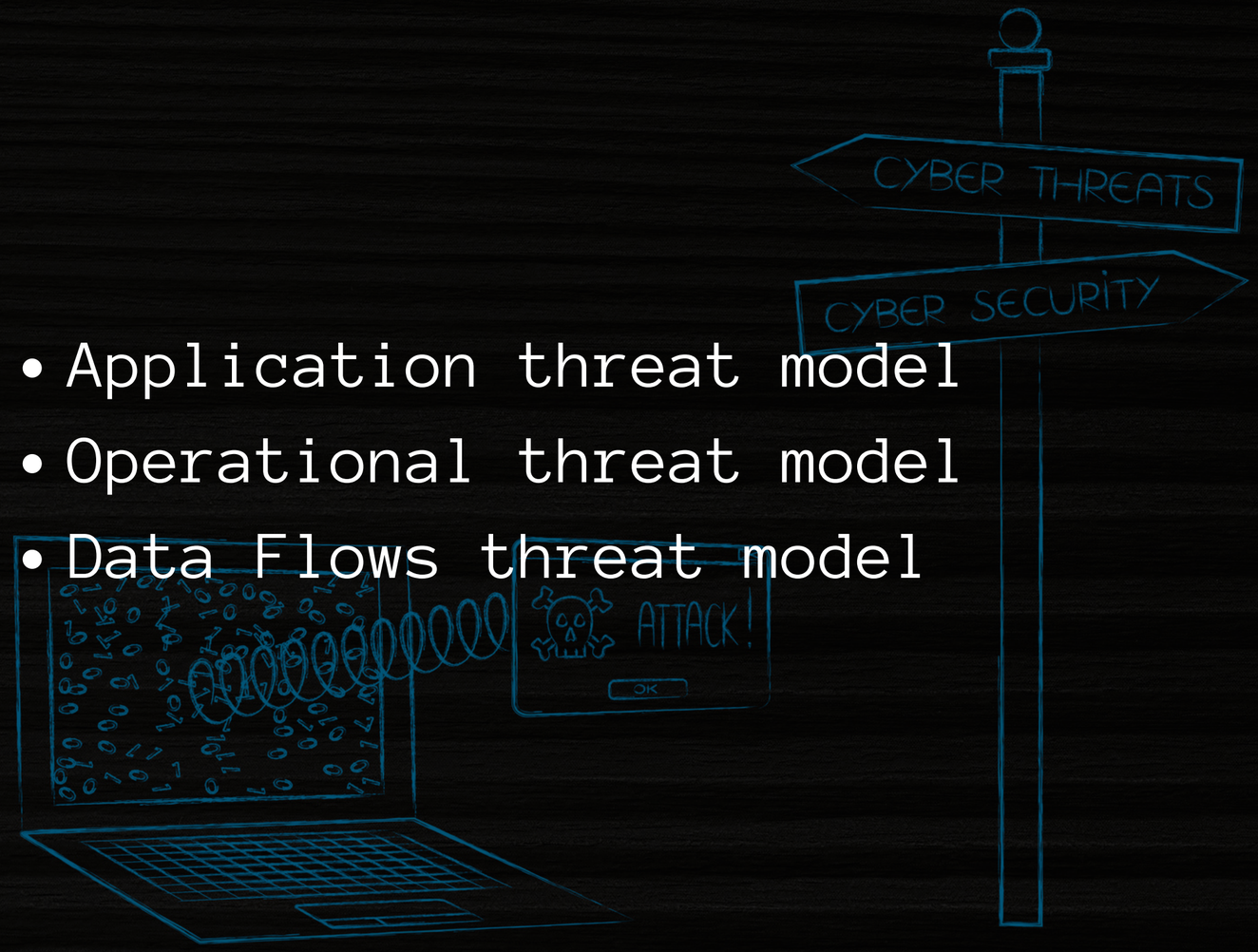


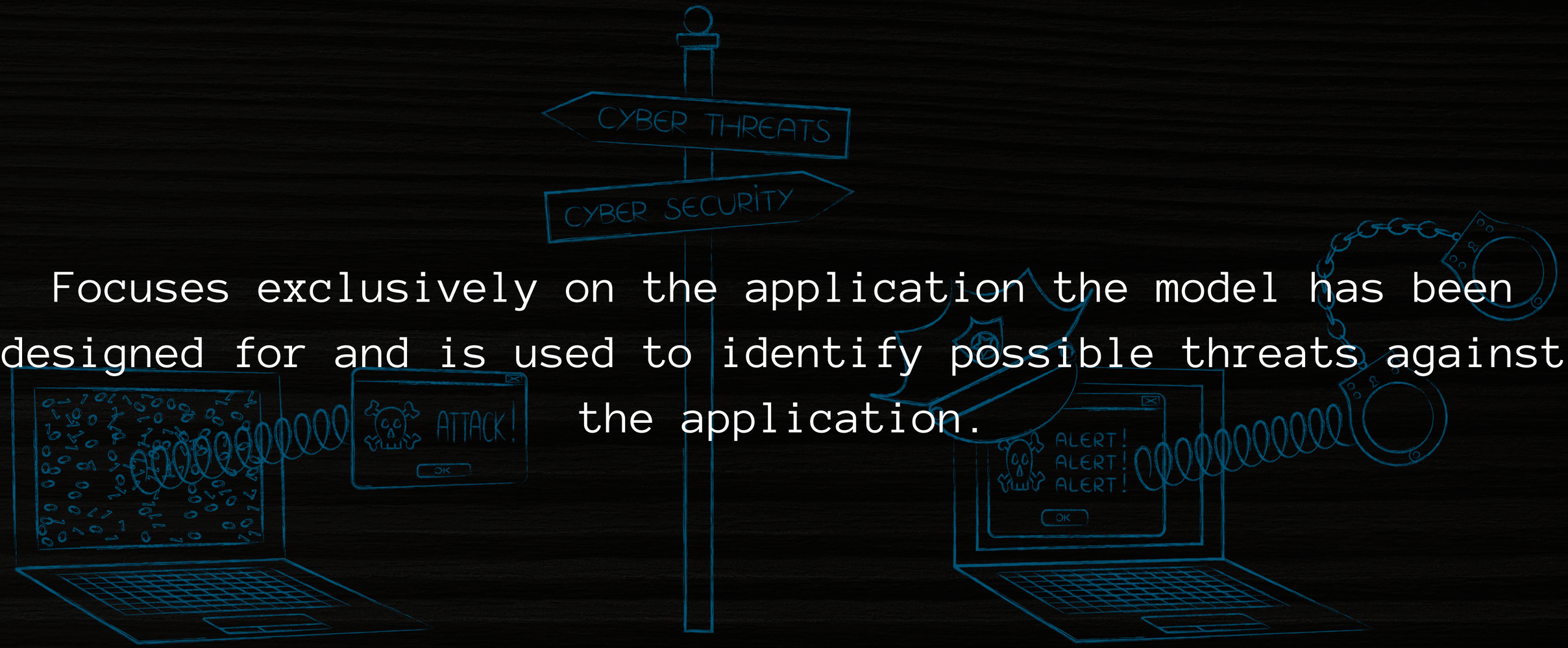

# THREAT MODELLING- PART 2

# Types of Threat Models



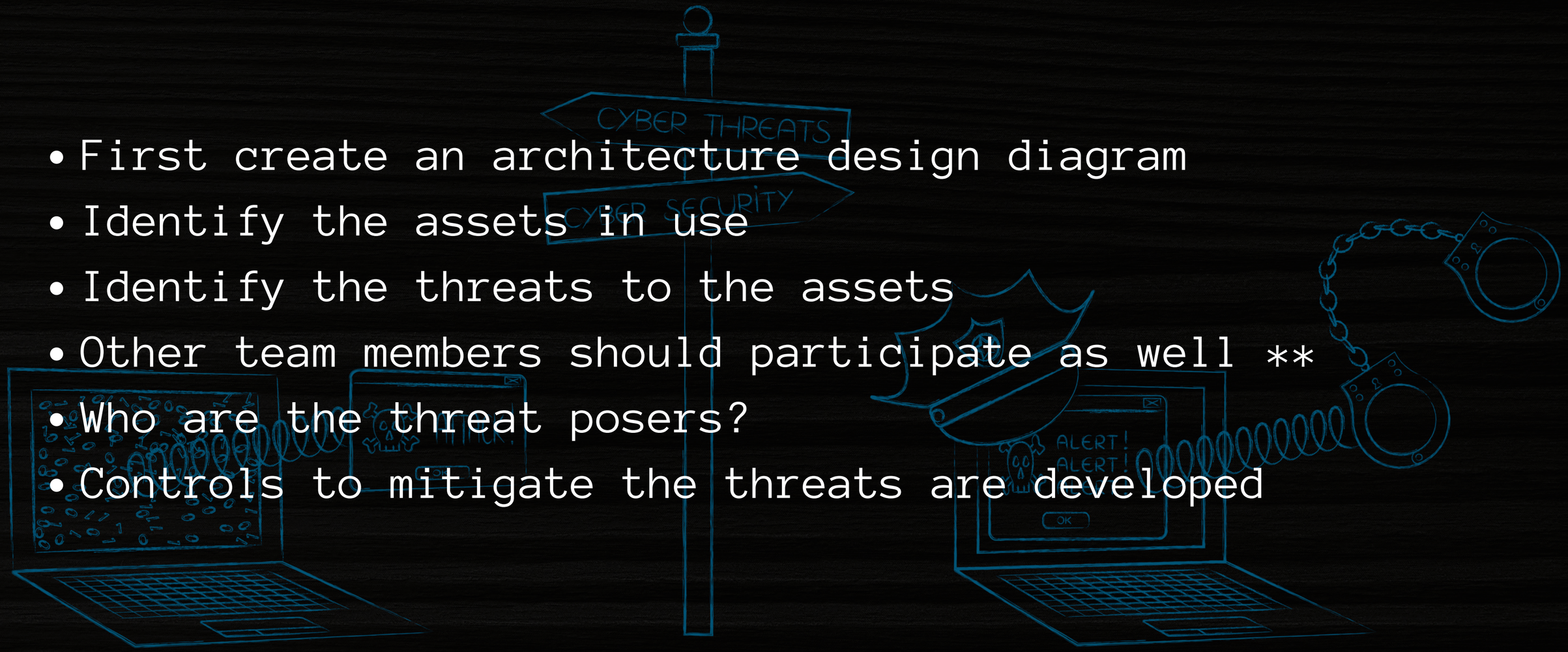

- Application threat model
- Operational threat model
- Data Flows threat model

# Application Threat Model



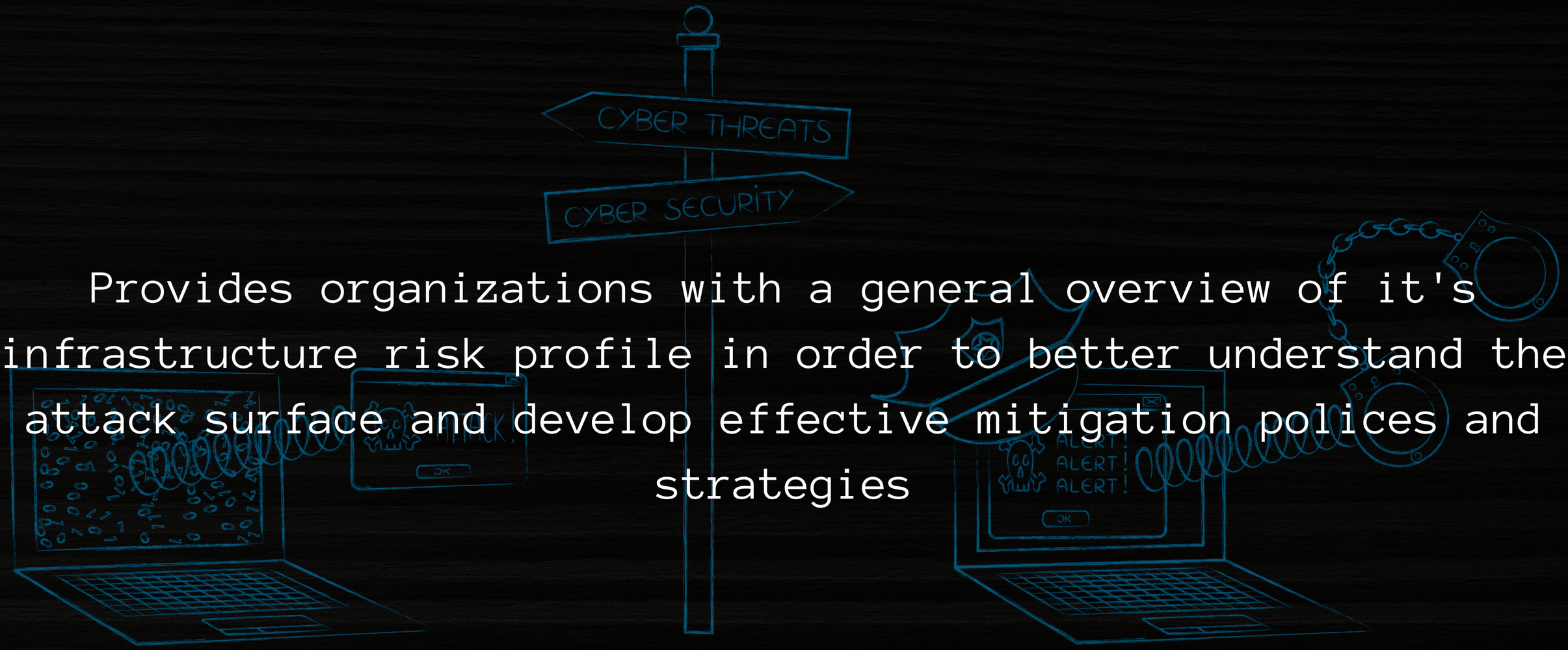

Focuses exclusively on the application the model has been designed for and is used to identify possible threats against the application.

# Application Threat Model



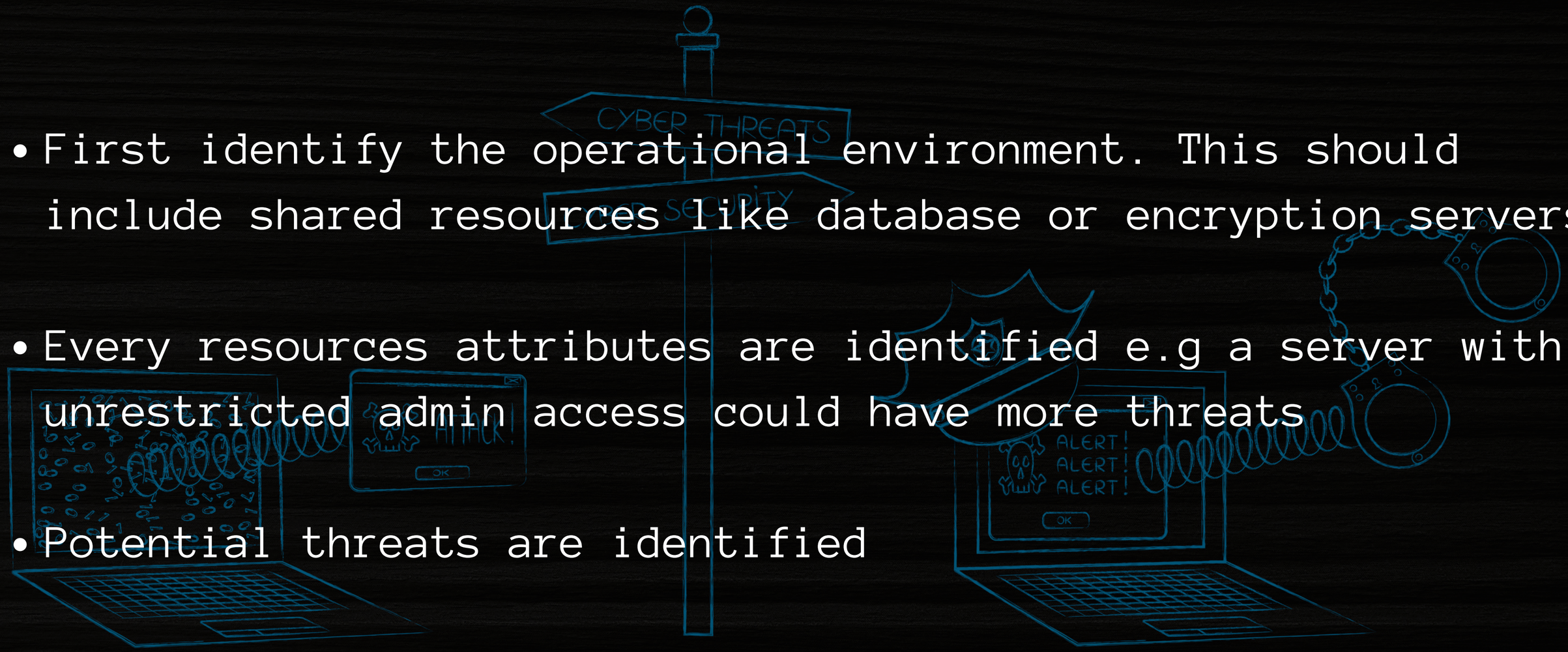

- First create an architecture design diagram
- Identify the assets in use
- Identify the threats to the assets
- Other team members should participate as well **
- Who are the threat posers?
- Controls to mitigate the threats are developed

# Operational Threat Model

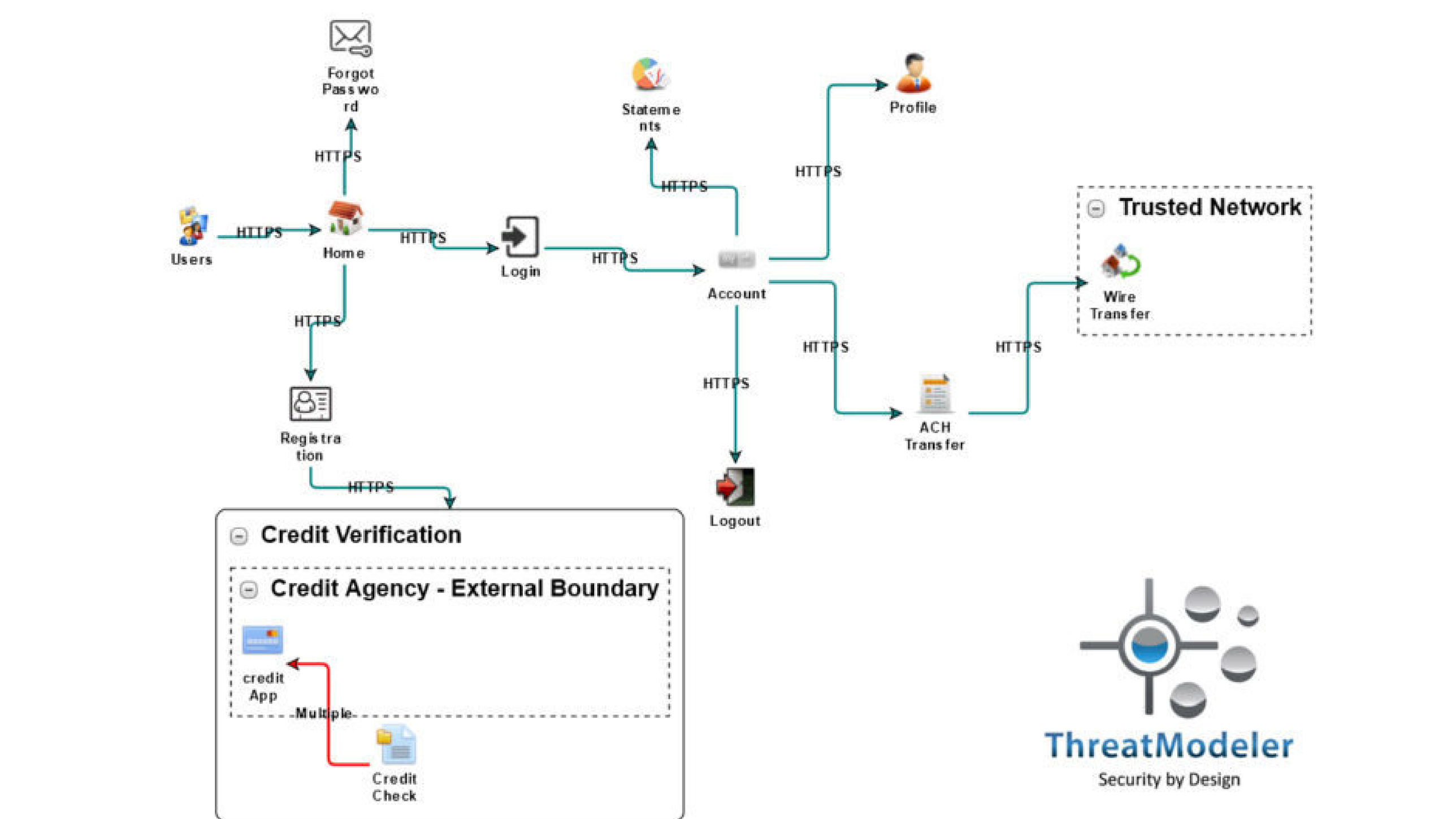



Provides organizations with a general overview of it's infrastructure risk profile in order to better understand the attack surface and develop effective mitigation polices and strategies

# Operational Threat Model



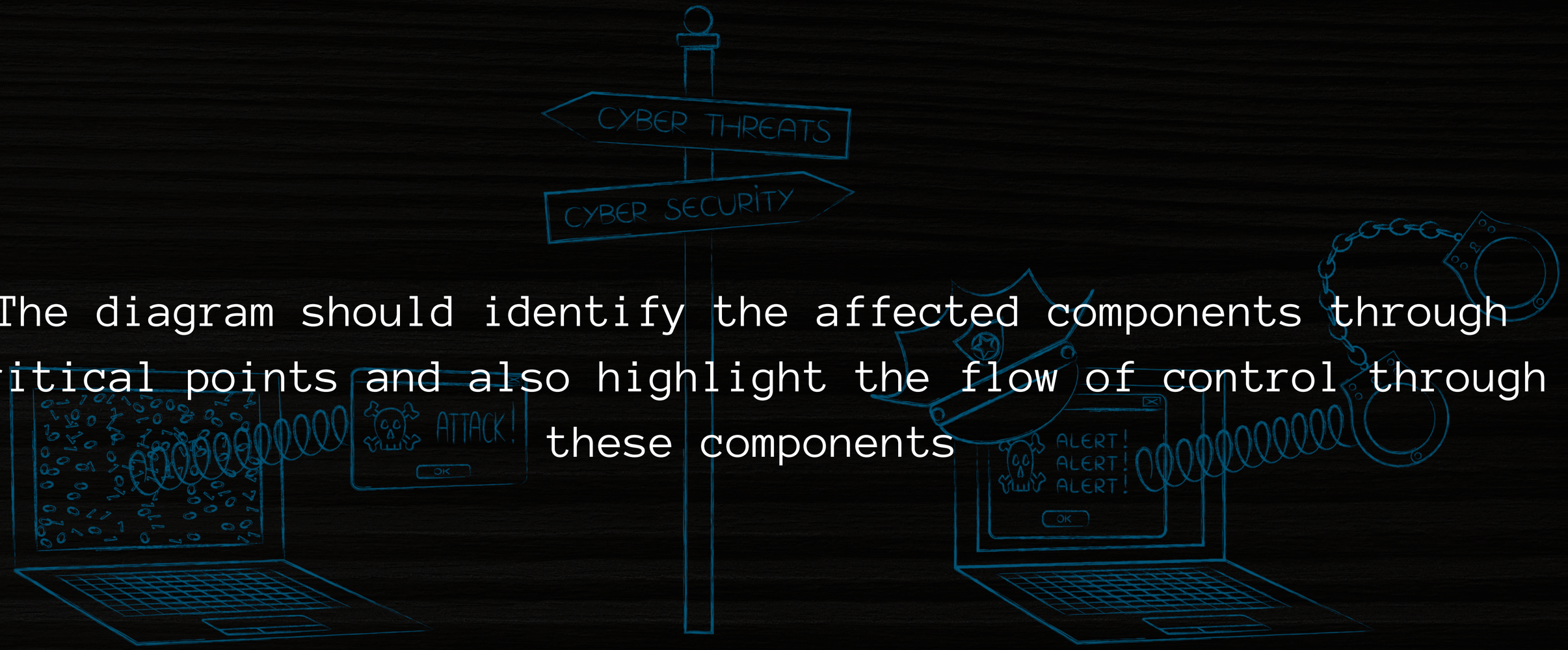

- First identify the operational environment. This should include shared resources like database or encryption servers
- Every resources attributes are identified e.g a server with unrestricted admin access could have more threats
- Potential threats are identified
- Effective security controls are developed


Forgot Password
HTTPS
Users
HTTPS
Home
HTTPS
Login
HTTPS
Statements
HTTPS
Account
HTTPS
Profile
HTTPS
Trusted Network
Wire Transfer
HTTPS
HTTPS
ACH Transfer
HTTPS
Logout
HTTPS
Registration
HTTPS
Credit Verification
Credit Agency - External Boundary
credit App
Multiple
Credit Check
ThreatModeler
Security by Design

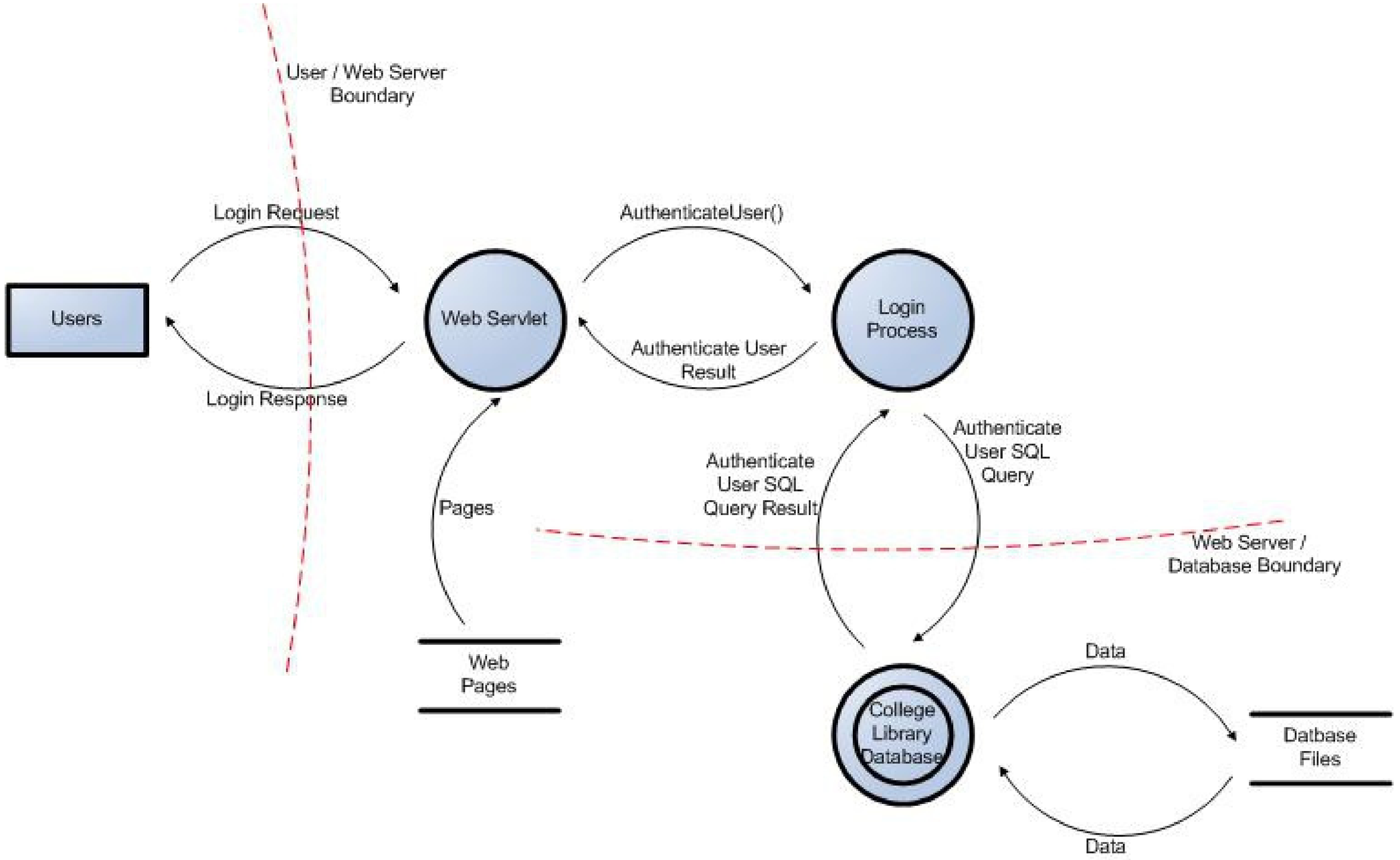
# Data Flow Model


Data flow diagrams (DFD) are used to accurately model the application through visual representation.

# Data Flow Model




The diagram should identify the affected components through critical points and also highlight the flow of control through these components


User / Web Server
Boundary
Login Request
Login Response
Users
Web Servlet
AuthenticateUser()
Authenticate User
Result
Login
Process
Pages
Web
Pages
Authenticate
User SQL
Query Result
Authenticate
User SQL
Query
Web Server /
Database Boundary
College
Library
Database
Data
Data
Database
Files