



Round 1

## No Attack

The attackers were lured by other things. You got lucky!

**Points Lost:** 0

**Mitigation(s):** None



Round 1

## False Alarm

You thought you were under attack, but it merely was a false alarm from a required external penetration test.

**Points Lost:** 0

**Mitigation(s):** None



Round 1

## Scanning Kiddie

A malicious actor gets to server by accident – maliciously deletes all data.

**Points Lost:** 25

**Mitigation(s):** Data Backup

Server Patches



Round 1

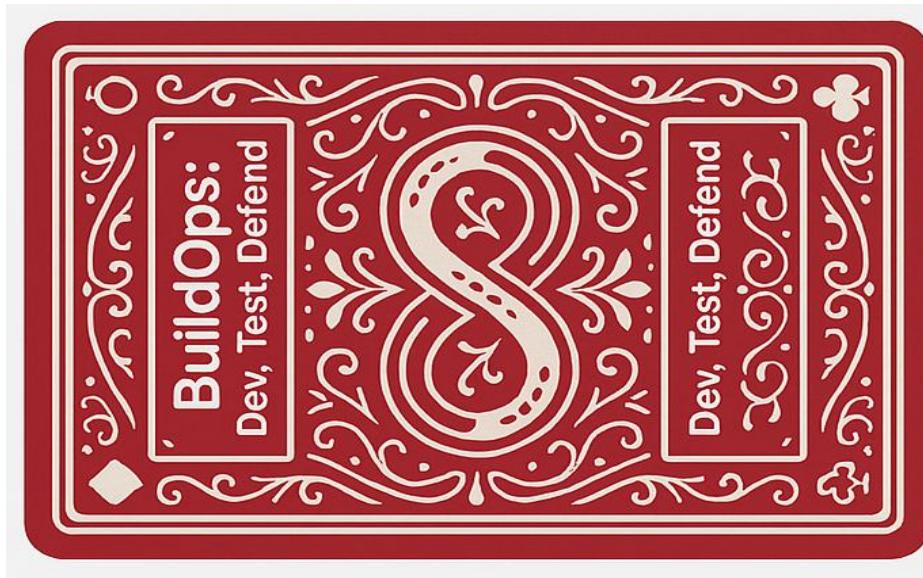
## DoSing Kiddie

A malicious actor gets to server by accident and uses for ddos attacks on other servers

**Points Lost:** 25

**Mitigation(s):** Server Penetration Testing

Network Protection





## Round 1

### Mother Nature

Lightening strikes your data center, taking it offline. If this is not mitigated, you'll only get half of the work done next sprint that you would like to, as you will be restoring the machine the entire time.

**Points Lost:** 25

**Mitigation(s):** Data Backup

Cloud Migration



## Round 1

### Bad Outsourcing

An attacker is able to use a simple SQL injection attack to discover the root password for the system. From this, they take it offline resulting in a service outage.

**Points Lost:** 40

**Mitigation(s):** Review of App Code

Server Penetration Testing



## Round 1

### Coffee Shop Hacker

A major client of yours has had their Wi-Fi hacked at their coffee shop. Lots of packets are captured, and the attackers attempt to use them to break into other systems.

**Points Lost:** 30

**Mitigation(s):** Secure Network Communication

Two Factor Authentication



## Round 1

### Mother Nature Again

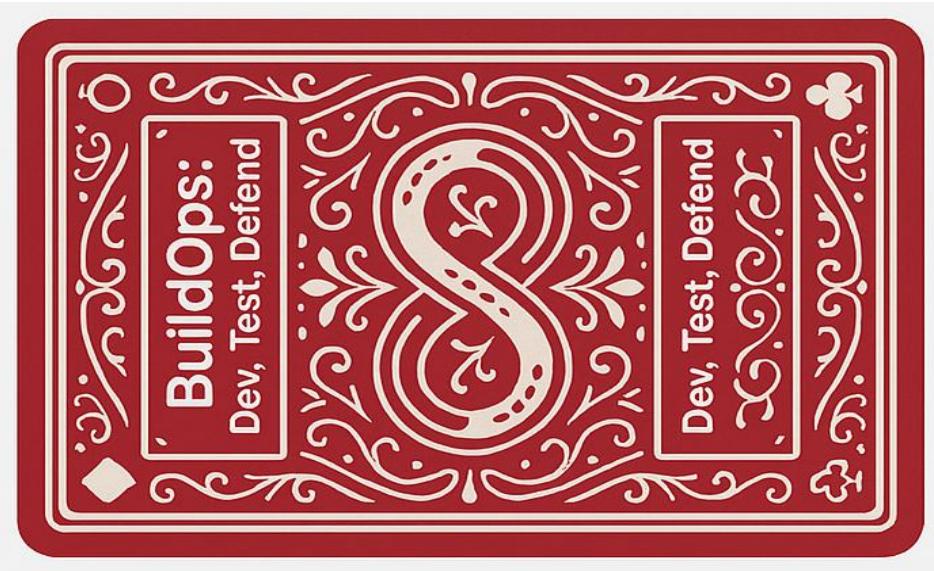
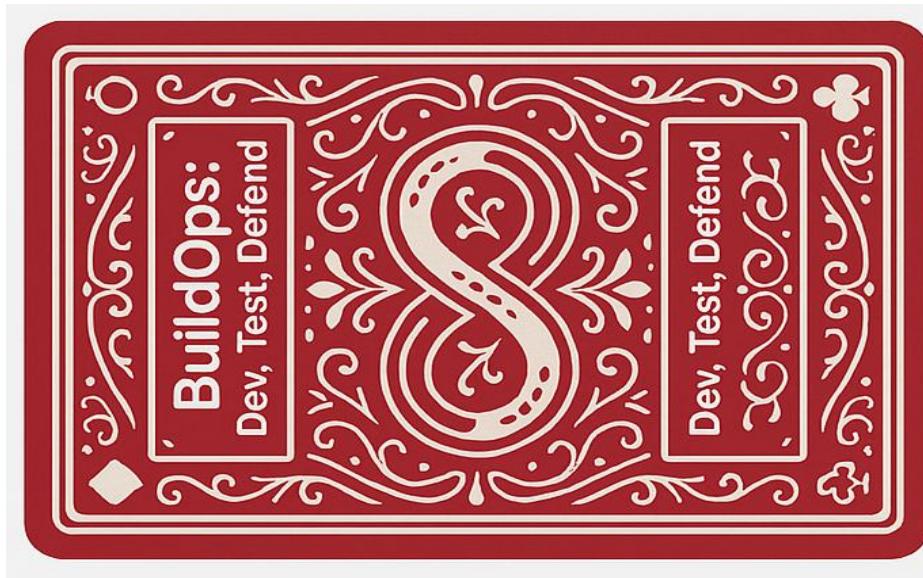
A power outage hits your data center, resulting in lowered performance for your system.

If the system has been moved to the cloud, you are fine. Otherwise, customers are somewhat unhappy, but the system is still operational.

**Points Lost:** 20

**Mitigation(s):** Cloud Migration

Only Cloud Migration





Round 2

## Just Looking Attack

An attacker gets into your system, but doesn't do anything. They do not try to steal any data, they merely poke around.

**Points Lost:** 10

**Mitigation(s):** Authentication Hardening  
Prevent Access to Office



Round 2

## Hacking Kiddie

A hacker gains access to your system and gets to server by accident. The attacker exfiltrates unencrypted data from the database and downloads other material, publishing it on the web.

**Points Lost:** 50

**Mitigation(s):** Server Penetration Testing  
Network Protection



Round 2

## Phishing Kiddie

An attacker sends spam email, gets subscribers to download rogue version or enter credentials in spoofed website, and now has log in credentials on your system.

**Points Lost:** 40

**Mitigation(s):** Incident Communication  
Two Factor Authentication



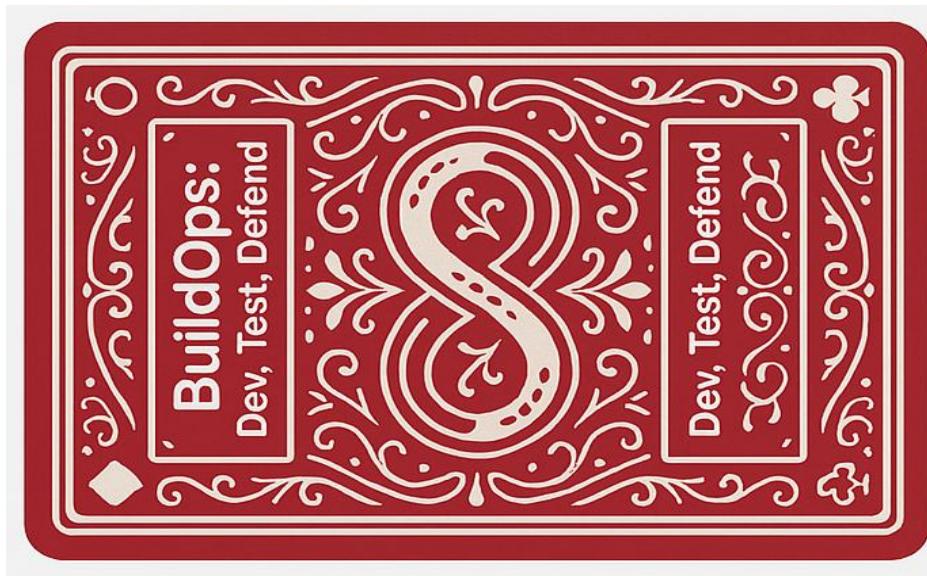
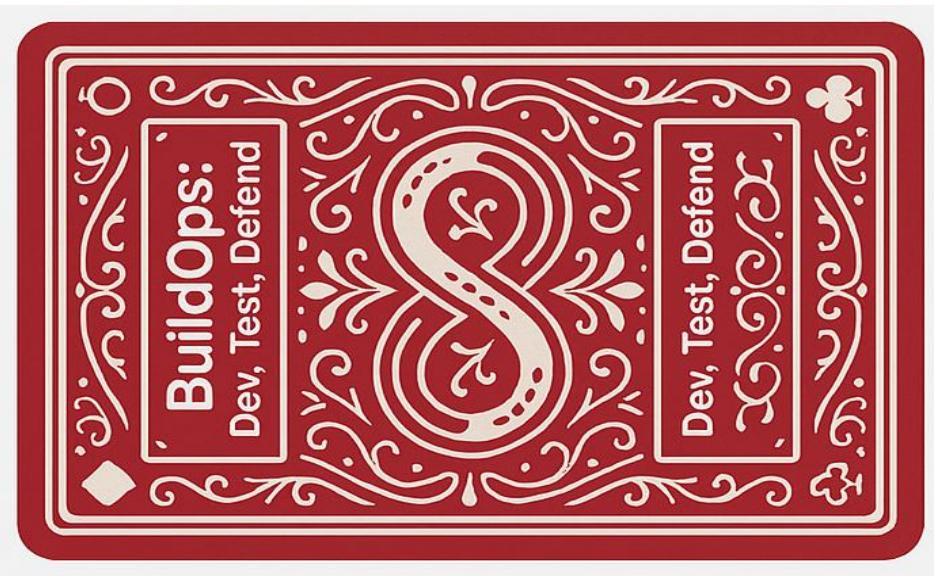
Round 2

## Journalist Hacker

A hacker – wants account information for specific users – server hack – publishes information or causes customer complaints.

**Points Lost:** 30

**Mitigation(s):** Server Penetration Testing  
Encrypt & Hide Data on Server





## Round 2 Recognition

Your site has been acknowledged as an overly secure site and is published in Wired magazine as an exemplar.

**Points Lost:** 0

**Mitigation(s):** None



## Round 3 MITM Kiddie

An attacker spoofs Wi-Fi access point in airport – Gains credentials – randomly hacks accounts.

**Points Lost:** 25

**Mitigation(s):** Secure Network Communication

Two Factor Authentication



## Round 3 Aggrieved Hacker

An attacker gains access to server – downloads or modifies server data – publicizes the data resulting in personal information being published.

**Points Lost:** 60

**Mitigation(s):** Server Penetration Testing

Encrypt & Hide Data on Server



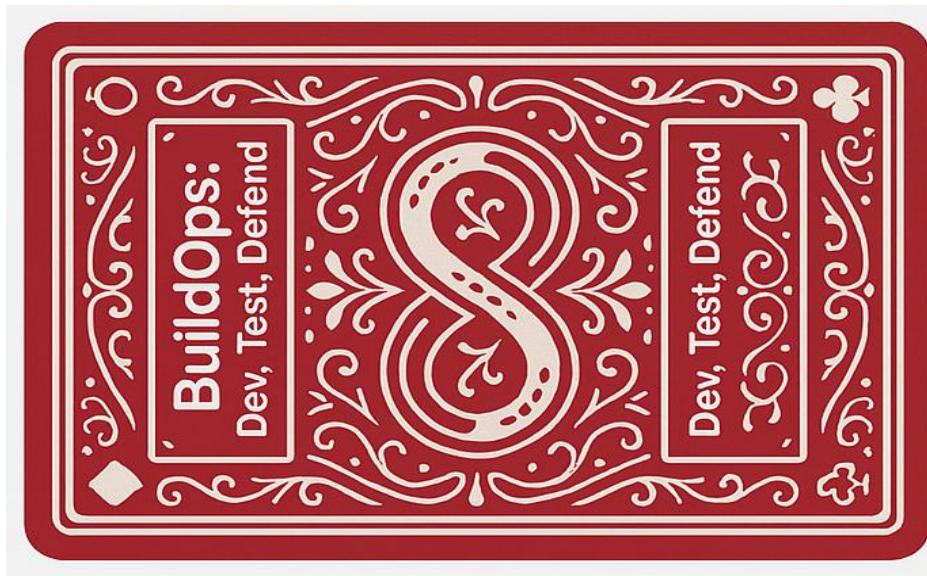
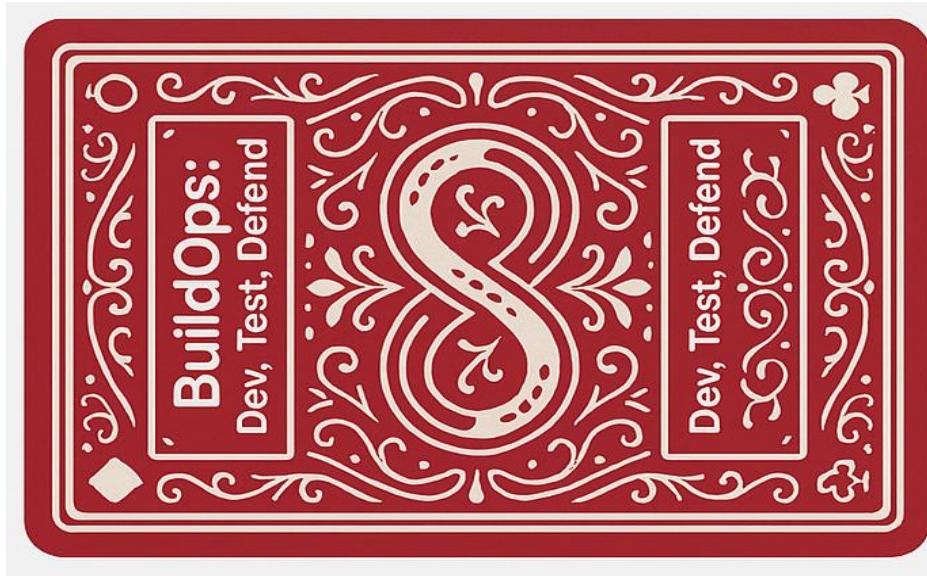
## Round 3 MITM Mafia

An attacker spoofs Wi-Fi access point in airport uses dodgy root certificates to validate all banking services - gains credentials - steals small amount from each.

**Points Lost:** 80

**Mitigation(s):** SSL Pinning for Enhanced HTTPS Security

Two Factor Authentication





Round 3

## Mafia Adv Prog Team

A set of advanced hackers gain access to server though zero day exploit, installed hacked version, transfer money out of accounts.

**Points Lost:** 100

**Mitigation(s):** Network Monitoring for Server

Only Network Monitoring for Server



Round 3

## Mafia APT

An attacker gets malware on device via email – sends back credentials found in logs to command and control server – used to clean out all compromised accounts.

**Points Lost:** 100

**Mitigation(s):** Filter server logs

Two Factor Authentication



Round 3

## Zero Day

A Zero day vulnerability has been identified in the cloud platform the project has migrated to.

If the platform has been moved to the cloud, there is no defense against this vulnerability except for the single item listed. If the platform has not been moved to the cloud, you are not vulnerable.

**Points Lost:** 50

**Mitigation(s):** Encrypt & Hide Data on Server

Only Encrypt & Hide Data on Server



Round 3

## Vendor Faking

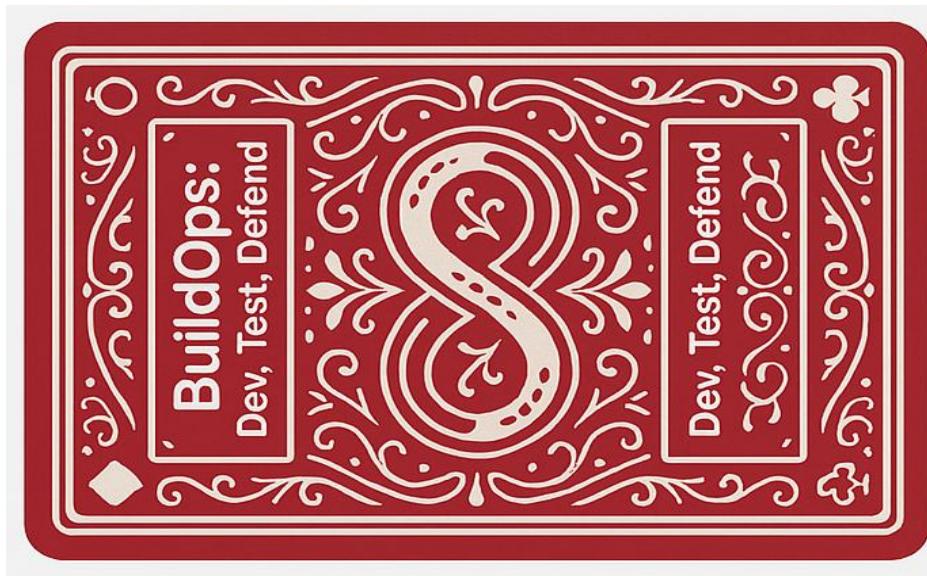
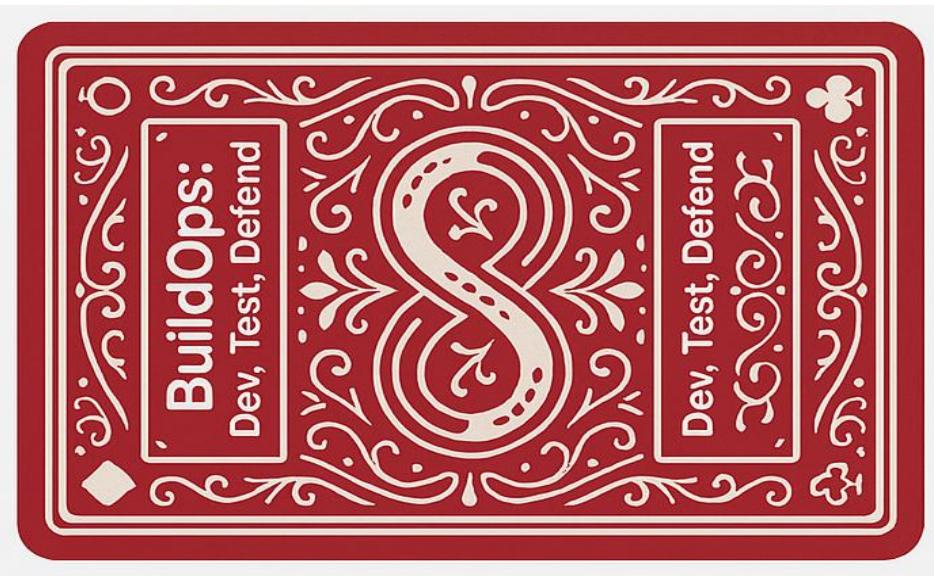
A vendor has been faked within the system and is attacking automatic payments.

If the automatic payment system PBI has been implemented, you are vulnerable unless the mitigations have been applied.

**Points Lost:** 60

**Mitigation(s):** Two Factor Authentication

Only Two Factor Authentication





Round 3

## Chat Feature Data Leak

Unencrypted or improperly stored messages reveal sensitive communication.

If you have enabled the Chat feature, you are vulnerable to this attack.

**Points Lost:** 50

**Mitigation(s):** None



Round 3

## Receipt Fraud Attack

Malicious users have attacked your system, generating fake receipts and modifying legitimate ones, sending fraudulent proof of purchases to vendors or providing you with receipts that are fraudulent.

If Digital Receipts for Payments have been enabled, you are vulnerable.

**Points Lost:** 80

**Mitigation(s):** None



Round 3

## Platform Attack

A malicious user has identified a vulnerability in the platform that is being used for your microservices architecture.

If you have switched to a microservices architecture, you are vulnerable. If you have not made the switch, you are not vulnerable. If vulnerable, you will spend 3 story points next sprint mitigating this.

**Points Lost:** 60

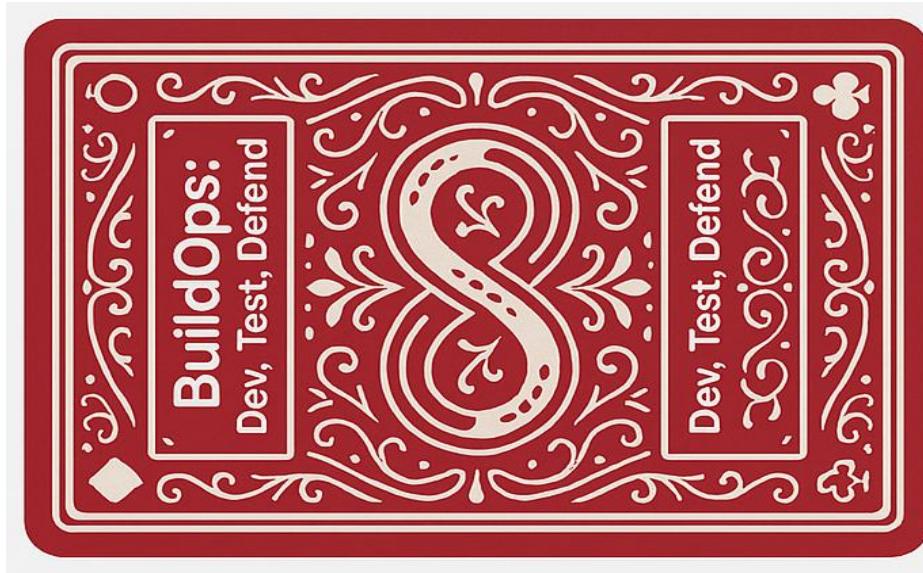
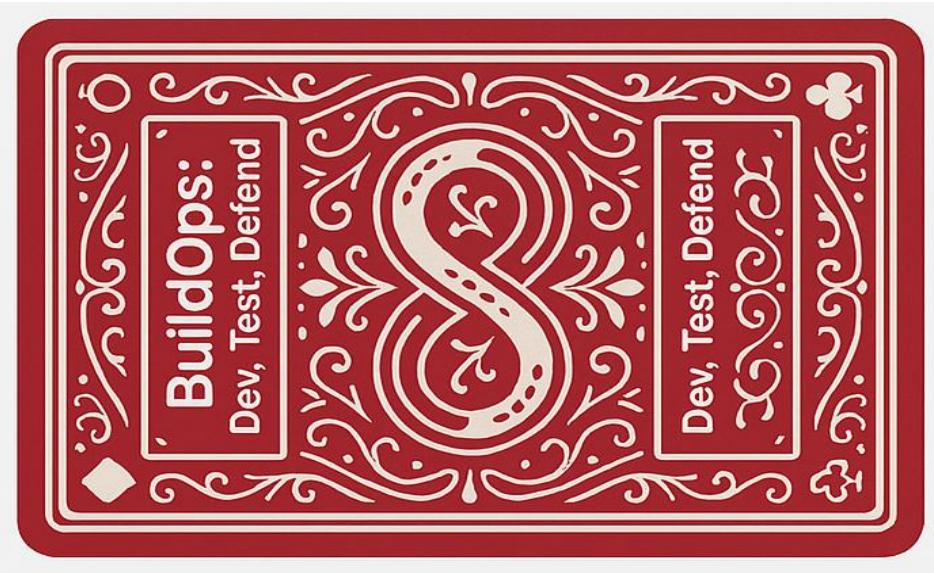
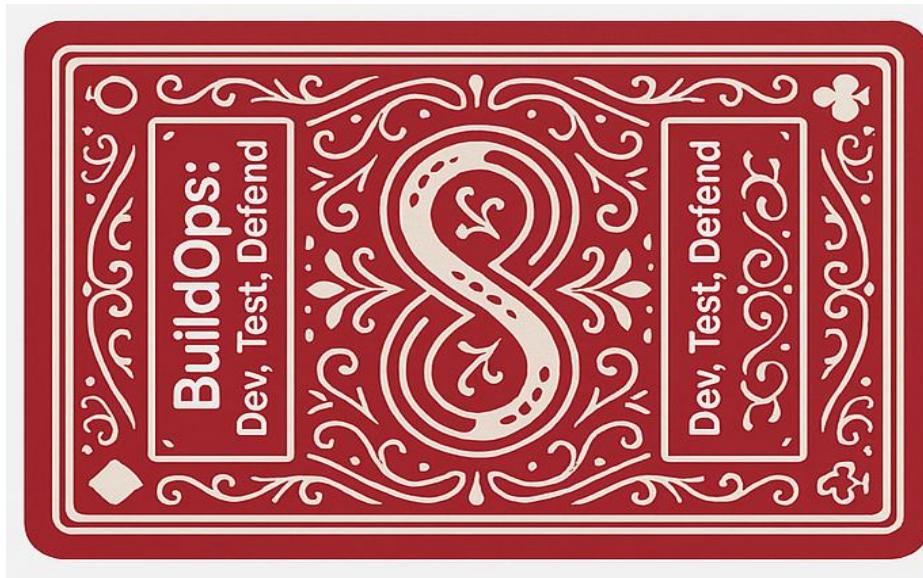
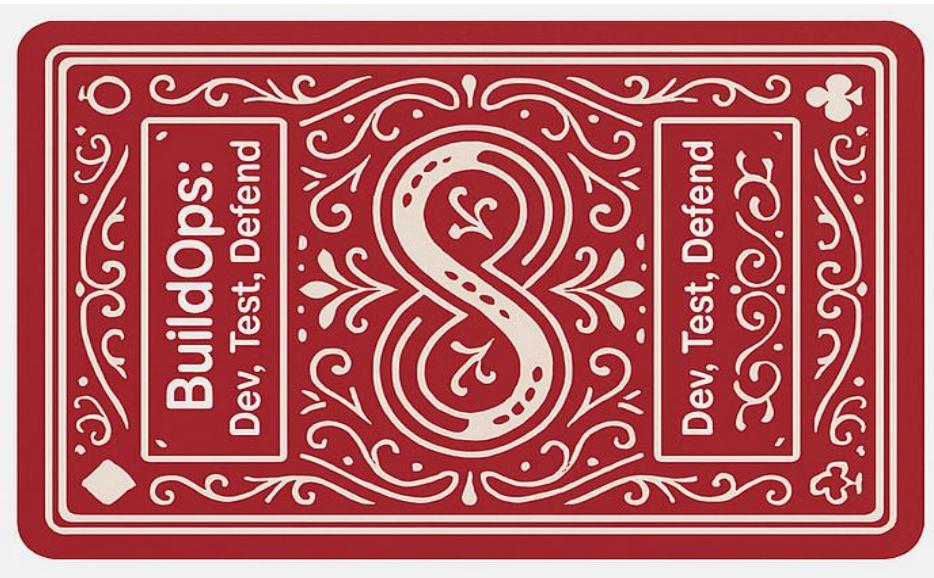
**Mitigation(s):** None



Round

**Points Lost:**

**Mitigation(s):**





## Cloud Migration

As a **CTO**, I want **the application moved from out local data center into the cloud and architected to ensure redundancy across multiple zones** so that **the system is more robust in the event of a failure of computing infrastructure..**

**Story Points:** 6

**Customer Value:** 60



## Common Platform

As a **CTO**, I want **the application to use a common code base for both iOS and Android Deployments** so that **the developers do not need to maintain two separate applications, one for Android and one for iOS..**

**Story Points:** 8

**Customer Value:** 50



## User Relationships

As a **User**, I want **the application to support multiple users to safely access a single account and perform operations on a single account** so that **spouses can jointly manage transactions and a parent can aid a child using money zoom while away at college.**

**Story Points:** 6

**Customer Value:** 60



## Currency Conversion

As a **User**, I want **the application to support transfers made in a foreign currency and converted to American Dollars** so that **the user can use the application while vacationing in Canada, Mexico, and the Bahamas..**

**Story Points:** 8

**Customer Value:** 50





## Transaction Categorization and Budgeting

As a **User**, I want **my transactions to be automatically categorized and allow me to set budgets** so that **so that I can track and control my expenses**.

**Story Points:** 6

**Customer Value:** 40



## In-App Chat for Transfers

As a **User**, I want **to include a message with my transfer and be able to chat with the recipient** so that .

**Story Points:** 6

**Customer Value:** 40



## Scheduled Payments

As a **user**, I want **to schedule recurring payments** so that **I don't have to remember and manually pay them each time**.

**Story Points:** 4

**Customer Value:** 40



## Digital Receipts for Bill Payments

As a **user**, I want **to receive digital receipts for each payment** so that **I have proof of payment for my records or tax purposes**.

**Story Points:** 3

**Customer Value:** 50





## Microservices Architecture

As a **CTO**, I want **the system to be redesigned to use a microservices architecture and platform engineering** so that **the system is easier to maintain and can be extended easier and also is more robust.**

**Note:** If Cloud Migration has already been performed, this PBI will only require 6 story points instead of 9..

**Story Points:** 9

**Customer Value:** 90



As a , I want so that .

**Story Points:**

**Customer Value:**



As a , I want so that .

**Story Points:**

**Customer Value:**



As a , I want so that .

**Story Points:**

**Customer Value:**





## Logging and Monitoring

Sprint: 1

As a **Developer**, I want **the app to log all user and system actions to the server** so that **I can diagnose security issues when they occur**.

**Story Points:** 2

**Customer Value:** 10



## Data Backup

Sprint: 1

As a **System Administrator**, I want to **schedule regular backups of server data to an offsite location** so that **we can restore operations quickly in case of a failure or breach**.

**Story Points:** 1

**Customer Value:** 15



## Password Security Rules

Sprint: 1

As a **User**, I want **the app to enforce passwords that include uppercase, lowercase, and numbers with a minimum of 8 characters** so that **my account is more secure**.

**Story Points:** 1

**Customer Value:** 20



## Password Change

Sprint: 1

As a **Security Officer**, I want **the app to require users to change their passwords regularly** so that **compromised credentials cannot be used long-term**.

**Story Points:** 2

**Customer Value:** 20





## Security Review of Application

Sprint: 1

As a **Product Owner**, I want **an external security expert to perform code and design reviews of the app** so that **we can fix any vulnerabilities early**.

Story Points: 4

Customer Value: 20



## Device Integrity Check

Sprint: 1

As a **Developer**, I want **the app to detect and block usage on jailbroken or rooted devices** so that **we can reduce the risk of compromised environments**.

Story Points: 2

Customer Value: 25



## Server Penetration Testing

Sprint: 1

As a **CTO**, I want **an external security expert to attempt to breach the server** so that **we can identify and patch security weaknesses**.

Story Points: 4

Customer Value: 10



## Server Patches

Sprint: 1

As a **CTO**, I want **the IT team ensure that all software versions are current and patched** so that **we can ensure that all known vulnerabilities have been removed and all functions are operating properly..**

Story Points: 2

Customer Value: 10





## Security Review of Server Code

Sprint: 2

As a **Product Owner**, I want **an external security expert to review the server configuration and code** so that **we can mitigate backend vulnerabilities**.

Story Points: 4

Customer Value: 10



## Network Protection Sprint: 2

As a **IT Administrator**, I want **firewall systems and phishing filters in place for office networks** so that **internal systems are protected from external threats**.

Story Points: 4

Customer Value: 20



## Hardware Security Module Sprint: 2

As a **Security Engineer**, I want **all sensitive credentials and encryption keys to be stored in a Hardware Security Module (HSM)** so that **they are not exposed to unauthorized access**.

Story Points: 3

Customer Value: 10



## Incident Communication Sprint: 2

As a **Marketing Lead**, I want **a communications plan for security breaches** so that **we can respond to incidents transparently and protect the brand**.

Story Points: 4

Customer Value: 25





## Network Monitoring for Server

Sprint: PT

As a *Penetration Tester*, I want *to put in a specialist 'network monitoring' system around the server access to detect unusual network traffic that suggests an attack* so that *the operations team can detect a potential attack and mitigate it before it is successful..*

Story Points: 8

Customer Value: 20



## Honeytrap in server Sprint: PT

As a *Penetration Tester*, I want *the development team to place a honeypot in the system to make it look as if there's nothing much for a hacker to find there but what they'll find appears to be live data* so that *adversaries have a more challenging time hacking the network and are not able to traverse the network as quickly..*

Story Points: 4

Customer Value: 10



## Filter server logs

Sprint: PT

As a *Penetration Tester*, I want *the development team to change the logging on the system to ensure that the logs are anonymous and all entries are de-identified* so that *an adversary is not able to use the logs to attack the system..*

Story Points: 4

Customer Value: 25



## SSL Pinning for Enhanced HTTPS Security

Sprint: RSC

As a *Developer (Code Reviewer)*, I want *to implement SSL Pinning in the app so that attackers cannot impersonate our server and intercept communications, even if HTTPS is compromised..*

Story Points: 4

Customer Value: 20





## Block Outdated App Versions

Sprint: RSC

As a **System Administrator (Code Reviewer)**, I want **prevent outdated app versions from accessing the server and guide users to upgrade** so that **security patches and features are consistently applied..**

**Story Points:** 2

**Customer Value:** 30



## Strengthen Login Security

Sprint: RSC

As a **security analyst (Code Reviewer)**, I want **the login system to obscure username validity and block login after five failed attempts** so that **attackers cannot easily guess credentials through brute force..**

**Story Points:** 4

**Customer Value:** 20



**Sprint:**

As a , I want so that .

**Story Points:**

**Customer Value:**



**Sprint:**

As a , I want so that .

**Story Points:**

**Customer Value:**





## Sprint Result

### Mother Nature Strikes

Lightening strikes your data center, taking it offline. If this is not mitigated, you'll only get half of the work done next sprint that you would like to, as you will be restoring the machine the entire time. Thus, when planning for your next sprint, only plan for half of the PBI's that you would normally plan for.



## Sprint Result

### Competition Strikes

Your lead developer is hired by a new startup, Appear, Inc. to develop a new computing platform, code named Golden Delicious. The largest PBI in the previous sprint did not get completed. Adjust the order of your tasks and place arrow above the longest task, which is highest priority for the current task.



## Sprint Result

### No Attack

The attackers were lured by other things and other sites. Do not draw any attack cards for this sprint.



## Sprint Result

### Lottery Winner

You won the lottery. Your project got done early and to celebrate your boss sends you to Hawaii for a weeks vacation at a major cyber security conference. But, because you are gone, reduce the number of story points in the next sprint by 4.





## Sprint Result

### Estimation Error

There was an error in estimation and the team did not get as many story points completed as planned. Select the lowest priority PBI's from the sprint and indicate they did not get completed.



## Sprint Result

### Big Estimation Error

There was an error in estimation and the team did not get as many story points completed as planned. Select the two lowest priority PBI's from the sprint and indicate they did not get completed.



## Sprint Result

### Normal Sprint

The sprint was completed normally. You completed everything that was planned in an appropriate fashion. Great job!



## Sprint Result

### Normal Sprint

The sprint was completed normally. You completed everything that was planned in an appropriate fashion. Great job!





## Sprint Result

### Burnout Detected

The team got its work finished, but struggled and you are detecting burnout. To avoid burnout, reduce the number of story points in the next sprint by half to combat this and use team building activities to counteract burnout.



## Sprint Result

### Effective Sprint

The team has completed its retrospective and feels it can be more productive next sprint. In planning the next sprint, add two additional story points to planning beyond what normally is planned for.



## Sprint Result



## Sprint Result

