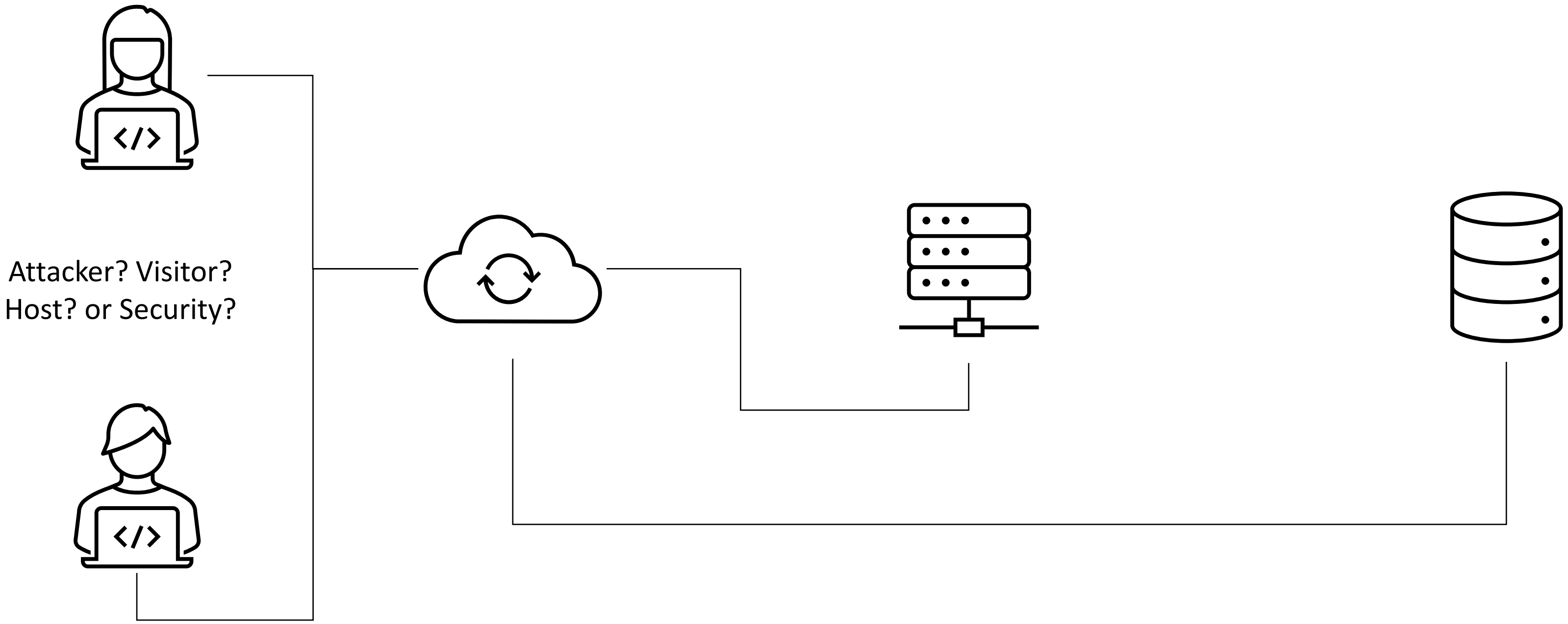
# Assignment checklist & documentation

BENR 3433 INFORMATION SECURITY

YOUR AZUREWEBSITES LINK HERE FOR PENETRATION TESTING

# ?Your VMS architecture? ?threat modelling? ?due diligence?

Public connections over the Internet



Attacker? Visitor? Host? or Security?

| Assets | Threat Agent | Attack surface | Attack Goal | Impact | Controls (Mitigation) |
|---|---|---|---|---|---|
| User credential stored in the database?? | Attacker? Visitor? Host? or Security? | Improper API implementation of the backend server? | Obtained user credential? | Confidentiality? Integrity? Availability? | ? |
| | | A lot more? | | | |

# Checklist (APIs)

| | Needed APIs for BENR3433 | API hosted at azurewebsites |
|---|---|---|
| 1 | Public API for security to create new host account.<br>1.1 API required security approval (e.g. /create/host)<br>1.2 Testing API without security approval (e.g. /create/test/host) | ?POST? https://xxxx.azurewebsites.net/??? |
| 2 | Public API for authenticated host to see all created visitors. | |
| 3 | Public API for authenticated host to issue visitor pass (only visitor record stored into database, no need to create visitor account). | |
| 4 | Public API for visitor to retrieve the pass. | |
| 5 | Administrator login page (dump all hosts' data upon successful login). | |
| 6 | 6.1 Additional APIs (manage account roles (security/host) by authenticated administrator and etc)<br>6.2 Public API for authenticated security to retrieve the contact number of the host from the given visitor pass (the pass should only review destination host to visit to the public) | |

# API documentations (swagger or REST clients)

| | Needed APIs for BENR3433 | API hosted at azurewebsites |
|---|---|---|
| 1 | Public API for security to create new host account.<br>1.1 API required security approval (e.g. /create/host)<br>1.2 Testing API without security approval (e.g. /create/test/host) | 1.1 ?POST? https://xxxx.azurewebsites.net/???<br>1.2 ?POST? https://xxxx.azurewebsites.net/??? |

and the documentation on how to create new host and new test host (without security approval)
The test API should have identical role as actual host
*The test API shall be removed at the end of the penetration testing.*

# API documentations (swagger or REST clients)

| | Needed APIs for BENR3433 | API hosted at azurewebsites |
|---|---|---|
| 2 | Public API for authenticated host to see all created visitors. | |

and the documentation on how to see all created visitors by the host.

# API documentations (swagger or REST clients)

| | Needed APIs for BENR3433 | API hosted at azurewebsites |
|---|---|---|
| 3 | Public API for authenticated host to issue visitor pass (only visitor record stored into database, no need to create visitor account). | |

and the documentation on how to issue visitor pass.

# API documentations (swagger or REST clients)

|  | Needed APIs for BENR3433 | API hosted at azurewebsites |
|---|---|---|
| 4 | Public API for visitor to retrieve the pass. |  |

and the documentation on how to access the created pass.

# API documentations (swagger or REST clients)

| | Needed APIs for BENR3433 | API hosted at azurewebsites |
|---|---|---|
| 5 | Administrator login page (dump all hosts’ data upon successful login). | |

and the documentation on how to login

# API documentations (swagger or REST clients)

| | Needed APIs for BENR3433 | API hosted at azurewebsites |
|---|---|---|
| 6 | 6.1 Additional APIs (manage account roles (security/host) by authenticated administrator and etc)<br>6.2 Public API for authenticated security to retrieve the contact number of the host from the given visitor pass (the pass should only review destination host to visit to public) | |

and the documentation on how to use the 6.1 and 6.2 APIs

# Due diligence in securing the APIs

| | Needed APIs for BENR3433 | API hosted at azurewebsites |
|---|---|---|
| 1 | Public API for security to create new host account.<br>1.1 API required security approval (e.g. /create/host) | ?POST? https://xxxx.azurewebsites.net/??? |
| | Current weakness and plan to secure it. | Expected outcomes and estimated date of completion |

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| | Needed APIs for BENR3433 | API hosted at azurewebsites |
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# Due diligence in securing the APIs

| | Needed APIs for BENR3433 | API hosted at azurewebsites |
|---|---|---|
| 4 | Public API for visitor to retrieve the issued pass. | |
| | Current weakness and plan to secure it. | Expected outcomes and estimated date of completion |

# Due diligence in securing the APIs

| | Needed APIs for BENR3433 | API hosted at azurewebsites |
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| 5 | Administrator login page (dump all hosts' data upon successful login). | |
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# Due diligence in securing the APIs

| | Needed APIs for BENR3433 | API hosted at azurewebsites |
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| 6 | 6.1 Additional APIs (manage account roles (security/host) by authenticated administrator and etc)<br>6.2 Public API for authenticated security to retrieve the contact number of the host from the given visitor pass (the pass should only review destination host to visit to public) | |
| | Current weakness and plan to secure it. | Expected outcomes and estimated date of completion |

# Due diligence in securing your MongoDB database

| | Database access (action plan) | Outcomes |
|---|---|---|
| 1 | Backend uses certificates rather than username and password to connect to the MongoDB Atlas? | |
| 2 | Whitelist only the azurewebsites' backend IP address? | |
| 3 | MongoDB Atlas uses strong username and password to login? | |