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| Merrilton Bank |
| Cloud Infrastructure Design |
| D088 Final Assessment |

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| Name  Date  Version 1.0 |

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# Authentication Process

*Propose an authentication process for the cloud application that meets the applicable device, browser, and user security requirements.* DELETE THIS!!!

# Remote Access

*Explain how an employee will remotely access the cloud environment by using two-factor authentication. Explain how an employee will remotely access the cloud environment by using two-factor authentication.* DELETE THIS !!!

# Application Security

*Propose an end-to-end encryption solution for the communication between the application and the cloud.* DELETE THIS !!!

# Network Security

*For network security employees will be required to utilize VPN to access the cloud  
Propose an end-to-end encryption solution for the communication between the home office and the cloud.* DELETE THIS !!!

# Internal APIs

## E1. Bank Fraud Services Internal API

*Describe systems that will integrate with each of the following internal application program interfaces (APIs), including technical details or diagrams to support the explanation of the mechanics of the integration:  
-bank fraud services  
-branch location information  
-all log data  
  
Provide the following for each internal API:  
-Describe the technology that the API will be built with (Node js, .Net Core, etc.)  
-Where the code will run (AWS Lambda, behind an API Gateway, Azure Functions… etc)?  
-How the code is invoked (RESTFUL endpoint with parameters… which parameters, etc)?  
-What happens on invocation (database lookup, calculation, etc)?  
-What is returned (json formatted payload)?  
-What is done with returned payload?*  
DELETE EVERYTHING ABOVE!!!

## E2. Branch Location Information Internal API

*Describe systems that will integrate with each of the following internal application program interfaces (APIs), including technical details or diagrams to support the explanation of the mechanics of the integration:  
-bank fraud services  
-branch location information  
-all log data  
  
Provide the following for each internal API:  
-Describe the technology that the API will be built with (Node js, .Net Core, etc.)  
-Where the code will run (AWS Lambda, behind an API Gateway, Azure Functions… etc)?  
-How the code is invoked (RESTFUL endpoint with parameters… which parameters, etc)?  
-What happens on invocation (database lookup, calculation, etc)?  
-What is returned (json formatted payload)?  
-What is done with returned payload?*  
DELETE EVERYTHING ABOVE!!!

## E3. All Log Data Internal API

*Describe systems that will integrate with each of the following internal application program interfaces (APIs), including technical details or diagrams to support the explanation of the mechanics of the integration:  
-bank fraud services  
-branch location information  
-all log data  
  
Provide the following for each internal API:  
-Describe the technology that the API will be built with (Node js, .Net Core, etc.)  
-Where the code will run (AWS Lambda, behind an API Gateway, Azure Functions… etc)?  
-How the code is invoked (RESTFUL endpoint with parameters… which parameters, etc)?  
-What happens on invocation (database lookup, calculation, etc)?  
-What is returned (json formatted payload)?  
-What is done with returned payload?*  
DELETE EVERYTHING ABOVE!!!

# External APIs

## F1. Single Sing-On (SSO) External API

*Describe systems that will integrate with each of the following external APIs, including technical details or diagrams to support the explanation of the mechanics of the integration:  
-single sign-on (SSO)  
-credit score provider  
-location data look-up  
Provide the following for each external API:  
-Which third party vendor hosts the API?  
-How is the API invoked, what is sent?  
-What is returned?  
-What is done with what is returned?*  
DELETE EVERYTHING ABOVE!!!

## F2. Credit Score Provider External API

*Describe systems that will integrate with each of the following external APIs, including technical details or diagrams to support the explanation of the mechanics of the integration:  
-single sign-on (SSO)  
-credit score provider  
-location data look-up  
Provide the following for each external API:  
-Which third party vendor hosts the API?  
-How is the API invoked, what is sent?  
-What is returned?  
-What is done with what is returned?*  
DELETE EVERYTHING ABOVE!!!

## F3. Location Data Look-Up External API

*Describe systems that will integrate with each of the following external APIs, including technical details or diagrams to support the explanation of the mechanics of the integration:  
-single sign-on (SSO)  
-credit score provider  
-location data look-up  
Provide the following for each external API:  
-Which third party vendor hosts the API?  
-How is the API invoked, what is sent?  
-What is returned?  
-What is done with what is returned?*  
DELETE EVERYTHING ABOVE!!!

# Deployment Plan

*Summarize a deployment plan for the cloud application and its cloud infrastructure, including the following sub-headings* DELETE THIS!!!

## G1. Cloud Backend Timeline

-

## G2. Resources

-

## G1. Estimated Costs

-

## G1. Redundancies

-

# Maintenance Strategy

*Summarize a maintenance strategy for the cloud application that addresses the needs of the business and the short- and long-term considerations for each of the following points:  
-patch management  
-updates and redevelopment.*  
DELETE EVERYTHING ABOVE!!!

## H1. Patch Management

-

## H2. Updates and Redevelopment

-

# Disaster Recovery Plan

*Summarize the systems, processes, and procedures of a disaster recovery plan for the cloud application*. DELETE THIS!!!

# Regulatory Compliance

*Explain how you will maintain compliance with key applicable laws and regulations imposed on the cloud application.* DELETE THIS!!!

# Sources

*Acknowledge sources, using in-text citations and references, for content that is quoted, paraphrased, or summarized*. DELETE THIS!!!