Architecture Evaluation Exercise

Parinya Ekparinya

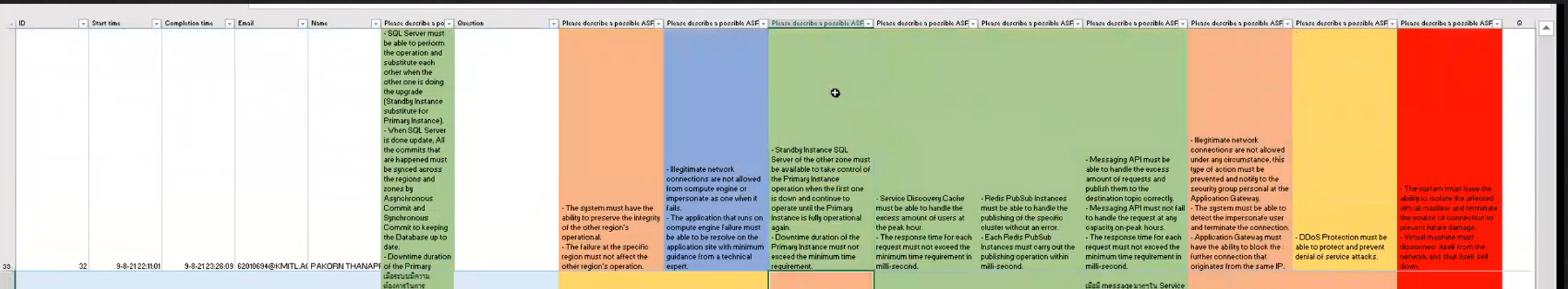
Parinya.Ekparinya@gmail.com

Software Architecture and Design

2021 Semester 1

Visit the link below and fill-in possible ASRs:

https://forms.office.com/r/t5K1Z9VWfZ



ID	Start time	Completion time	Email	Name	Please describe a po	Question	Please describe a possible ASR	Please describe a possible ASR	Please describe a possible ASR	Please describe a possible ASR	Please describe a possible ASR	Please describe a possible ASR	Please describe a possible ASR	Please describe a possible ASR	Please describe a possible ASR	Q
33	32	9-8-21 22:11:01	9-8-21 23:26:09	62010694@KMITL.A(	PAKORN THANAPI		- The system must have the ability to preserve the integrity of the other region's operational. - The failure at the specific region must not affect the other region's operation.	- Illegitimate network connections are not allowed from compute engine or impersonate as one when it fails. - The application that runs on compute engine failure must be able to be resolve on the application site with minimum guidance from a technical expert.	- Standby Instance SQL Server of the other zone must be available to take control of the Primary Instance operation when the first one is down and continue to operate until the Primary Instance is fully operational again. - Downtime duration of the Primary Instance must not exceed the minimum time requirement.	- Service Discovery Cache must be able to handle the excess amount of users at the peak hour. - The response time for each request must not exceed the minimum time requirement in milli-second.	- Redis PubSub Instances must be able to handle the publishing of the specific cluster without an error. - Each Redis PubSub Instances must carry out the publishing operation within milli-second.	- Messaging API must be able to handle the excess amount of requests and publish them to the destination topic correctly. - Messaging API must not fail to handle the request at any capacity on-peak hours. - The response time for each request must not exceed the minimum time requirement in milli-second.	- Illegitimate network connections are not allowed under any circumstance, this type of action must be prevented and notify to the security group personal at the Application Gateway. - The system must be able to detect the impersonate user and terminate the connection. - Application Gateway must have the ability to block the further connection that originates from the same IP.	- DDoS Protection must be able to protect and prevent denial of service attacks.	- The system must have the ability to isolate the affected virtual machine and terminate the source of connection to prevent future damage. - Virtual machine must disconnect itself from the network and shut itself self down.	
					- SQL Server must be able to perform the operation and substitute each other when the other one is doing the upgrade (Standby Instance substitute for Primary Instance). - When SQL Server is done update, All the commits that are happened must be synced across the regions and zones by Asynchronous Commit and Synchronous Commit to keeping the Database up to date. - Downtime duration of the Primary										

Cloud Reference Architectures

- AWS Reference Architecture Diagrams
  https://aws.amazon.com/architecture/reference-architecture-diagrams/
- Azure Reference Architecture
  https://docs.microsoft.com/en-us/azure/architecture/browse/
- Cloud Architecture Center
  https://cloud.google.com/architecture?hl=en&doctype=referencearchitecture
- Oracle Cloud Infrastructure Architecture Center
  https://www.oracle.com/cloud/architecture-center/
- IBM Cloud Architectures
  https://www.ibm.com/cloud/architecture/architectures/

https://www.facebook.com/leon.coate