ld	Risk	Statement	Response	Objective	Impact	Likelihood	Risk Level		Risk Assessment Guide					
1	SQL database Connection	The AWS managed MySQL database could become inaccessible.	Disaster recovery plan in place with more than one availability zone for the database.	Data loss would be disasterous. In AWS MySQL database with at least 2 availability zones would prevent any such events.	Severe	Unlikely	5							
2	Source code loss	Source code repository can be lost due to infrastructure failure	Disaster recovery plan in place with version control	Github repository used as a source code management for the project. Always follow the best practices to interact with Github	Severe	Unlikely	5					Severity		
3	Jenkins VM connection	Jenkins VM which hosting the Jenkins	Used NGINX which will prevent Jenkins vm from outside attacks. Beside, port 22 can be accessbile only from the white listed IP addesses.	The continuous CI/CD pipeline is managed, built, tested and deployed by the Jenkins. NGINX will be used as reverse proxy.	Severe	Possible	10			Minimal	Minor	Moderate	Major	5
4	Jenkins pipeline webhook issue	Github webhook is set up with the Jenkins vm IP address. When IP address changes, webhook connection needs to update.	Attached Elastic IP with the Jenkins VM which will create fixed IP address.	Github webhook is set up with the Jenkins vm elastic IP address. It will prevent IP address changes issues.	Severe	Possible	10		Guaranteed		5 10	19	5 2	20
5	Dockerhub repository down	If Dockerhub repository is unaccessible, then EKS wouldn't be able to retrieve those images.	It would be a better idea to create a private personal repository to store images.	Dockerhub is using to store images before and after test. Those images are used for the deployment.	Major	Likely	12		Expected		8	1:	2 1	16
6	AWS S3 connection/security error		I activates S3 encryption which will provide security. S3 data loss rate is ignorable.	S3 is secured, easily accessible using authentication and data loss issues are ignorable.	Severe	Unlikely	5	Likelihood	Likely	;	3 6		9 1	12
7		If multiple users try to use the website sametime , it might cause the downtime.	To prevent this I have used Nginx web server as a load balancer to equally distribute the traffic among different machines.	DDOS attack is common and Nginx will be sufficient enough in this stage.	Severe	Possible	10		Possible	:	2 4		3	8
8	Instance type and size	AWS instance type and size can impact the performance.	I have used t2.small and t2.medium to make the pipeline fully efficient.	Software and application's performance can be implified by using competent type and size of instances.	Moderate	Expected	12		Unlikely		1 2	:	3	4