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| **INF 354 : Class Assignment** | | |
| **Assignment #:** |  | **DUE DATE: in class** |
| **Topic:** |  | |
| **Instructions:** | | |
| Please view the slides at this link[*https://www.slideshare.net/HubSpot/git-101-git-and-github-for-beginners*](https://www.slideshare.net/HubSpot/git-101-git-and-github-for-beginners)Then complete this tutorial [*http://product.hubspot.com/blog/git-and-github-tutorial-for-beginners*](http://product.hubspot.com/blog/git-and-github-tutorial-for-beginners)  **Homework: Amazon cloud services**  Answer the following amazon related questions   1. **What is EC2? Can I run a free EC2 server? If so which instance?**   Amazon Elastic Compute Cloud, resizable compute capacity. You can run a free server. EC2 Micro Instances   1. **What is S3?  What is a bucket? What is it used for?  Should encryption be used?**   **An object storage service. A bucket is a resource that Amazon provides an API for, so that you can manage it. A bucket gets used to store your data. Amazon provides a default encryption but you can create your own.**   1. **What is an AMI?  How do I build one?**   **Amazon Machine Image, a tool that stores information to launch a virtual server in the cloud. You have to create an EMI, then create a Root Volume. Then register it and launch it.**   1. **Can I vertically scale an Amazon instance? What is auto-scaling?**   **Yes. Auto-scaling monitor’s your applications and adapts capacity to maintain steady and provide predictable performance at the lowest cost.**   1. **What is mechanical turk?**   **Human intelligence through an API. It allows you to get human processing done on your data or in your application with real world people.**   1. **Define the term hybrid and elastic cloud?**   **Elastic cloud is cloud services that scale depending on application, user etc. needs that can change frequently.**  **Hybrid cloud, is an infrastructure where a private cloud(user managed) and public cloud(3rd party managed) are integrated with each other.**   1. **What is amazon cloudfront?**   **It’s a web service that speeds up and optimizes content delivery from buckets by storing it in edge locations(servers closest to requests), to reduce latency.**   1. **Determine where in the world Amazons datacenters are. What are the benefits of hosting across multiple datacenters?**   **Reduces load on single servers, reduces latency for users requesting from their closest server. Data backup and redundancy.**  **C:\Users\Daddy_COol\AppData\Local\Microsoft\Windows\INetCache\Content.Word\Capture.png**   1. **Name the type of load balance servers available?**   **Application Load Balancer(Application layers for routing decisions)**  **Network Load Balancer(Transportation layers for routing decisions)**  **Classic Load Balancer(Both Application and Transportation layers used for routing decisions)**   1. **Name the database server instances that can be deployed?**   **Standard(m3/m4), Memory Optimized(r3/r4), Burstable Performance(t2)**   1. **What is the difference between Scalability and Elasticity?**   Elasticity allows you to grow or shrink infrastructure resources dynamically to adapt to workload changes. Especially useful for applications that experience sudden or cyclical changes in demand. Better use of resources.  Scalability is the ability to increase workload size within infrastructure without impacting performance, usually pre-allocated with estimated headroom for peek estimated demand. Better for more consistent services. | | |
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| **RUBRIC** | |
| **Outcome** | **Mark** |
| **Demonstrate an add, commit, push pull, add and merge branch** | **10** |
| **TOTAL** | **10** |