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Preliminary Final Project Proposal

What I plan to do:

I have not fully committed to a project idea, but right now my current idea is to *measure inter-VPC latency between the two major cloud providers*. Essentially, I would implement an example application using only AWS services, the same application using only Microsoft Azure services, and then the same application using a mix of AWS and Microsoft Azure services. After building the dummy app, I could measure the latency of doing some operation in the app that uses components from both cloud providers, and in theory the latency should be larger because it is between different Virtual Private Cloud Networks.

However, I do think there are some big drawbacks to this idea, so I am still considering and open to other ideas. For one thing, I feel like it's a bit of a stretch that this would actually be necessary in the real world. Maybe one situation would be where there is a legacy system implemented using the services of one cloud provider, and then that company is acquired by a company that uses a different cloud provider and needs to integrate their system.

How it's relevant to software engineering:

Cloud offerings from AWS and Microsoft Azure have become very widespread throughout the software world.

Why I'm interested in the project:

I was inspired to study this after reading the following Quora post:

<https://www.quora.com/Is-that-a-bad-idea-to-combine-AWS-and-Azure-together>

Some users claimed that there is inherent latency added because of having to jump between AWS and Azure systems. However, I haven't been able to find any actual experiments or studies testing if there actually is a significant increase in latency, so I think it warrants investigation.