Bryce Vonilten
6/8/2019
CSC 406

<div align="center">Developer Conference Report (Cloud Next '19)
"Google Cloud Platform 101"</div>

The developer presentation I chose for my report was "Google Cloud Platform 101" given at the 2019 NEXT conference by Google engineer Terrence Ryan. The presentation's primary focus was to provide a tour of the tools offered by google cloud platform (GCP) to someone new to the platform. It also had a secondary purpose of showing when and how to use several of the tools, at least the ones shown and highlighted, as the platform was presented. There are so many tools offered by Google it would take the average user a very long time to learn them all. Google has recognized this and wants to help remove the learning barrier, both with presentations like this one and additional tools like "Google Cloud in 4 Words". This project aims to describe any tool by google succinctly in 4 words or less and gets referenced multiple times throughout the presentation.

This was an interesting topic for me because, other than a hackathon weekend I attended once, I have had very little experience previously with their platform and this presentation offered a large overview of all the major tools google cloud platform (GCP) had to offer. I can easily recognize Google's problem. The platform can definitely be a bit daunting starting out due to the sheer abundance of tools with similar sounding purposes. GCP categorizes these dozens of tools on their website by Computing, Storage, Networking, Stackdriver, Big Data, AI, and even an ambiguous section called Tools.

As an app developer, Terrence is specialized and therefore discussed the Computing category in the most detail. Just looking at that small piece of the pie, GCP still has a high number of options. IT data managers can host their own elastic cloud hosting networks, run serverless systems, or do a variety of other setups and hybrid solutions. But how do they decide what is the best set up that fits their needs? That question usually takes a lot of up front experimentation work to answer. Terrance tries to make the question simpler by giving the bottom line between using a serverless system vs VMs vs containers. Usually if you have a lot of system operators and want to switch to cloud storage, the answer is to use the standard VMs offered by their Cloud Engine. If you have a lot of developers though and greenfield projects, ones that aren't constrained by previous architecture, try to use serverless systems for performance. Otherwise, if you have a lot of developers and system operators and want to get the most support for your money, go with containers. An additional benefit with running your system on containers is the transition to serverless is mostly seamless and serverless is probably going to be where computing will be in the near future.

In addition to Computing and infrastructure, Terrence also reviewed the other large categories on GCP in excellent detail. So if you are a product manager and want to switch your system to the cloud, or maybe just even create a machine learning program from existing models to identify pizza (another clever demonstration), I highly recommend checking out Terrance's talk.