Cloud computing allow to store and run data and applications on the cloud rather than on our local computer, accessible through the internet. **Cloud** is like enormous building filled with computers (servers). Those servers store data, web hosting, run applications, data processing and so on. Servers are networked together and they can be accessed on the internet. Companies who owns cloud, call cloud providers (AWS, Azul, etc) and their purpose is to sell their computers as a service.

Deployment types: In *Public cloud* I pay only for resource that I use and I pay for how long I used it. If I use less I pay less for that month and vice versa. Analogy is like a bus. It is accessible by anyone. I pay for the sit/time that I occupy. That cost is very small. *Private cloud* is like buying your own car. Here is huge upfront cost and is only owned by me, therefore I do not pay for it hourly. *Hybrid cloud* is mix of two above. Analogy is comfort car and no need to pay upfront huge amount.

Cloud Service: PaaS (platform as a service) is best suited for software developers. It is provide cloud platform for developing, testing and managing applications. It enables users to deploy application, without need to acquire, maintain related architecture (servers, os, storage, networking, virtualization, runtime). PaaS only requires user to handle applications and data.

Benefits of cloud computing: Major reason is *cost*. With cloud computing company eliminates a lot of expenses of buying own software and hardware, along with building, maintenance, electricity in order to run their data center. *Scalability*, if small company want to start renting few computers and later down the road this startup become big shot it would need to rent much more computers and that's not problem with cloud computing. If that big start up not going to do well they just rent few computes. It is like Geiko commercial: "You pay for what's you need". Unlike if company store all those computers in their own-premises and when this company go down, it won't need that many computes, so it is big overhead for on-premises solution. *Reliability* if one cloud data center goes down (where that company store data), they have another one as a backup. So there is no downtime. Unlike on-premises solution if web server caught fire then "finito la comedia".

Uses of cloud computing:

1. Data Storage online. Allow store and access: images, video, files on cloud storage.
2. Software development and testing
3. Backup and recovery
4. Data analyses
5. E-commerce business process.