# Cloud Infrastructure – Spring 2017
# Lecture 2
# Intro to IAAS - Servers

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# Infrastructure As A Service

## What is infrastructure?

**Infrastructure** refers to structures, systems, and facilities serving the economy of a business, industry, country, city, town, or area,[1] including the services and facilities necessary for its economy to function.

-wikipedia "Infrastructure"

# Infrastructure As A Service

## What is (computer) infrastructure?

**Infrastructure** refers to structures, systems, and facilities serving the computational needs of an enterprise, allowing the enterprise to function.

# Infrastructure As A Service

## What is infrastructure as a service?

According to the Internet Engineering Task Force (IETF), the most basic cloud-service model is that of providers offering computing infrastructure – virtual machines and other resources – as a service to subscribers.

# IAAS Offerings

- Servers
- Storage
- Load Balancers
- Backups

# IAAS Vendors

- Amazon
- Azure (Microsoft)
- Linode
- Digital Ocean
- Google

- (and lots of smaller vendors)

# Vendor Services

- Servers of various sizes
  - By the month
  - By the hour
- Storage capabilities
- Load balancers
  - (also firewalls)
- Backup systems

- Other PAAS services (more on this later)

# Demo Agenda

- Visit vendor
- Look at offerings and prices
- "Spin up" a server
- Log in and look around
- Check out web presence
  - (We won't have DNS, generally)
- Discard the server when done!

- Do this for several vendors

# Reading

- Wikipedia on Cloud Computing

  [https://en.wikipedia.org/wiki/Cloud_computing](https://en.wikipedia.org/wiki/Cloud_computing)

- Setting up a DO 'droplet'

  [https://www.digitalocean.com/community/tutorials/initial-server-setup-with-ubuntu-16-04](https://www.digitalocean.com/community/tutorials/initial-server-setup-with-ubuntu-16-04)

# Homework

- Log into at least two vendors
- Spin up a server
- Log into the server
- Discard the server

- *SUBMIT HOMEWORK AS ONE PDF ONLY!*
- *Non-pdf files will not be graded.*

# Office Hours

- I will be setting up online office hours.
- Time suggestions?
- Instructions will be sent out.