

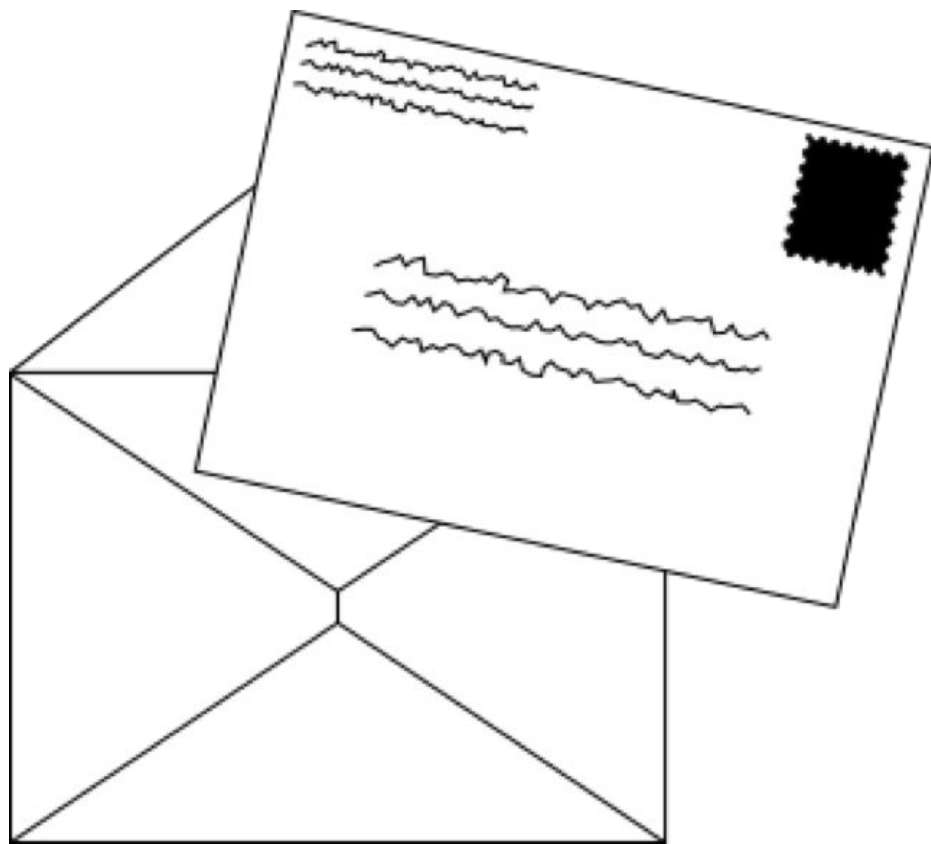
# CS50 for JDs

[cs50.harvard.edu/hls](https://cs50.harvard.edu/hls)

[cs50.ly/feedback](https://cs50.ly/feedback)

Internet Technologies, Cloud Computing

**Internet Technologies,** Cloud Computing



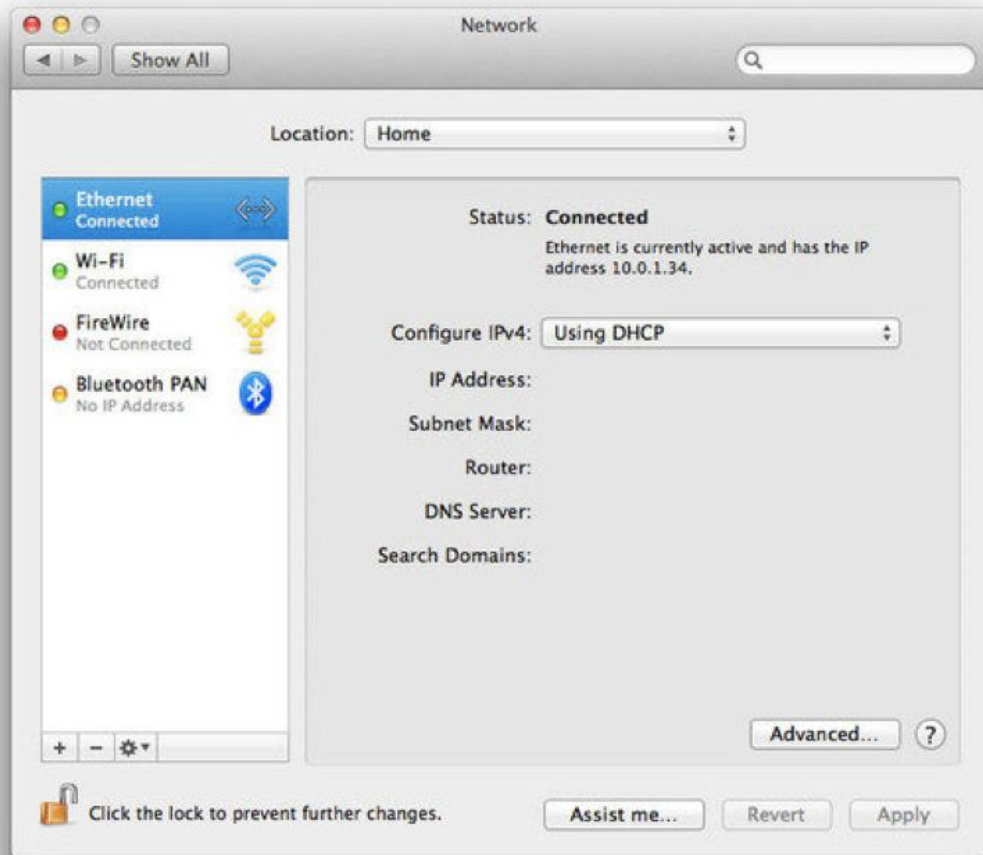
IP

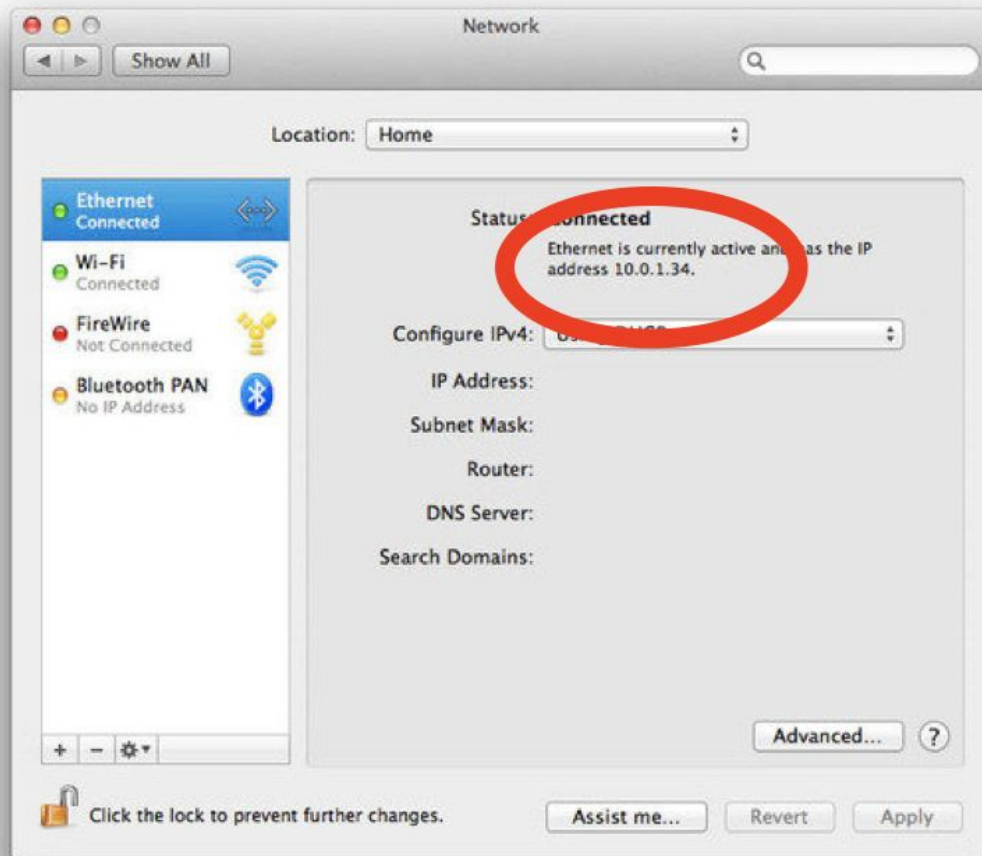
**##.##.##**

- 10.##.##
- 172.16.## – 172.31.##
- 192.168.##
- ...

DHCP







Settings

ETHERNET

Allow your PC to be discoverable by other PCs and devices on this network. We recommend turning this on for private networks at home or work, but turning it off for public networks to help keep your stuff safe.

On

### Properties

IPv4 address:	192.168.1.116
IPv4 DNS Servers:	209.81.96.30
	209.81.96.49
	192.168.1.1
Manufacturer:	Realtek

Settings

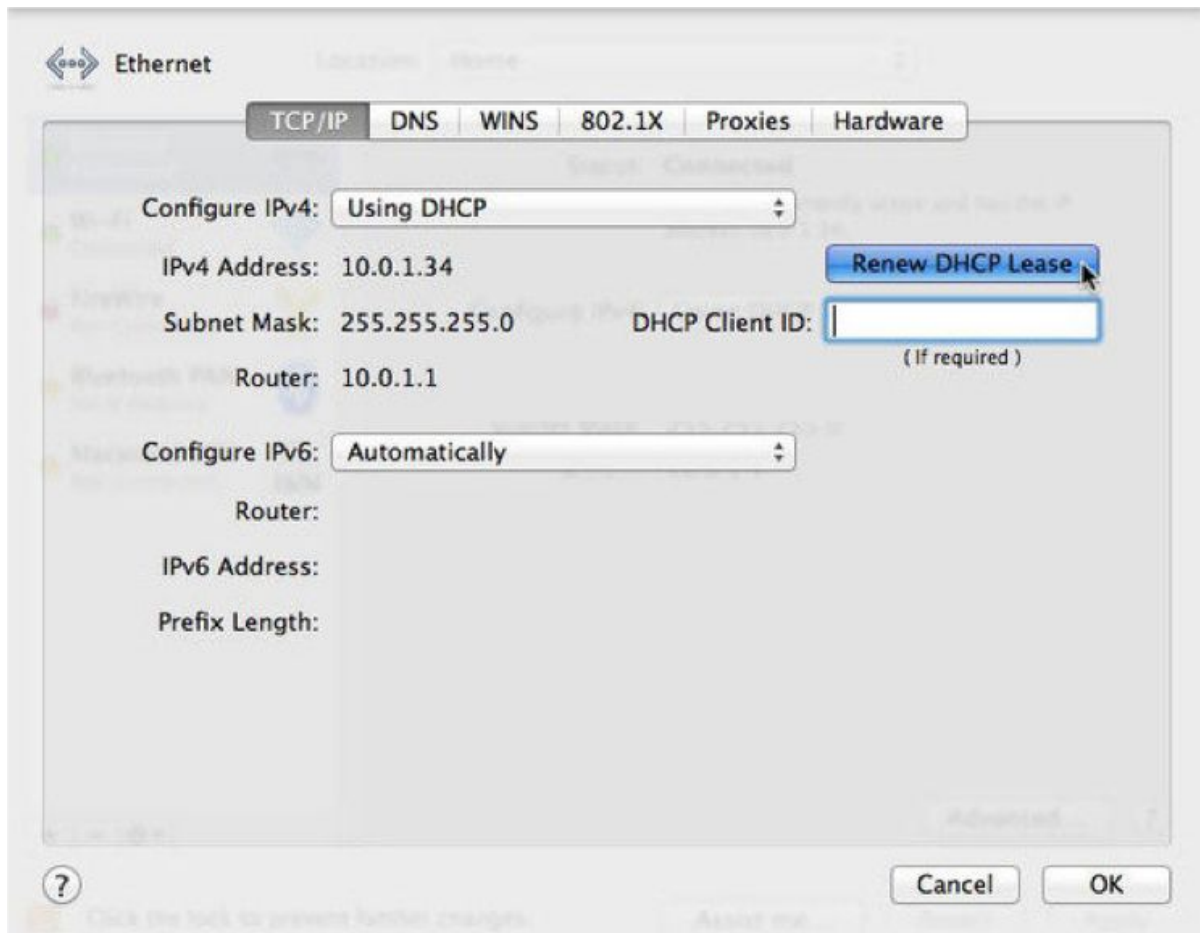
## ETHERNET

Allow your PC to be discoverable by other PCs and devices on this network. We recommend turning this on for private networks at home or work, but turning it off for public networks to help keep your stuff safe.

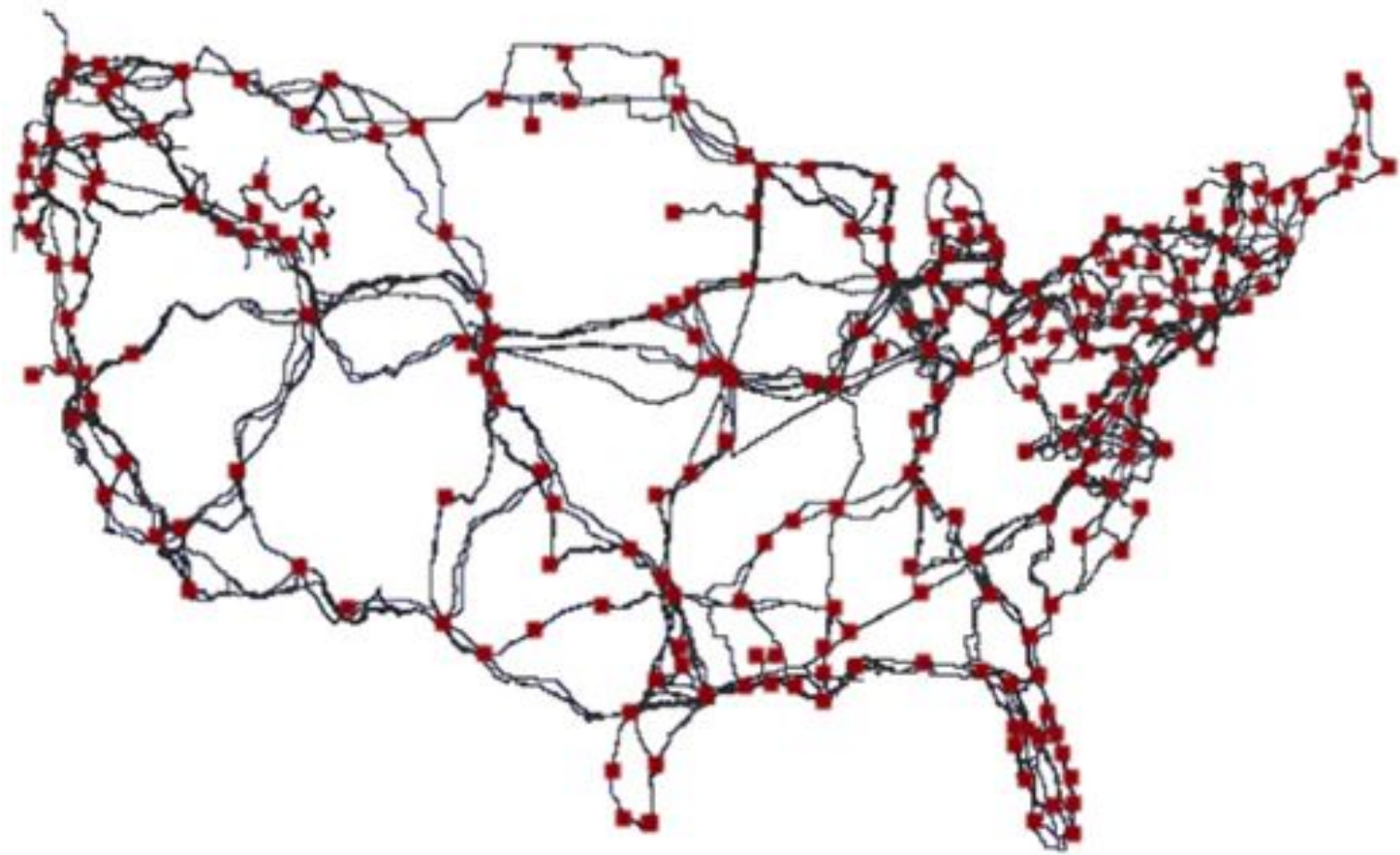
On

### Properties

IPv4 address:	192.168.1.116
IPv4 Subnet Mask:	255.255.255.0
IPv4 Default Gateway:	209.81.96.49
IPv4 DNS Servers:	192.168.1.1
Manufacturer:	Realtek



routers



NAT



TCP

# Ports

- 80, 443
- 143, 587
- ...





DNS

Settings

ETHERNET

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On

### Properties

IPv4 address:	192.168.1.116
IPv4 DNS Servers:	209.81.96.30
	209.81.96.49
	192.168.1.1
Manufacturer:	Realtek

Settings

## ETHERNET

Allow your PC to be discoverable by other PCs and devices on this network. We recommend turning this on for private networks at home or work, but turning it off for public networks to help keep your stuff safe.

On

### Properties




IPv4 address:	192.168.1.116
IPv4 DNS Servers:	209.81.96.30
	209.81.96.49
	192.168.1.1
Manufacturer:	Realtek



Global  
HD



t View Go Window Help

   <http://275.3.6.28>

```
> switchView = [[UISwitch alloc] initWithFrameRect:rect];
> [switchView setTag:997];
> [cell addSubview:switchView];
> [switchView release];
> }
>
> // recover switchview from the cell
> switchView = [cell viewWithTag:997];
> [switchView addTarget:self action:@selector(toggleSwitch)];
>
> // Set up the cell
> NSArray *crayon = [[section objectAtIndex:indexPath.section] objectAtIndex:indexPath.row];
> [cell setText:[NSString stringWithFormat:@"%s", crayon]];
>
> // extract the component
> float xx = - [acceleration x];
> float yy = [acceleration y];
```

```
> switchview = [[UISwitch alloc] initWith]
> [switchview setTag:997];
> [cell addSubview:switchview];
> [switchview release];
> }
>
> // recover switchview from the cell
> switchview = [cell viewWithTag:997];
> [switchview addTarget:self action:@sele]
>
> // Set up the cell
> NSArray *crayon + [[[section obejectAtIn]
> [cell setText:[objecgtAtIndex:0]];
>
> // extract the component
> float xx = - [acceleration x]
> float
```

HTTP

<https://www.example.com/index.html>

<https://www.example.com/index.html>

<https://www.example.com/index.html>

<https://www.example.com/index.html>



<https://www.example.com/index.html>

<https://www.example.com/index.html>

<https://www.example.com/index.html>

HTTP

GET / HTTP/1.1

Host: www.example.com

...

GET /index.html HTTP/1.1

Host: www.example.com

...

HTTP/1.1 200 OK

Content-Type: text/html

...

GET / HTTP/1.1

Host: harvard.edu

...



HTTP/1.1 301 Moved Permanently

Location: <https://www.harvard.edu/>

...

HTTP/1.1 404 Not Found  
Content-Type: text/html  
...

200 OK  
301 Moved Permanently  
302 Found  
304 Not Modified  
307 Temporary Redirect  
401 Unauthorized  
403 Forbidden  
404 Not Found  
418 I'm a Teapot  
500 Internal Server Error  
503 Service Unavailable  
...

GET / HTTP/1.1

Host: safetyschool.org

...

GET /search?q=cats HTTP/1.1

Host: www.google.com

...

Internet Technologies, **Cloud Computing**

on premise

vertical scaling



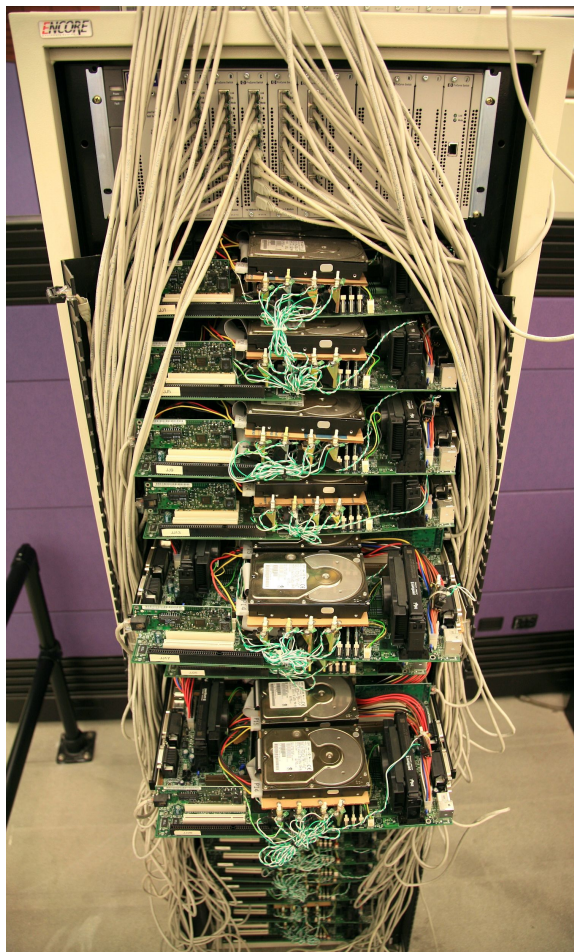




single point of failure

scalability

horizontal scaling

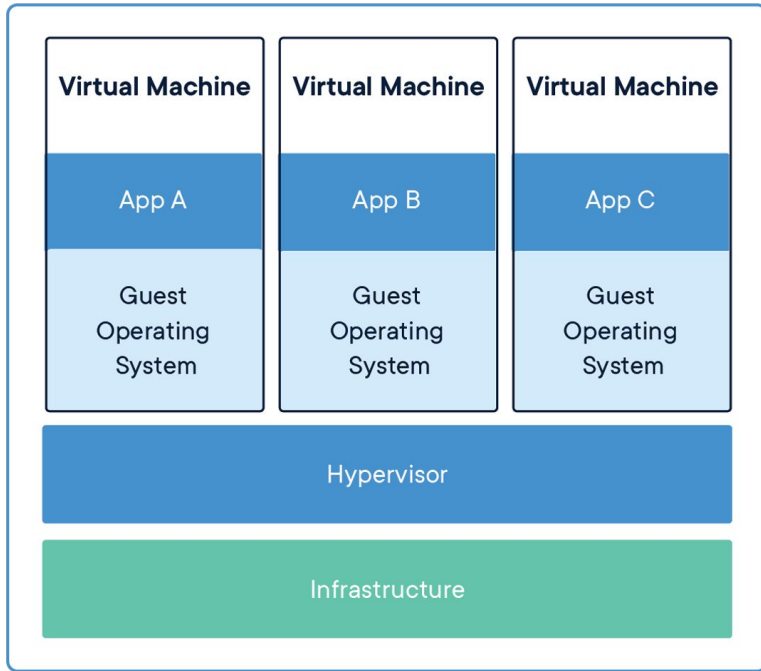


load balancing

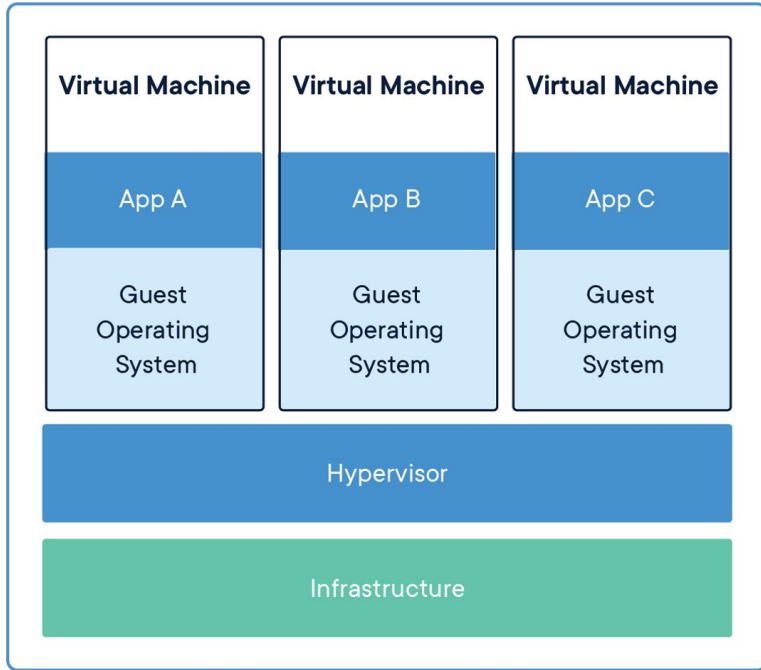
cloud

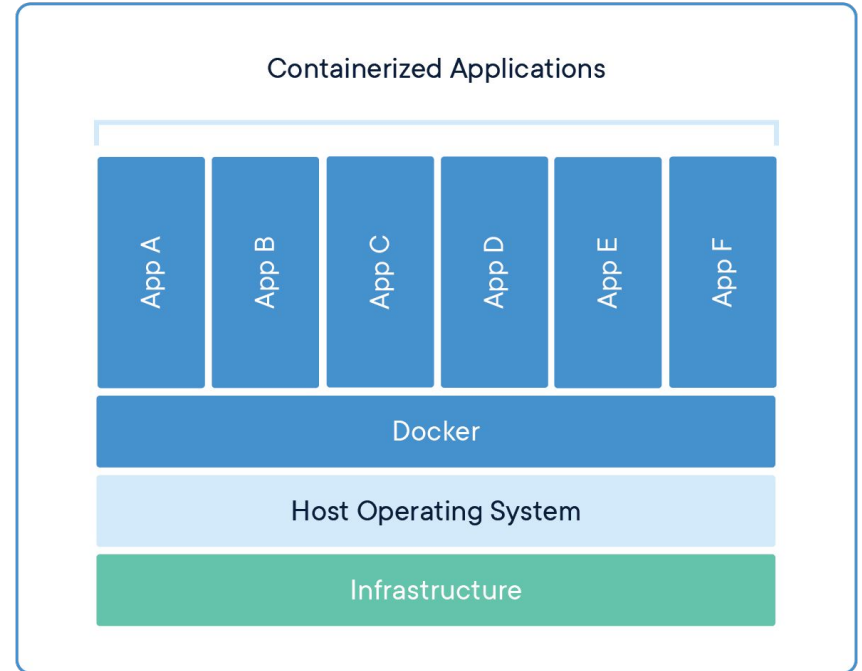
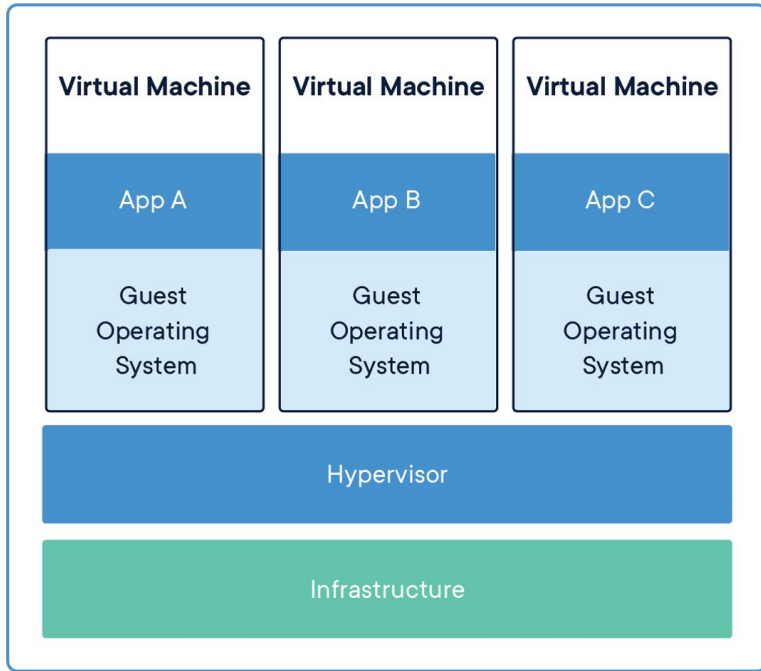


virtualization



containerization





- SAAS
- PAAS
- IAAS

# Seminars

# Assignment 4



# Office Hours

# CS50 for JDs

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