# A unique opportunity for you to be mentored by Amazonians



**Batch 04**Week 7
19-Aug-2023



# Week 07 – 19-Aug



Ashish Prajapati

Minutes
Fundamentals Track
DNS & DHCP



40 Minutes

**Security Track**Threat Remediation



Parna Mehta



**Pranav Chaudhary** 

Minutes

A day in life of
Software
Developer

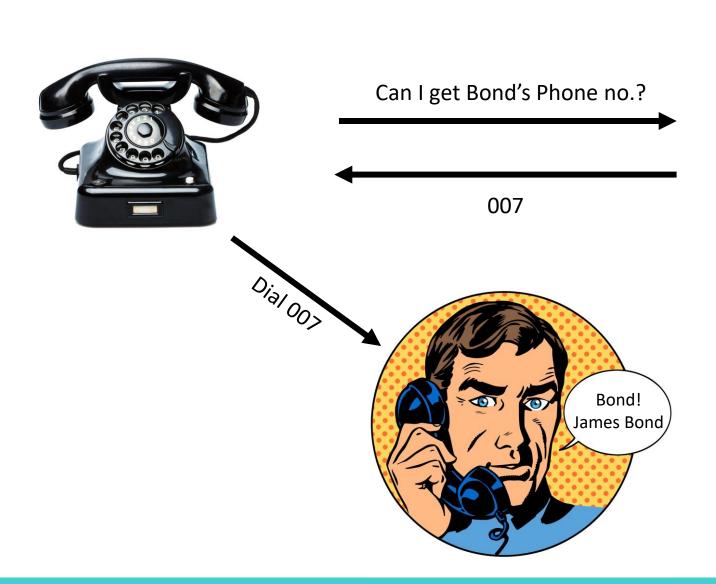




# Anybody remembers this?



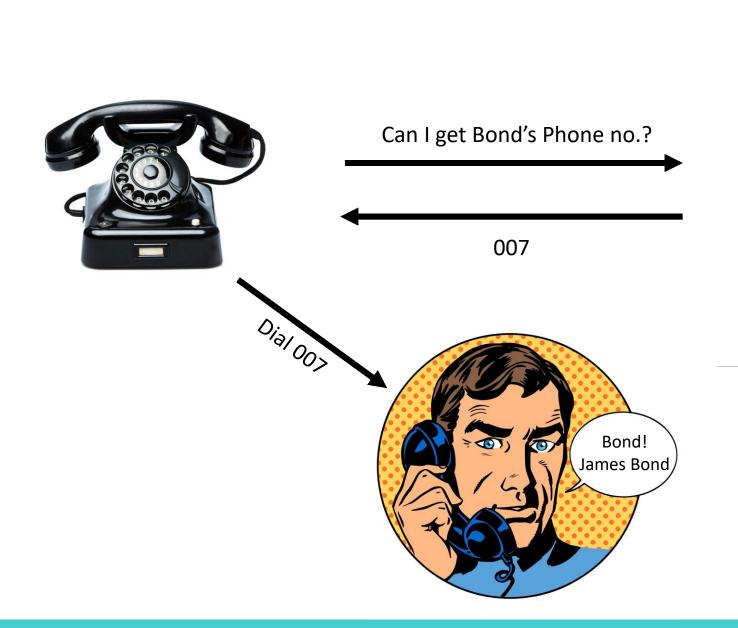
## I want to talk to James Bond





Telephone Enquiry Office

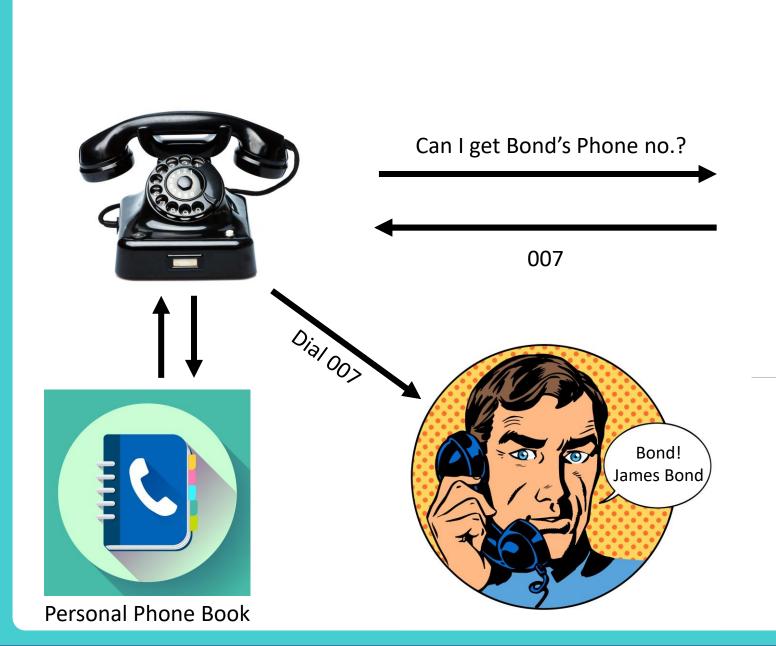
## I want to talk to James Bond





Telephone Directory

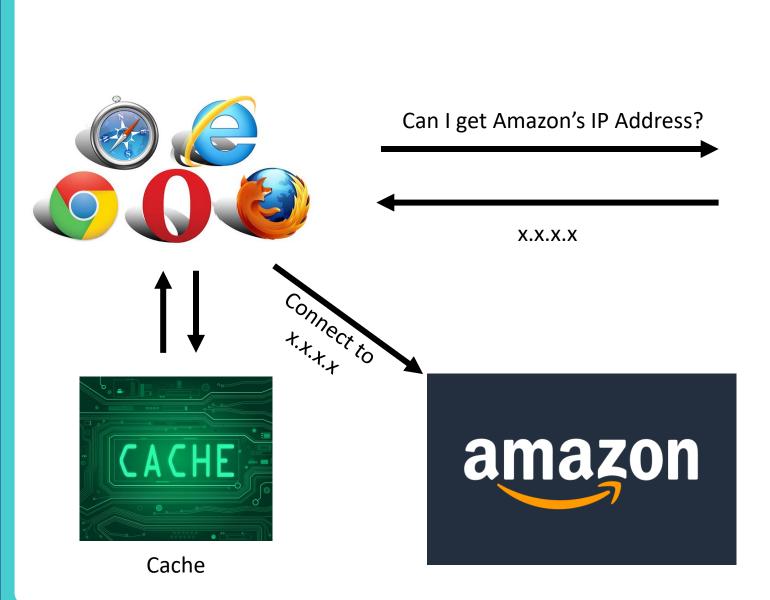
# I want to talk to James Bond

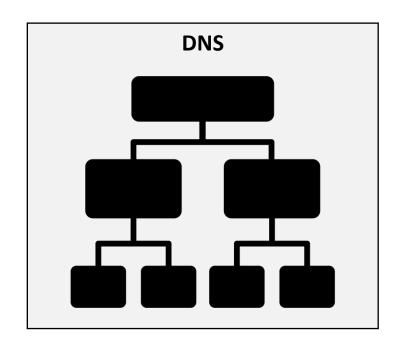




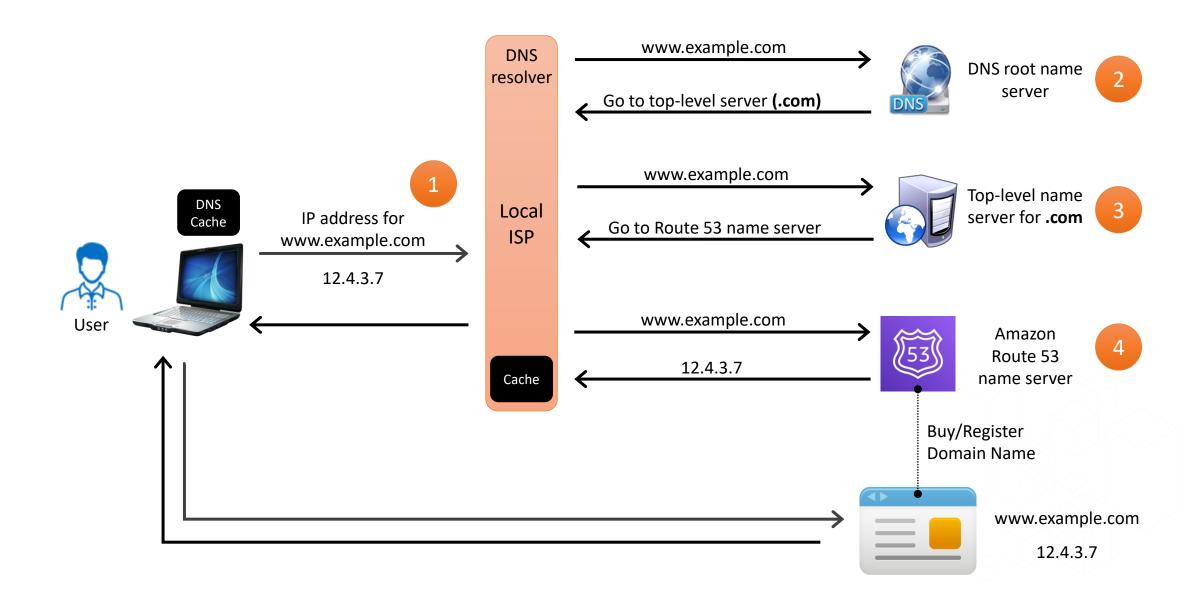
Telephone Directory

# I want to go to Amazon.com





#### How DNS Works?



#### What is in the name?

Online Dig

https://toolbox.googleapps.com/apps/dig/

- Root Servers
  - https://www.iana.org/domains/root/servers

#### **DNS** Records

- A Record
  - Points a domain or subdomain to an IP address
    - Amazon.com >> 54.239.28.85
- AAAA Record
  - Point the domain to an Ipv6 address.
    - MyIP.com >> 2a00:23c8:118b:1001:e9ff:4d32:6a62:946c
- CNAME Record
  - Points one domain or subdomain to another domain name
    - www.example.com >> web.example.com
- Alias Record
  - Let you route traffic to selected AWS resources, such as CloudFront distributions, Elastic Load Balancer, Amazon S3 buckets.
    - www.example.com >> elb01-3812349455.eu-west-1.elb.amazonaws.com

## Route 53 – Routing Policies

Simple routing

Use if you're routing traffic to just one resource, such as a webserver.



Weighted

Use when you have multiple resources that do the same job, and you want to specify the proportion of traffic that goes to each resource. For example: two or more EC2 instances.



Geolocation

Use when you want to route traffic based on the location of your users.



Latency

Use when you have resources in multiple AWS Regions and you want to route traffic to the Region that provides the best latency.



Failover

Use to route traffic to a resource when the resource is healthy, or to a different resource when the first resource is unhealthy.



Multivalue answer

Use when you want Route 53 to respond to DNS queries with up to eight healthy records selected at random.



# Route 53 – Routing Policies

Policy	Decision is
Simple	Simple. Here's the destination for that name.
Weighted	You can setup multiple resources and I'll route according to the percentage of weight you assign to each resource
Failover	Normally, I'd route you to <primary>, but it appears down based on my Health Checks so I'll failover to <backup>.</backup></primary>
Geolocation	Looks you are in Europe, so I'm going to route you to a resource closer to you in that region.
Geoproximity	You're closer to the US-EAST-1 region than US-WEST-2 so I'll route you to US-EAST-1
Latency	Let me see which resource has lower latency from you, then I'll direct you that way.
Multi-value Answer	I will return server IP addresses, as a sort of basic local balancer

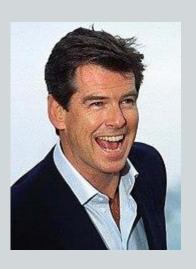




# Who is your favourite bond?



**Sean Connery** 



**Pierce Brosnan** 



**Daniel Craig** 



# AWS Foundational and Layered Security Services



AWS Security Hub



**AWS** Control Tower



AWS Organizations



**AWS** Trusted Advisor



**AWS Transit** Gateway

<u>(6)</u>

Amazon

VPC

PrivateLink



Amazon VPC

**AWS** 

Direct

Connect



**AWS IoT** Device Defender

Resource

Access

manager



Amazon Cloud Directory



**AWS** Directory Service



Amazon GuardDuty



Amazon Inspector



Amazon CloudWatch



**AWS Systems** Manager



**AWS Step** 

**Functions** 

**AWS** Lambda



AWS **OpsWorks** 



**AWS CloudFormation** 

# Identify



#### Protect





**Automate** 



#### Recover



**AWS Service** Catalog



AWS Config



AWS Well-Architected Tool



AWS Systems Manager



**AWS Shield** 

**AWS** 

WAF



IAM

**AWS** 

Firewall

Manager

**AWS Secrets** Manager

**AWS** 

Certificate

Manager



KMS

AWS

CloudHSM







**AWS IAM** Identity Center



Amazon Macie



**AWS** Security Hub

#### **Investigate**



Amazon CloudWatch

Personal Health

Dashboard

Amazon Detective



AWS CloudTrail





Amazon Route 53

Archive





Parna Mehta

AWS Technical Instructor



# A day in the life of an Amazonian



**Pranav Chaudhary**Software Developer

# Thank you for attending. See you next Saturday (26-Aug-2023)





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