ASG = ELB +EC2 Instance + Launch Configs + Cloud Watch +SNS

**Why we need Elastic Load Balancer**

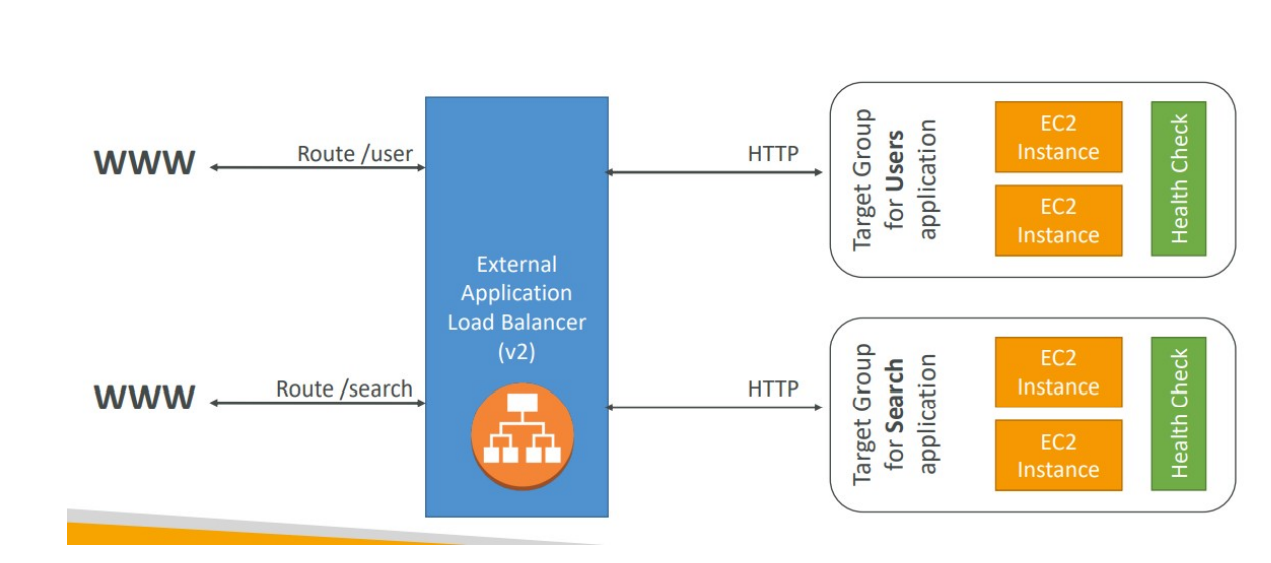
An ELB (EC2 Load Balancer) is a managed load balancer

AWS guarantees that it will be working

AWS takes care of upgrades, maintenance, high availability

AWS has 3 kinds of Load Balancers

* Classic Load Balancer (v1 - old generation) - 2009
* Application Load Balancer (v2 - new generation) – 2016
* Network Load Balancer (v2 - new generation) – 2017

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**Why we need Elastic Load Balancer**

* + Spread load across multiple downstream instances
  + Expose a single point of access (DNS) to your application
  + Do regular health checks to your instances
  + Provide SSL termination (HTTP) for websites
  + Enforce stickiness with cookies
  + High availability across zones
  + Separate public traffic from private traffic
  + Seamlessly handle failures of downstream instances

**Load Balancers**

* Classic Load Balancers are Deprecated
* Application Load Balancers for HTTP / HTTPs
* Network Load Balancer for TCP
* CLB, ALB & NLB support SSL certificates and provide SSL termination
* All Load Balancers have health check capability
* ALB can route on based on hostname / path
* ALB is a great fit with ECS (Docker)
* Any Load Balancer (CLB, ALB, NLB) has a static host name. Do not resolve and use underlying IP