

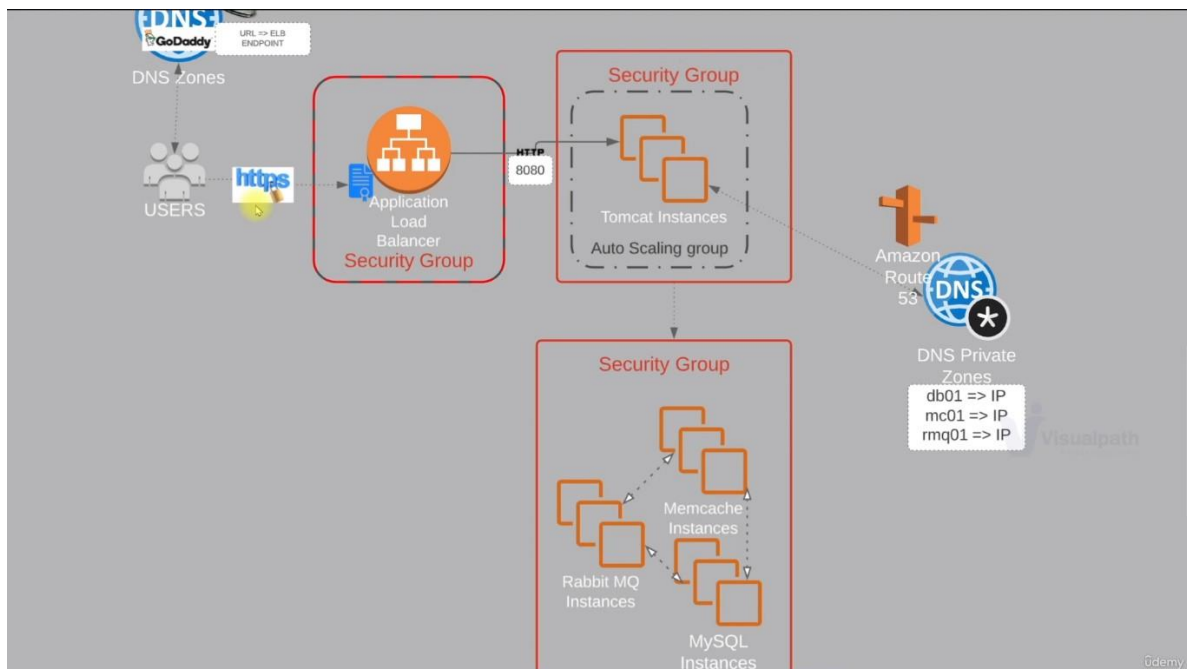
# AWS IAAS PROJECT

This project is a simple multi-tier web application stack built using IAAS services on AWS cloud. In this project we have used Tomcat (frontend service) and MySQL, Memcached, RabbitMQ (backend services)

## **Benefits of Building the application on AWS are:**

- Scalability
- Pay as you go (this eliminates all the upfront cost for running the application)

## DIAGRAM WORKFLOW



## AWS SERVICES USED:

- EC2 instances (for frontend and backend services)
- ELB (for load balancing)
- S3 (storing the artifact)
- Autoscaling (for scaling up/down frontend instances)
- Route53 (for backend IP-name mapping, so that frontend can connect to backend services)
- ACM (for setting https secure connection)
- IAM (for using AWS CLI for managing S3)
- EBS

## **FLOW OF EXECUTION**

- Login to AWS account.
- Create Key Pairs
- Create Security Groups
- Launch Instances with userdata (BASH scripts)
- Update IP to name mapping in ROUTE 53
- Build Application artifact from source code
- Upload to S3 Bucket.
- Download artifact to Tomcat EC2 instance.
- Setup ELB with HTTPS [certificate from Amazon Certificate Manager]
- Map ELB Endpoint to website name in Godaddy DNS
- Create Autoscaling Group for Tomcat instances
- Verify the website.