**Problem Statement:**

Client is opening a technical institute/online coaching platform:

Name: **“Technical Home School”**

Tag line **“Ready to fry in technology “**

Website: **technicalhomeschool.tk**

Requirement: Institute provides an invaluable space for personal development to the students for that they want to receive information from students of India about which technologies students are interested in and store into the database for analyzing technologies trends for arranging online classes. So that students can establish their technical skills and achieve their goals in a minimal cost.

Note: Institute wants to do this server initially for 5 days, later on, if required they will increase it based on the response.

**Steps:**

* Create VPC – IP Address 192.1.0.0/16
* 4 subnets (2 Private IP 192.1.0.0/24 , 192.1.1.0/24 & 2 Public IP 192.1.2.0/24 , 192.1.3.0/24)
* Internet Gateway and Route Table.
* Create 1 RDC instance in subnet group with MYSQL.
* Create 2 EC2 instances and deploy website code on it with required port open in Security group.
* Also configure the connection between HTML webpages and RDS using python script.
* Test the application is it taking data from webpage and storing the same into DB.
* Create an AMI which will be used in Auto scaling.
* Create Application load balancer and attach both the server with ALB.
* Create Launch configuration with AMI to create similar server while auto scaling.
* Attach Application load balancer to Auto scaling Group.
* Create domain and attach name servers of Route 53 with domain.
* Use Amazon Certificate manager for buying SSL and create CNAME Record in Route53, also attach ACM with ALB.
* Create A record in Route53 with alias of ALB.
* Create SNS –for getting notified if servers are not working.
* Create Cloud watch alarm and attach SNS notification.
* Created Secrets manager for hiding hard coded DB configuration.
* Created IAM user for providing region to secrets manager to connect with my python code.
* Created s3 bucket for storing logs of ELB.
* Needed two sample HTML pages: (Available on internet )

1. Registration form page.
2. Display message after submitting data.

**Architect Diagram:**

