Architecture

Clients are mobile Browser and mobile application to deploy our web application we need to have some kind of web server.

To launch web application Amazon EC2 instances are used. Enable the auto scaling EC2 instances are going to be up when load is less automatically EC2 instances are removed from the group. Enabling security groups we have used EC2 instances in one particular region or zone A. If any issue happen our application will go down just to be sure to bring high availability .We can Enable our application in other zone. in case a problem has occurred in one particular zone then the second zone the application is still alive and running. When the load is more definitely AWS provides option called Elastic Load Balancer so whenever the traffic is more on one particular server automatically redirects to the other EC2 instances. Now we have to expose our application to the public. We have route53 and through route53 we can register our domain, give the domain to the end user so that end user internally maintains and particularly redirects to the particular application.

CloudFront is the Content Delivery Network it helps us to enable the different content based on JIO, Offline cache. Using this application performance can be improved.

In Security there are two different things AWF and AWS Shield. Web application firewall protect your web application from common webex explodes customize traffic.AWS Shields is very good for DDOS Protection if any guy is repetitively sending requests to bring server down it can detect those and protect your server. Guard Duty in case your server compromised for some reason it will help you to monitor continuously EC2 instances and it will notify you.

We need to have backup of EC2 instances never know what kind of situation occur to be safer we always need to have backup of EC2 instances use S3 bucket to take regular backup on the Database. Any application will have database provides RDS, Dynamo DBS

Cloud watch what if our server are down how will you get to know it continuously monitors the down or up and restarted, rebooted we need to enable our Notifications this Simple Notification Services you can get through notification using email or sms or any other way to root user. We have to enable APIs to get the data to the mobile application use Lambda function and write some logic under Lambda and we can expose this to API gateway so that your application can access.

1. Database-Relational Database

2. Networking-Public Subnet, Private Subnet

3. Security-Multifactor Authentication

4. Storage-S3 Bucket