Web Application Development

DYP
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Assignment No. 4 (b)

Aim :-

Deploy / Host your web application on AWS VPC or AWS Elastic Beanstalk.

Theory :-

- **Cloud Computing ⇒**

  Cloud computing is the on-demand delivery of IT resources over the internet with pay-as-you-go pricing. Instead of buying, owning, and maintaining physical data centres and servers, you can access technology services, such as computing power, storage, and databases, on as needed basis from a cloud provider like Amazon Web Services.

  - Benefits of cloud computing ⇒
    - Agility
    - Elasticity
    - cost savings
    - deploy globally in minutes.

  - Types of cloud computing ⇒
    - Iaas (Infrastructure as a Service)
    - Paas (Platform as a Service)
    - Saas (software as a service)

- **AWS ⇒**
  - AWS stands for Amazon Web Services.

· Amazon Web Services (AWS) is the world's most comprehensive and broadly adopted cloud, offering over 200 fully featured services from data centers globally. Millions of customers - including the fastest-growing startups, largest enterprises, and leading government agencies - are using AWS to lower costs, become more agile, and innovate faster.

· Amazon Web Services (AWS) is a cloud computing platform that was launched by Amazon in 2006. AWS was initially designed to support the needs of Amazon's own ecommerce business but was soon made available to other businesses as a way to build, deploy, and scale applications in the cloud.

- AWS Applications ⇒

i) Storage and Backup
ii) Big data
iii) Enterprise IT
iv) Social Networking
v) Mobile apps
vi) websites
vii) gaming.

- AWS use cases ⇒ i) Netflix.
ii) McDonald's.

iii) Airbnb
iv) Novartis
v) Expedia
vi) samsung
vii) NASA
viii) facebook
ix) Bankinter
x) Adobe.

- Creating an AWS account ⇒

i) open the Amazon Web Services home page.
ii) Choose create an AWS account
iii) enter account information and verify email address.
iv) enter verification code & choose verify.
v) choose Business or personal.
vi) Read and accept the AWS customer Agreement.
vii) choose verify and continue.

- Deployment ⇒
we can deploy your application using CLI OR console.

∃ - To deploy your application revision ~~(CLI)~~ console ⇒

i) deploy your application revision, you need a service ARN. so for that we should have already followed the instructions in create a service role (console) to create a service role. To get the ARN of the service role. ~~go~~

ii) Now, sign in the AWS management Console

and open the codeDeploy console at https://console.aws.amazon.com/codedeploy.

iii) in the navigation pane, expand Deploy, then choose applications.

iv) Choose HelloWorld_App.

v) On the Deployment groups tab, Choose create deployment group.

vi) in deployment group name, enter HelloWorld_DepGroup.

vii) in service Role, choose the name of the service role.

viii) In deployment type, choose in-place.

ix) in environment configuration, select Amazon Ec2 instances.

x) in key, enter Name & in value, enter CodeDeploy-Demo

xi) in deployment configuration, choose codeDeploy Default oneAtime.

xii) in load Balancer, clear enable load balancing.

xiii) choose deployment group then create deployment.

Conclusion =>

So thus, In this we learnt about the cloud computing, AWS and its deployment process.